Educational Sciences Research in the Globalizing World
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Preface

This book, “Educational Sciences Research in The Globalizing World” has 50 chapters including digital learning material development adoption, parental divorce and the importance of fathers’ roles in children's lives, the effect of the program for distinctive fathers education, analyzing elementary level Turkish efl learners’ written errors, a framework for knowledge management, philosophy for children: basic issues and theoretical explanations, the perceptions of language teachers, students and parents on the characteristics of effective primary school language teachers, technology addiction in children, the effect of colors used in interior designs on the human psychology, mathematics teaching anxiety of classroom teachers, relationship between the teacher-child relationship and academic self-esteem, a study of problem solving skills of children, examining addition and subtraction skills, awarenesses of pre-school children’s parents towards media use, relation between spare time activity duration and negative social behavior of preschoolers, creative drama education on children’s perspective-taking skills, teaching practices and emotional intelligence in early childhood, examination of emotional states of children with chronic conditions by picture, the role of men in early childhood education and care, strategies used by preschool teachers to organize and manage learning centers, samples of drama based topics in life studies textbooks with the views of classroom teacher candidates, early intervention programs in autism spectrum disorder, the attitudes and the opinions of teachers about self-compassion, an investigation of the attitudes and opinions of students about altruism, the impact of the Montessori approach in supporting children's self-regulation skills, emotional intelligence, the dream concepts and contents of Turkish preschool children, problem solving and family in early childhood and other aspects of education.

Contributions in each chapter are prepared by experts in the respective fields and mirror the advancement in the approach. This book contains important future tasks of the particular fields and supplies extensive bibliographies at the end of each chapter, as well as tables and figures that illustrate the research findings. All these make this book highly useful and a must read for students, researchers and professionals in educational sciences.

We would like to express our gratitude to all contributors for bearing with us as the volume has taken time to come to fruition.

We particularly wish to express our thanks to the team at Sofia St. Kliment Ohridski University Publishing for preparing the book for publication.

The Editors
Chapter 1

The Effect of the Program for Distinctive Fathers Education (PDFE) on the Attitudes of Fathers with Their Children

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INTRODUCTION

The child growing attitude generally affects psycho-social, mental, linguistic, sexual and physical developments to a great extent (Senemoğlu, 2012). Positive father attitudes comprise such more democratic and encouraging attitudes as using non-coercive disciplinary methods towards the child, explaining the reasons of rules, giving responsibility to the child, offering cognitive stimulants and exhibiting supportive or active attitudes. Negative father attitudes contain harmful attitudes for the happiness and health of the child such as using punishing and coercive disciplinary methods towards the child like giving corporal punishment with violent and authoritative attitudes (McWayne, Downer, Campos & Harris, 2013). The fact that fathers are more critical and controller towards their children, they talk to their children such positive issues as accepting and approving the positive behaviours of them influences the self-esteem of the children negatively (Kernis et al., 2000). In addition, these negative attitudes increase the extraverted problem behaviours of children and affect cognitive and academic skills of children in a negative way (McWayne et al., 2013).

In particular, fathers play a strong role in the life of children in childhood period. Positive and active involvement of fathers about parenthood, their spending enough and qualitative time with their children make incredible contributions to child development and have permanent effects in their social, cognitive, emotional and physical developments from their babyhood to adulthood period. There is also a significant relation between the behaviours of the father in early periods and the future behaviours of the child (Downer, Campos, McWayne & Gartner, 2008; Lamb-Parker, Piotrkowski, Baker, Kessler-Sklar, Clark & Peay, 2001; McWayne et al., 2013; Sak, Şahin Sak, Atlı & Şahin, 2015; Tezel Şahin, Akıncı Coşgun & Aydın Kılıç, 2017; Tezel Şahin & Aydın Kılıç, 2016; Tezel Şahin & Özyürek, 2017; Tezel Şahin & Tutkun, 2017; Tutkun & Tezel Şahin, 2016; Wilson, Havighurst, Kehoe & Harley, 2016; Wood & Lambin, 2013).

Depending on this information, it is thought that more involvement of fathers to their children’s lives, their adoption of positive attitudes towards their children and improving themselves by participating educational programs when they need it are of great importance. In this sense, the purpose of the study was to investigate the effect of the Program for Distinctive Fathers Education (PDFE) on the attitudes of
fathers with their children.

**METHOD**

The model of the research is a mixed method where both experimental design of retention test with “pre-post-test and control group” and quantitative and qualitative research methods were used in the same study in order to investigate The Effect of the Program for Distinctive Fathers Education (PDFE) on the attitudes of fathers with their children. Mixed method is method focusing on the gathering both qualitative and quantitative data in just one research, and a series of research, analysing, combining and associating them (Creswell& Plano Clark, 2014).

**Participants**

The participants of the research are the fathers of children at the age of 4-6 attending to a preschool education institution in the city of Ankara in spring term of 2017. A total 38 fathers of children, 18 in experimental group and 20 in the control group also with the wives of 18 fathers were included in the study to investigate their views over the education program.

In determining the participants, it was stipulated that children must have a normal development, parents must live together, and fathers must be volunteer to participate and that they haven’t participated in any other father education program beforehand.

Upon the review of the information of the participants, the ages of fathers vary from 26 to 46. Of them, 29 were university graduates and 9 were post graduates. In terms of their monthly income, 2 fathers had an income of 2000-2999 TL, 4 fathers had an income of 4000-4999 TL, 9 fathers had 5000-5999 TL and 23 fathers had an income of 6000 TL and over. When it comes to the ages of the children, 20 children were 48-60 months old, 18 children were 61-72 months old. Sixteen children were girls and 22 were boys. As for the spouses of the fathers in the experimental group, their ages varied from 26 to 40. One of the mothers was a high school graduate, 14 were university graduate and 3 were post-graduates.

**Measures**

**Personal Information Form:** In order to get information about the fathers and their children with their spouses participating in the experimental and control group, “Personal Information Form” was formed. In this form, some questions were given in order to learn about the ages of fathers, their status of education, monthly income of the family, the number of children, the age of the children included in the study, their gender, rank of birth, the age of the spouses of the fathers in the experimental group and their status of education.

**Father Support Program (BADEP) Attitude Inventory**

In the current study, BADEP Attitude Inventory was used to measure the attitudes and behaviours of fathers towards their children before and after the program. BADEP Attitude Inventory was developed by MCEF-BADEP unit in 2004. The inventory was made up of 57 items and 4 factor structure. While “Non-traditional roles” was made up of 17 items, the second factor, “Non-authoritative Attitude” was made up of 18 items, “Non-concessive Attitude” was comprised of 10
factors and “Clarity in Communication”, being the fourth factor, was made up of 12 items (Atmaca Koçak, 2004). In the sub-dimensions of the scale, Cronbach Alpha values were determined as .85, .80, .73, .76 respectively (Atmaca Koçak, 2004). In the validity and reliability study by İnci & Deniz (2015), Alpha values were determined as .82, .82, .71, .60 and .89 in total (İnci & Deniz, 2015).

**Mother and Father Interview Forms:** A “Father Interview Form (A-B)” and a “Mother Interview Form (A-B)” were prepared by the researchers with semi structured questions where the fathers and their spouses in the experimental group participating in the education program could express their views regarding the evaluation of the program. Interview Form –A was applied before the education while Interview Form –B was applied after the education to the fathers and their spouses in the experimental group. In the Interview Form A which was applied before the education were the question to learn about what the gains of education program could be for fathers. As for the Interview Form B applied after the education, there were questions regarding what the gains of education program could be for fathers.

**The Education Program of Distinctive Fathers**

The main purpose of the Education Program of Distinctive Fathers is to increase the father – child relation and the involvement of fathers in the lives of their children and also develop their attitudes towards their children. In the preparation of the Education Program of Distinctive Fathers, 422 fathers having a child in 3-6 age group in the central towns of the city of Ankara were reached and their educational needs were determined. Based on the educational needs of fathers, the topics to be given in the sessions of “The Education Program of Distinctive Fathers”, the teaching techniques to teach these topics, the materials to be used, the works that fathers could do at home with their children (games, experiments, reading books etc.) were prepared and the content of the program was formed. The Program for Distinctive Fathers Education is made up of total 13 sessions, one day a week (1.5-2 hours). The target group of the Education Program for Distinctive Fathers is the fathers having a child between 3-6 ages (Tutkun, 2017).

**Procedure:** In order to determine the participant, preschool education administrators and teachers were contacted and they were informed about the research. After necessary consents were taken from the preschool education institution, a meeting was held with the fathers and mothers. In the preliminary meeting, they were informed about the content, purpose and duration of the Program for Distinctive Fathers Education (PDFE) and handed out PDFE Involvement Determination Form. The fathers accepting the involvement were asked to fill in the form to learn about the available day and hour of the involvement and their contact number, and then to submit it to the administrator of the institution. In this sense, the forms were examined and the volunteer fathers involving in the education program were determined by assigning 20 fathers for the experimental group and 20 fathers for the control group. As two fathers were not able to attend the education program, they were excluded so the experimental group was made up of 18 fathers.
Separate meetings were held with the fathers in both the experimental and control groups and they were asked to fill in “General Information Form” in order to determine their personal information. Following that, they were asked to fill in BADEP Attitude Inventory as a pre-test. In addition, the fathers in the experimental group Father Interview Form –A were applied while their spouses were given Mother Interview Form –A. After the pre-tests were applied, the fathers in the experimental group were applied PDFE which was made up of 13 sessions. The fathers in the control group were not given any program. After completing PDFE program, the fathers in both experimental and control groups were applied BADEP Attitude Inventory as a post-test. In addition, the fathers in the experimental group were applied Father Interview Form – B and their spouses were given Mother Interview Form –B. Six weeks after the application of the post-tests, the fathers in the experimental group were given BADEP Attitude Inventory as a retention test.

**FINDINGS**

The findings were analysed in two parts as qualitative ones and qualitative ones. In the first past, the quantitative findings regarding “BADEP Attitude Inventory” were given and in the second part, qualitative findings with regard to the views of fathers in the experimental group and their spouses over PDFE were given.

**Quantitative Findings**

**Table 1:** Mann Whithey U test results regarding the difference between the groups in terms of their pre-test scores of BADEP attitude inventory

<table>
<thead>
<tr>
<th>Sub-Dimensions</th>
<th>Groups</th>
<th>N</th>
<th>ss</th>
<th>Mean Rank</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Traditional Roles</td>
<td>Experimental</td>
<td>18</td>
<td>0,42</td>
<td>19,97</td>
<td>-0,249</td>
<td>0,804</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>0,41</td>
<td>19,08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Authoritative Attitude</td>
<td>Experimental</td>
<td>18</td>
<td>0,50</td>
<td>19,69</td>
<td>-0,102</td>
<td>0,918</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>0,33</td>
<td>19,33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Concessive Attitude</td>
<td>Experimental</td>
<td>18</td>
<td>0,53</td>
<td>20,47</td>
<td>-0,514</td>
<td>0,608</td>
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<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>0,47</td>
<td>18,63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarity of Communication</td>
<td>Experimental</td>
<td>18</td>
<td>0,25</td>
<td>21,44</td>
<td>-1,028</td>
<td>0,304</td>
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<td></td>
<td>Control</td>
<td>20</td>
<td>0,36</td>
<td>17,75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Experimental</td>
<td>18</td>
<td>0,38</td>
<td>20,78</td>
<td>-0,673</td>
<td>0,501</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>0,25</td>
<td>18,35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was statistically significant difference between the groups in terms of BADEP Attitude Inventory pre-test scores of non-traditional roles, non-authoritative attitude, non-concessive attitude, clarity of communication sub-dimensions and also of BADEP Attitude Inventory total scores. In this sense, it is likely to say that the attitudes of fathers in the experimental and control groups to their children were at the same level before the application of the Program for Distinctive Fathers Education.
Table 2: Mann Whithey U test results regarding the difference between the groups in terms of their post-test scores of BADEP attitude inventory

<table>
<thead>
<tr>
<th>Sub-Dimensions</th>
<th>Groups</th>
<th>N</th>
<th>ss</th>
<th>Mean Rank</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Traditional Roles</td>
<td>Experimental</td>
<td>18</td>
<td>0.50</td>
<td>26.92</td>
<td>-3.908</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>0.50</td>
<td>12.83</td>
<td></td>
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<tr>
<td>Non-Authoritative Attitude</td>
<td>Experimental</td>
<td>18</td>
<td>0.55</td>
<td>26.53</td>
<td>-3.705</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>0.40</td>
<td>13.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Concessive Attitude</td>
<td>Experimental</td>
<td>18</td>
<td>0.39</td>
<td>27.50</td>
<td>-4.22</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>0.4</td>
<td>12.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarity of Communication</td>
<td>Experimental</td>
<td>18</td>
<td>0.26</td>
<td>26.44</td>
<td>-3.672</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>0.42</td>
<td>13.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Experimental</td>
<td>18</td>
<td>0.41</td>
<td>27.28</td>
<td>-4.095</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>20</td>
<td>0.36</td>
<td>12.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A statistically significant difference was found between the groups in terms of non-traditional roles, non-authoritative attitude, non-concessive attitude and clarity of communication sub-dimensions, and also of BADEP Attitude Inventory total post-test scores. Non-traditional roles, non-authoritative attitude, non-concessive attitude and clarity of communication sub-dimensions, and also of BADEP Attitude Inventory total post-test scores in the experimental group was found higher compared to those of the control group.

Table 3: Wilcoxon test results regarding the difference between pre and post-test in terms of BADEP scores in the groups.

<table>
<thead>
<tr>
<th>Sub-Dimensions</th>
<th>Test</th>
<th>Groups</th>
<th>N</th>
<th>ss</th>
<th>Mean Rank</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Traditional Roles</td>
<td>Pre-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.42</td>
<td>1.00</td>
<td>-3.681</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.50</td>
<td>10.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Control</td>
<td>20</td>
<td>0.41</td>
<td>9.27</td>
<td>-0.283</td>
<td>0.777</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>Control</td>
<td>20</td>
<td>0.50</td>
<td>11.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Authoritative Attitude</td>
<td>Pre-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.50</td>
<td>0.00</td>
<td>-3.73</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.55</td>
<td>9.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Control</td>
<td>20</td>
<td>0.33</td>
<td>10.15</td>
<td>-0.701</td>
<td>0.484</td>
</tr>
<tr>
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<td>Post-Test</td>
<td>Control</td>
<td>20</td>
<td>0.40</td>
<td>8.69</td>
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<td></td>
</tr>
<tr>
<td>Non-Concessive Attitude</td>
<td>Pre-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.53</td>
<td>3.50</td>
<td>-3.46</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.39</td>
<td>9.34</td>
<td></td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Control</td>
<td>20</td>
<td>0.47</td>
<td>7.75</td>
<td>-0.789</td>
<td></td>
</tr>
<tr>
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<td>20</td>
<td>0.48</td>
<td>12.00</td>
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<td></td>
</tr>
<tr>
<td>Clarity of Communication</td>
<td>Pre-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.25</td>
<td>1.00</td>
<td>-3.582</td>
<td>0.001</td>
</tr>
<tr>
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<td>Post-Test</td>
<td>Experimental</td>
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<td>0.26</td>
<td>9.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-Test</td>
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<td>9.50</td>
<td>-1.246</td>
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<td>0.42</td>
<td>9.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Pre-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.38</td>
<td>0.00</td>
<td>-3.724</td>
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</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.41</td>
<td>9.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Control</td>
<td>20</td>
<td>0.25</td>
<td>10.17</td>
<td>-1.088</td>
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<tr>
<td></td>
<td>Post-Test</td>
<td>Control</td>
<td>20</td>
<td>0.36</td>
<td>9.71</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For that reason, there became a significant difference in favour of the experimental group with regard to the BADEP Attitude Inventory test scores of the fathers after the application.

A statistically significant difference was found between pre and post-test in terms of non-traditional roles, non-authoritative attitude, non-concessive attitude and clarity of communication sub-dimensions, and also of BADEP Attitude Inventory total post-test scores in the experimental group. It was also found that the pre-test scores of non-traditional roles, non-authoritative attitude, non-concessive attitude and clarity of communication sub-dimensions, and also of BADEP Attitude Inventory total post-test scores in the experimental group were lower compared to post-test scores. As for control group, there was no statistically significant difference between the pre and post-test in terms of non-traditional roles, non-authoritative attitude, non-concessive attitude and clarity of communication sub-dimensions, and also of BADEP Attitude Inventory total post-test scores. In this sense, there was a significant difference in favor of the experimental group with regard to the pre and post-test scores of the BADEP Attitude Inventory.

**Table 4:** Friedman Two Way ANOVA test results regarding the comparison of pre and post-test retention test scores in terms of the BADEP attitude inventory scores of the experimental group

<table>
<thead>
<tr>
<th>Sub-Dimensions</th>
<th>Test</th>
<th>Groups</th>
<th>N</th>
<th>ss</th>
<th>Mean Rank</th>
<th>Chi-Square</th>
<th>p</th>
</tr>
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<tbody>
<tr>
<td>Non-Traditional Roles</td>
<td>Pre-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.42</td>
<td>1.06</td>
<td>29.2</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.49</td>
<td>2.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retention</td>
<td>Experimental</td>
<td>18</td>
<td>0.43</td>
<td>2.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Authoritative Attitude</td>
<td>Pre-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.50</td>
<td>1.03</td>
<td>30.833</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.55</td>
<td>2.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retention</td>
<td>Experimental</td>
<td>18</td>
<td>0.47</td>
<td>2.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Concessive Attitude</td>
<td>Pre-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.53</td>
<td>1.17</td>
<td>24.691</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.39</td>
<td>2.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retention</td>
<td>Experimental</td>
<td>18</td>
<td>0.33</td>
<td>2.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarity of Communication</td>
<td>Pre-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.26</td>
<td>1.17</td>
<td>23.684</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.26</td>
<td>2.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retention</td>
<td>Experimental</td>
<td>18</td>
<td>0.28</td>
<td>2.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Pre-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.36</td>
<td>1.00</td>
<td>30.875</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>Experimental</td>
<td>18</td>
<td>0.41</td>
<td>2.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retention</td>
<td>Experimental</td>
<td>18</td>
<td>0.36</td>
<td>2.61</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A statistically significant difference was found between pre and post-test in terms of non-traditional roles, non-authoritative attitude, non-concessive attitude and clarity of communication sub-dimensions, and also of BADEP Attitude Inventory total post-test scores in the experimental group. It was also found that the pre-test scores of non-traditional roles, non-authoritative attitude, non-concessive attitude and clarity of communication sub-dimensions, and also of BADEP Attitude Inventory total post-test scores in the experimental group were lower compared to post-test scores and retention test scores. These results show that the fathers in the experimental group retained the mean scores they obtained in the post-test in the
last 6 weeks regarding non-traditional roles, non-authoritative attitude, non-concensive attitude and clarity of communication sub-dimensions, and also of BADEP Attitude Inventory total post-test scores.

**Quantitative Findings**

**Table 5:** Preliminary interview results of PDFE of fathers and their spouses in terms of the gains of fathers.

<table>
<thead>
<tr>
<th>Categories</th>
<th>According to Fathers</th>
<th>According to Mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consciousness and Awareness</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Support to Communication</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Spending Effective Time</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Recognizing Children</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Patience and Anger Control</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Learning to Play Games</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Understanding</td>
<td>--</td>
<td>4</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>--</td>
<td>1</td>
</tr>
</tbody>
</table>

It was found that a great majority of fathers and their spouses expressed that the program of PDFE would make gains over “Consciousness and Awareness”, “Support to Communication”, “Spending Effective Time” in terms of fathers.

Some of the views of mothers and fathers are as follows:

“I believe that my awareness in the issues with regard to my child will increase thanks to this program and that I will be able to know how to spend effective time with my child, how to communicate with him/her and learn the latest developments in scientific sense” (Father – 5).

“I will be in a healthy contact with my child. Besides that, I will know the effects of my behaviors on my child and behave so” (Father – 16).

**Table 6:** Post interview results of PDFE of fathers and their spouses in terms of the gains of fathers.

<table>
<thead>
<tr>
<th>Categories</th>
<th>According to Fathers</th>
<th>According to Mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consciousness and Awareness</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>Change in Attitudes</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Relation with Children and Support to Communication</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Support to Spending Time Effectively and Qualitatively</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Learning Qualitative Games/Activities</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Increasing Patience and Tolerance</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Easiness in Child Raising</td>
<td>2</td>
<td>--</td>
</tr>
<tr>
<td>Support to Expressing Love</td>
<td>2</td>
<td>--</td>
</tr>
<tr>
<td>Support to Problem Solving Skills</td>
<td>1</td>
<td>--</td>
</tr>
<tr>
<td>Coolness and Anger Control</td>
<td>--</td>
<td>4</td>
</tr>
</tbody>
</table>

“I particularly wanted my husband to participate in this program. I believe that my husband must have better communication with our children and that he
must understand them and control his anger which he sometimes exhibits.

We can have some different ideas while growing up our children and we have to find a common point for the benefit of our children” (Mother -5).

It was found that a great majority of fathers and their spouses expressed that the program of PDFE would make gains over “Consciousness and Awareness”, “Change in Attitudes”, “Relation with Children and Support to Communication” in terms of fathers.

Some of the views of mothers and fathers are as follows:

“My approach towards my child became more different. I believe I am now more conscious. I learned that there is not always one truth and there might be some alternative solutions” (Father –2).

“It made me consider my attitudes and behaviours towards my child scientifically and rethink them by questioning. It also made me see the wrong that I believed true and the true that I believed wrong by means of awareness it caused on me” (Father -8).

“First of all, I recognized myself thanks to this program. I learn to find the mistake upon me. I got rid of the unnecessary anger I felt towards children. My anxiety and concern disappeared. I learned to look through the eyes of my child. I was purified of my traditionally wrong knowledge. Now, I know what to do” (Father -18).

“I made me attain awareness. I saw the changes about my shares that I tried hard to make them believe but I couldn’t, without saying anything more” (Mother –13).

“My child behaves more calmly and understandably, playing more games” (Mother -14).

**DISCUSSION AND RESULTS**

It was found in the current study that The Program for Distinctive Fathers Education had a positive effect on the attitudes of fathers towards their children and that this effect was retained from the post-test to the retention test applied 6 weeks later. At the end of the education, it was found that fathers in the experimental group and the spouses made some gains over consciousness and awareness, changes in attitudes, support to relation and communication, spending effective and qualitative time, learning qualitative games/activities, increasing patience and tolerance in PDFE in terms of fathers. In this sense, it is likely to say that PDFE had an effect on fathers and that it was supported by qualitative and quantitative data obtained from fathers and mothers.

It is likely to think that the fact that the program PDFE is successful in terms of the attitudes of fathers towards their children could result from the presence of such issues as the effects of father attitudes over child, positive disciplinary methods, changing undesired behaviours in child and listening to the child and talking to him, and also presence of different methods and techniques regarding the attitudes in the educational programs. Kaminski, Valle, Filene & Boyle (2008) put forward that the family education program for the parents of the children at the age of 0-7 is of great effect on their mothers and fathers to change their attitudes, on the prevention of
early childhood education behavioural problems or improvement of their behaviours. Similarly, another study showed that family programs developed the attitudes and behaviours of both parents and children (NICE, 2006). When the families are taught to put some limit to their children in the family education programs, and they are guided in a way to make them criticise their children less and praise them so often, these education programs could help the mothers and fathers change their attitudes. In addition, family education programs could help mothers and fathers to reduce stress, improve communication and solve disagreements (Matthew, Wang, Bellamy & Copeland, 2005).

In particular, when it comes to the fact that there lie parents’ harsh, punitive and negative attitudes under the behavioural problems of the children in preschool period (Deater Deckard, Dodge, Bates & Pettit, 1998), it is likely to say that it would make great contribution to make fathers conscious about adopting positive and suitable attitudes towards their children. In addition, it is thought that it is a big necessity to have a program where fathers and mothers could have their education together in Turkey.

In the future studies, it is possible to carry out longitudinal studies to investigate long term retention of the program PDFE and the efficiency of the follow up studies could be tested 1 year after the education.

ACKNOWLEDGEMENT

This study is based on a PhD thesis titled “The Effect of The Program for Distinctive Fathers Education (PDFE) on The Relations, Attitudes and Father Involvement of Fathers with Their Children”. This thesis study was supported by Gazi University Projects of Scientific Investigation, Project Number: 04/2016-09

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Chapter 2

Virtual Reality (VR) as Innovative Technology in Landscape Architecture Education

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INTRODUCTION

With the development of technology in the 21st century, designers-landscape architects have made great contributions to computer-aided design. First, they strengthened the graphic, diagram, drawing and design ideas on paper during the education and research process. Strengthened these expressions with computer based visualization (3d drawings) (Akıncı and Cındık Akıncı, 2017). However, the existing 3D modeling software has been able to partially realize the 3D simulation of an area and is deprived of the feeling of reality.

Landscape architecture has a scale and a three-dimensional structure as a discipline. As a three-dimensional structure, landscape is the experience of exploring and designing "inside out" scenery by an observer moving through the space (Nijhuis, 2013). Three-dimensional designs are attracting interest in a three-dimensional world. Elements such as ground floor, reinforcements, plants, architectural objects, which are modeled in computer environment and made into visual presentations, reveal more beautiful and healthy designs with visual perception in design (Özdemir et al., 2013). For many years, landscape architecture design and teaching has mainly depended on two-dimensional drawing and oral teaching, lacking spatial simulation and computer technology support. Later on, the quality of teaching was improved with computer aided software (Autocad, SketchUp, 3d max etc.) (Chen and Minghan, 2016). Computer-aided designs are becoming easier to visualize. These programs can produce results that are close to reality and clear projects can be put forward (Olgun and Yılmaz, 2014).

Nature is a living concept within the discipline of landscaping architecture. Water tidal activity, wind, seasonal changes, topography, etc. visible, tangible facts. This has led to the development of some auxiliary tools. From the beginning of the design (topographic infrastructure) to the end (acquisition of the product), virtual reality (VR) has begun to be used to recognize the area and provide a sustainable environment.

The development of technology has allowed the use of new approaches in landscape education. One of these technologies is virtual reality technology that provides three-dimensional reality. With the rapid development of computer technology and the development of the virtual reality program, a new process has emerged in the architectural field. This process is a process developed by designers...
and planners to better understand the product during the analysis, design and implementation phases of a project to enable landscape architects to make and apply visual, auditory and sensory decisions. Virtual reality landscape architecture, architecture, city district planning and so on can address different branches of science. Therefore, it contains information about the use of more accurate and better design proposal and to highlight the importance of virtual reality by offering solutions to implement projects in landscape planning and design stage.

**Virtual Reality (VR)**

Virtual reality is a system in which a user is able to emotionally perceive emotionally through the special devices he wears on this simulated environment and to effectively control this artificial world through these devices in a computer generated three-dimensional simulation of a real world situation. That is to rebuild the truth. A virtual reality system consists of a presentation system and a connection system to enable the user to interact with the system. Virtual reality studies have begun to be developed after the 1990s and development studies are still underway. This new technology is a technology that can be used for many purposes and for various purposes. Especially for the individual, it is a very effective technology in the artificial environment, in the learning environment. The individual learns by doing and living in artificial environments created in this technology. The use of this technology is only possible with advanced computer software and specially developed equipment. It is a technological innovation that will create your future educational environments (Kayabaşı, 2005).

Virtual Reality (VR) can be defined as creating a simulated environment using computer technologies. Unlike traditional user interfaces, VR provides an active user experience. Instead of watching a screen, users interact with the 3D world. A door opens to the virtual world through a computer simulating as many senses as possible, such as sight, hearing, touch, feel and smell.

Virtual reality is a realistic three-dimensional image or virtual environment created by a mixture of interactive hardware and software, which is regarded as a real environment where the user interacts visually or physically. VR technology allows to stimulate the different human senses (e.g. sight, hearing, touch) and create the experience of the sense of “being there” (Brunnett, Coquillart, & Welch, 2008).

Another definition that can be used for virtual reality is a three-dimensional, computer-generated environment that can be discovered and interacted with by a person. This person becomes part of this virtual world and can intervene or perform a series of actions by interfering with the objects while there. In a nutshell, virtual reality is the creation of a virtual environment in which our senses are presented and we will experience as if they were really there. A technology that is very expensive at first output is becoming cheaper and widespread over time. From this perspective, it can be said that in the future, more innovative uses of technology and possibilities of virtual reality will enable communication and environment to be worked on.
Properties of Virtual Reality Environments

The important aspect of virtual reality is convincing and immersive. To get a good experience, it must be planned and programmed to the smallest elements in the environment. In landscape architecture education, to be sure of the virtual realism of the two-dimensional elements from the design process to the planning process.

Virtual reality refers to immersive, interactive, multisensory, viewer-centered, three dimensional computer generated environments and the combination of technologies required to build these environments. Virtual reality has three basic characteristics: Immersion, presence, and interactivity (Walsh and Pawlowski, 2002; Sherman and Craig, 2002). The virtual reality environment is the environment in which the person is mentally disconnected from the real environment and has various interactions such as entering into the simulation, being there, circulating, changing the places and properties of the objects, and these interactions are the result of sensory reactions as in the real world (Kayapa, 2010).

Virtual reality (VR) allows highly detailed observations, accurate behavior measurements and systematic environmental manipulations in controlled laboratory conditions. For this reason, it has the potential to be a valuable research tool for building usability studies and for studying human-environment interaction in architectural research and application (Kuliga et al., 2015).

Another aspect of virtual reality environments is that people have information about the objects and places that they can not find a way to go.

VR in Architectural Areas

With the rapid development of technology in the 21st century, there has been an intense increase in virtual reality (VR) implementations in recent years. The use of virtual reality (VR) can be achieved in many areas well. There are a wide variety of applications for virtual reality which include: Architecture, Military, Sport, Medicine, The Arts, Entertainment and Education. According to Barth (2005), which expresses virtual reality (VR) as a sophisticated way to experience a 3D model of everything a designer can bring, naturally, architects, engineers and landscape architects have the chance to put their designs into this new technology.

In architectural design education, most students complain that better design processes are not understood clearly and that the concept of creativity has changed from person to person. It is also important to be able to experience it as much as three-dimensional thinking for its design approach and quality. For this reason, the VR system will facilitate creativity in architectural education and facilitate the three-dimensional understanding of design processes. Virtual reality also expresses the dreaming and construction of a product that has not been revealed yet.

Virtual reality users can experience the environment created by the computer. The application of virtual reality in an architectural design studio can help students visualize the spatial qualities of their designs and visualize the color and texture of their materials (Chan, 1997). Virtual reality is a necessary technology for perceiving architectural structures and spaces.

Virtual environments allow systematic environmental management that can not
be implemented in real environments (or ineffective). While it is difficult to significantly change the spatial configuration of an existing building, the effect of the various redesigns on user behavior can be effectively simulated in virtual reality, without interruption to continuous building use. For environmental planners, VR offers numerous benefits such as visualizing, testing, experiencing, analyzing and jointly discussing planned designs and already built buildings. Detailed observations, accurate behavior measurements and systematic environmental manipulations are possible in virtual reality (VR) environments and in laboratory conditions. For this reason, it has the potential to become a valuable research tool in architectural research and applications (Kuliga et al. 2015).

According to Kuliga et al. (2015), not only behavioral (eg Navigation) and cognitive outcomes (eg, Pathfinding strategies) but also subjective experiences of users need to be taken into account in order to understand and improve adaptation between real and virtual environments. Only then can virtual reality reach its full potential as a research tool, such as the discovery of systematic building variations in terms of post- and pre-occupancy evaluation, as well as offering numerous possibilities for environmental and behavioral research, such as highly accurate measurements. More detailed research on the potential of VR and its application to research and architectural practice can open the way to becoming "common practice" in the creation of usability studies and user-centered design.

Briefly for architectural area, VR can realize an illusion. Until the development of this technology, architects had to wait weeks, months or more to see the results of their work. An architect works by making designs and plans on a page. They can express the architect's vision, but that does not mean that the vision needs to be realized. Time, cost and qualified labor force are necessary to realize them. No matter how useful they are, the scale models can not keep up with the real ones. A small-sized copy is more useful than a printed page or a 2D computer monitor, but it can not express the mind and glory of many architects when doing their design. Creating models is expensive and time-consuming, and an architect can not easily refresh these models as he makes changes and improvements. On the other hand, VR is longevity, fast and cheap. A design can be passed on to the imagination in the virtual world, and a sufficient quality simulation can be indistinguishable from the reality. With this technology, architects can follow what they have created by planning, see it as they see it, and make real-time changes when necessary. In the virtual world, everything is possible and architects can use the software to add or remove items they see fit.

**VR in Landscape Architecture Education**

Landscape architecture is a field that studies the concepts of ecology, planning and design in a systematic way. It plays a mediating role on the basis of protecting and managing human and physical environment, natural and cultural resources. It is a profession discipline dealing with field planning, design and management combining science, engineering, technology and art.

Landscape architecture education programs are usually based on the aim of educating professionals to design and plan outdoor spaces in different sizes and
scales according to user needs. Topics include design and planning principles, landscape architecture and design products. It emphasizes the functions of buildings, urban parts and rural areas in different functions and how outdoor spaces should be shaped depending on these functions. It is assessed that the design of the outside without knowing the internal dynamics of a formation will not be realistic. All natural, artificial, organic and inorganic building materials used in design are introduced. Engineering concept and engineering structures, survey and measurement information and detailing topics are covered. The curriculum aims to train the necessary personnel in the field of landscape planning and landscape design. The basis of the program is the physical and biological approaches that form the basis for the planning, design and management of natural and cultural resources. In this context, there are trained personnel who are equipped with academic and technical knowledge that both public and private sector need.

Landscape architecture is the essence of planning and design programs when viewed from the curriculum framework. For this reason, it will be quite appropriate to use VR technologies in landscape architecture education.

Virtual reality can offer a beautiful experience in park-garden spaces designed in the landscape architecture. A landscape architect plans and designs traditional outdoor plans such as parks, gardens, cemeteries and coastal areas. Also plans and designs for campuses, holiday villages, trade centers, residential development, institutional and institutional centers, transportation facilities and more (URL-1). Among the sectors studied in landscape education, project-design takes the first place (Atik et al., 2013). Whatever the scale of the landscape projects, vision, imagination and technique are needed in a landscape architect. Landscape architects develop new ways to use land in the best possible way. They have a direct influence on planning the reform and environmental policy they have developed (Landscape Institute, 2012).

A design process in the field of landscape architecture begins with the survey phase. The design is followed by field analysis. Projects are a design product. These designs are actually models of an imagination.

Landscape models in landscape architectural designs; besides drawings and maps are very important in the design research and research process (Nijhuis and Stellingwerff, 2011). Nowadays, models have reached virtual reality in computer environment. Modeled together, we can navigate and observe the region as if it were real. In recent years, the increase in modeling in the field of landscape architecture is the success of computer programs (Akıncı and Cındık Akıncı, 2017).

As another issue, we can say that spatial ability is an important part of landscape architecture education. In this context, there are studies that indicate that virtual reality is related to spatial ability. With the development of VR technologies, experts and educators have begun to ask the question "Can virtual environments be equivalent to real environments or produce better spatial understanding in them?". VR technology provides unique assets to assess, train and improve spatial capabilities. The ability to consistently create, present and manipulate dynamic three-dimensional (3D) objects and environments enables precise measurement of human interactive performance with these warnings. VE spatial aptitude testing and
training systems can provide ways for cognitive processes to go beyond what is possible with methods based on 2D pen and paper presentations (or methods that use real objects) of 3D objects typically found with traditional tools. Conventional methods are usually limited to poor depth, motion, and 3D hints needed for proper stimulus delivery. In addition, they have limited capacity for accurate measurement of responses. Based on observational methods, VR presents the potential to address ecologically valid (functional simulations) without loss of common experimental control with natural studies in this area (Kaufmann et al., 2005).

**Virtual Reality in Planning and Design Process**

There are various studies about how Virtual Reality Technology can be used by Landscape Architects. These studies are exploring how park and garden designs, green spaces and environmental regulations can be combined with this technology. With these studies, not only the value of technology, but also the extent to which designers and applications are accessible is tried to be shown.

Virtual reality, as well as health, travel, industry, education, play, architecture, will be an indispensable element in every aspect of our lives. For example, in a landscape architecture education project, it is like living a virtual reality of the leaves falling on the pavement with a wind along a road between trees.

On the other hand, the fact that the tools and equipment used in course are behind the times, the lack of catching up with technology is another factor that negatively affects the quality of the course. The lack of studios made up of computer units, printers, scanners, and plotters equipped with licensed design programs is preventing the instructor from transferring what they want to teach in a shorter time and in a more understandable way to solve such problems as conceptual thinking. Thus, students are deprived of the possibilities of creating an original work (Küçükerbaş and Sönmez Türel, 2011).

More detailed research on the potential of VR and its application to research and architectural practice can open the way to becoming "common practice" in the creation of usability studies and user-centered design. (Kuliga et al., 2015).

**CONCLUSION**

Appropriate use of virtual reality applications in landscape architecture education can enable qualified and desired results to be obtained in learning, teaching and design processes. Virtual reality environments can offer interesting experiences and opportunities for field researchers, educators and students. Virtual reality environments can provide different possibilities for students learning in architectural areas where spatial ability is important and which is important for creativity, to discover these capabilities and use them appropriately. It is obvious that the environments that can not be accessed in terms of time and space will be beneficial to students who are studying in the field of landscape architecture through virtual reality applications. A virtual reality laboratory to be established within the university can provide not only landscape architecture but also a lot of opportunities for all students who study in areas such as architecture, interior architecture, urban district planning where visualization and design are important.
Virtual reality technology is not yet a widespread technology in landscape architecture education. When virtual reality technology is used appropriately in landscape architecture education, there is a potential for students to interact with these environments and maximize their learning. Virtual reality technology, which can be widely used in learning environments in the coming years, will be able to be used effectively in the field of landscape architecture. Because students learn to plan and design by doing and living in virtual environments.

In today's world, rapid change and development of technology both hardware and software has made it necessary to update all the technological tools used in the lessons. In addition to the computer laboratories where licensed software is available in the departments, VR laboratories tailored for landscape architecture training can also be established.

In many places, VR is defined as a technology that breaks down the memories that will mark the next 10 years. It is thought that it will have a serious place especially in entertainment and education sector. Because it offers an experience that surrounds people all the time and it takes them to the center. From this perspective, it would be appropriate to set up virtual reality laboratories in the departments to ensure that the students in the landscape architecture department receive more qualified education, develop planning and design skills, and contribute to spatial thinking skills.

It should be said that there are some disadvantages as well as many advantages of virtual reality technology. First of all, the complexity of this technology makes it impossible to always use it because it is expensive in terms of software and hardware. It is also difficult to design the materials to be used for educational purposes. As a last word, although 3D virtual environments are used to simulate objects, it is important to remember that these environments do not allow users to perceive environmental complexity as a human-environment interaction.

As a result, we can say that the creation of VR-compatible 3-D models on the basis of landscape architecture and architectural area, public and private institutions in the near future will become increasingly widespread and an integral part of this field. VR applications increase research in the areas of Architecture and Landscape Architecture, especially where visualization is required. In addition, VR can be used as an effective learning tool in support of spatial thinking and reasoning skills of students in this field. Finally, it can be said that VR technologies will be a potential technology to play a key role in landscape architecture in the coming years.

REFERENCES
Chapter 3

Analyzing Elementary Level Turkish EFL Learners’ Written Errors

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INTRODUCTION

Language learning is a complex process which involves development of four skills. Among those skills, writing is considered to be the most challenging task for language learners. A student may perform well in routine grammatical exercises, or can find the answers of a reading text easily, but he cannot show the same performance when he is asked to write a short paragraph. Writing is a complex process even in the first language. It is even more complicated to write in a foreign language (Kaweera, 2013; Chen, 2006; Nunan, 1989; Krashen, 1984; White, 1981). During the process of foreign language learning, learners make mistakes which are very natural but language teachers are curious about why students keep making same mistakes although these mistakes have been highlighted and corrected several times. (Lalande, 1982; Erdoğan, 2005). This issue has been discussed by so many researchers since Corder (1967) pointed out the importance of errors in language learning.

Difference between ‘Error’ and ‘Mistake’

Most of the time ‘error’ and ‘mistake’ are used interchangeably. They are quite different though. For instance, Brown (2006) describes mistakes as a performance error that is either a random guess or a "slip," in that it is a failure to utilize a known system correctly. This failure is perceived as a mistake while errors refer to “a noticeable deviation from the adult grammar of a native speaker, reflecting the interlanguage competence of the learner”. Similarly, Ellis (1997) suggests that errors reflect gaps in a learner's knowledge; they occur because the learner does not know what is correct. Mistakes reflect occasional lapses in performance; they occur because, in a particular instance, the learner is unable to perform what he or she knows. Corder (1967) pointed out the difference between them; errors are systematic and mistakes are not systematic. Londoño Vásquez (2008) summarized these definitions; an error is made when the deviation arises as a result of lack of knowledge while a mistake or slip occurs when learners fail to perform their competence in the target language.

Classification of Errors

Errors have been classified into different categories by different researchers. The first classification is made by Corder (1973) cited in Erdoğan. He classified errors into four categories; omission of some required element; addition of some unnecessary or incorrect element; selection of an incorrect element; and disordering
of the elements. Ellis (1997) described learner errors as errors of omission, overgeneralization errors and transfer errors. He further suggested that errors can be classified as global and local errors. When the error is global, it causes communication problems; however, local errors do not impede communication as it affects only one constituent in a sentence. The final classification cited in Brown (2006) suggested by Lennon (1991) categorized errors as domain and extent. This classification is based on linguistic units: ‘domain’ is the rank of linguistic unit from phoneme to discourse that must be taken as context in order for the error to be understood, and ‘extent’ is the rank of linguistic unit that would have to be deleted, replaced, supplied or reordered in order to repair the sentence’. Corder (1973) made another classification as overt and covert errors, which is very similar to Lennon’s classification.

The importance of the Study

Students’ errors have always attracted the attention of teachers, syllabus designers and test developers (Erdoğan, 2005). The significance of the errors was summarized by Corder (1967) in three ways. First, it gives the teacher an idea about how much the learner progressed in language learning. Second, it provides evidence to the researcher about how language is learned or acquired and what strategies are employed. Finally, it is a device to learn a language used by the learner. He asserts that it is a strategy both employed by children acquiring L1 and others learning L2. Moreover, as Schmidt (1990) highlighted, learners may or may not notice the errors they have made. Even if an anomalous form is noticed, the learners are often not equipped with the linguistic competence to self-correct the anomaly (Chen, 2006).

With the development of technology the world has become global and in this global world writing has become more important way of communication. While communicating with others, errors may impede communication so they should be eliminated. In order to eliminate errors they should be studied in detail. In the light of the information given above the aim of this study is to analyze the errors of elementary level Turkish EFL learners. It is intended to answer the following research questions;

1. What are the most common errors of Turkish EFL Learners?
2. Does their error ratio change as they progress?
3. Is there a change in error types as they progress?

METHODS

Design: This is a descriptive study. Document analysis, which is a qualitative research method, was used. This study was carried out through error analysis, to investigate the errors of elementary level Turkish EFL learners’ writings.

Participants and setting: In this study written products of 22 students who attended a prep-school at a state university during 2012-2013 academic year were used. They were all Turkish students and they would study tourism. At the end of a placement test they were placed at elementary level at the beginning of the year. They had 24 hours intensive English course per week for one academic year and they were supposed to reach B1 level at the end of the year. Two of the students’ papers were excluded as one of them took only one exam and the other did not do
the writing section in one of the exams. Consequently 60 papers written by 20 students were analyzed in this study.

Data collection: Data was gathered from students’ achievement tests. In order to determine whether their errors changed as they progressed, first achievement test at the beginning of the fall term, second achievement test at the end of the fall term and last achievement test at the end of spring term were used. There was a writing section at the end of each achievement test, and students were offered two options to write about (See Appendix 1). They were asked to write 12-15 sentences for each writing topic. While analyzing the errors, three steps of error analysis specified by Corder (1974) were followed: (1) Collection of sample errors; (2) Identification of errors, and (3) Description of errors.

RESULTS

Table 1: Total and average number of words and errors made by the students.

| Student No | First Exam |  | Second Exam |  | Last Exam |  | Average |  | Total |  |
|------------|------------|  |-------------|  |------------|  |----------|  |--------|  |
|            | Number of Words | Number of Errors | Number of Words | Number of Errors | Number of Words | Number of Errors | Number of Words | Number of Errors | Number of Words | Number of Errors |
| 1          | 104        | 15                      | 65           | 8                  | 66           | 8                  | 78           | 10                  | 235             | 31                  |
| 2          | 61         | 8                       | 45           | 9                  | 54           | 8                  | 53           | 8                  | 160             | 25                  |
| 3          | 67         | 10                      | 47           | 7                  | 58           | 15                 | 57           | 11                 | 172             | 32                  |
| 4          | 63         | 5                       | 70           | 15                 | 58           | 8                  | 64           | 9                  | 191             | 28                  |
| 5          | 63         | 12                      | 74           | 14                 | 74           | 8                  | 70           | 11                 | 211             | 34                  |
| 6          | 94         | 7                       | 50           | 9                  | 65           | 14                 | 70           | 10                 | 209             | 30                  |
| 7          | 63         | 11                      | 37           | 6                  | 96           | 10                 | 65           | 9                  | 196             | 27                  |
| 8          | 44         | 4                       | 54           | 9                  | 26           | 3                  | 41           | 5                  | 124             | 16                  |
| 9          | 89         | 20                      | 69           | 10                 | 94           | 12                 | 84           | 14                 | 252             | 42                  |
| 10         | 72         | 11                      | 41           | 3                  | 46           | 6                  | 53           | 7                  | 159             | 20                  |
| 11         | 47         | 11                      | 60           | 10                 | 117          | 17                 | 75           | 13                 | 224             | 38                  |
| 12         | 63         | 7                       | 38           | 5                  | 27           | 5                  | 43           | 6                  | 128             | 17                  |
| 13         | 42         | 1                       | 64           | 3                  | 53           | 4                  | 53           | 3                  | 159             | 8                   |
| 14         | 31         | 4                       | 37           | 7                  | 35           | 4                  | 34           | 5                  | 103             | 15                  |
| 15         | 61         | 9                       | 57           | 10                 | 64           | 8                  | 61           | 9                  | 182             | 27                  |
| 16         | 90         | 12                      | 57           | 10                 | 82           | 14                 | 76           | 12                 | 229             | 36                  |
| 17         | 80         | 12                      | 82           | 9                  | 92           | 10                 | 85           | 10                 | 254             | 31                  |
| 18         | 52         | 10                      | 61           | 6                  | 46           | 5                  | 53           | 7                  | 159             | 21                  |
| 19         | 74         | 12                      | 37           | 5                  | 107          | 18                 | 73           | 12                 | 218             | 35                  |
| 20         | 46         | 10                      | 48           | 10                 | 50           | 7                  | 48           | 9                  | 144             | 27                  |
| Average    | 65         | 10                      | 55           | 8                  | 66           | 9                  | 62           | 9                  | 185             | 27                  |

When table 1 is examined, it is seen that the number of words written by the students change between 31- 104 for the first exam, 37-82 for the second exam, and 27-117 for the last exam. Average number of words decreased in the second exam and it increased in the last exam again. It is similar in the number of errors; there is
not a significant difference between the first and the last exam in terms of words and error numbers.

At the end of the analysis of all papers, 26 types of errors were identified. The total number of the errors was 540. It is similar to the number of words distribution. The number of errors was the highest in the first exam and it decreased in the second exam but it increased in the last exam again. There is not a big difference between the first and last exam.

Table 2: the number and distribution of errors in the exams

<table>
<thead>
<tr>
<th>Error types</th>
<th>1st Exam</th>
<th>2nd Exam</th>
<th>Last exam</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wrong form</td>
<td>10</td>
<td>5,2</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Possessive apostrophe error</td>
<td>9</td>
<td>3,1</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Fragment</td>
<td>10</td>
<td>4,2</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Extra word (unnecessary)</td>
<td>3</td>
<td>0,5</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Wrong or missing preposition</td>
<td>19</td>
<td>9,9</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>Wrong use of verb</td>
<td>30</td>
<td>15,7</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Missing verb (to be)</td>
<td>12</td>
<td>6,3</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Missing verb</td>
<td>2</td>
<td>1,0</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Wrong Word</td>
<td>7</td>
<td>3,7</td>
<td>21</td>
</tr>
<tr>
<td>10</td>
<td>Article error (missing, wrong, extra)</td>
<td>16</td>
<td>8,4</td>
<td>9</td>
</tr>
<tr>
<td>11</td>
<td>Incomplete sentence</td>
<td>2</td>
<td>1,0</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Faulty structure</td>
<td>18</td>
<td>9,4</td>
<td>24</td>
</tr>
<tr>
<td>13</td>
<td>Tense error</td>
<td>3</td>
<td>1,6</td>
<td>8</td>
</tr>
<tr>
<td>14</td>
<td>Capitalization</td>
<td>6</td>
<td>3,1</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>Spelling</td>
<td>29</td>
<td>15,2</td>
<td>13</td>
</tr>
<tr>
<td>16</td>
<td>Missing word</td>
<td>3</td>
<td>1,6</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>Run on sentence</td>
<td>0</td>
<td>0,0</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>Pronoun error</td>
<td>7</td>
<td>3,7</td>
<td>6</td>
</tr>
<tr>
<td>19</td>
<td>Word order</td>
<td>1</td>
<td>0,5</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>Plural -s</td>
<td>4</td>
<td>2,1</td>
<td>3</td>
</tr>
<tr>
<td>21</td>
<td>Punctuation</td>
<td>4</td>
<td>2,1</td>
<td>5</td>
</tr>
<tr>
<td>22</td>
<td>Parallel structure error</td>
<td>1</td>
<td>0,5</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>Subject-verb agreement</td>
<td>2</td>
<td>1,0</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>Shift in tense</td>
<td>3</td>
<td>1,8</td>
<td>2</td>
</tr>
<tr>
<td>25</td>
<td>Missing modal</td>
<td>4</td>
<td>2,4</td>
<td>2</td>
</tr>
<tr>
<td>26</td>
<td>Wrong prefix</td>
<td>2</td>
<td>1,1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>191</td>
<td>165</td>
<td>184</td>
<td>540</td>
</tr>
</tbody>
</table>
Among those 26 errors the most frequent ones changed in each exam. When we look at top ten in the list, it is composed of fourteen errors; wrong use of verbs, spelling, wrong or missing prepositions, faulty structures, article errors (missing, wrong, extra), missing verb (to be), wrong forms, fragment, wrong words, pronoun errors, tense errors, punctuation, word order and capitalization. In the first exam, there are no examples of shift in tense, missing modal and wrong prefix error types.

Table 3: Topic choice distribution of the students in the exams

<table>
<thead>
<tr>
<th>Topic</th>
<th>1st Exam</th>
<th>2nd Exam</th>
<th>3rd Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>

The numbers in table 3 suggests that they wrote about all the topics they were suggested. In the first exam they mainly chose the first topic as it was emphasized more in the first weeks of the term.

Table 4: Example sentences for 10 most frequent errors.

<table>
<thead>
<tr>
<th>Faulty structure</th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>I was child played theatre but I didn’t now.</em></td>
<td><em>I think a new job animation</em></td>
<td></td>
</tr>
<tr>
<td>Wrong word</td>
<td><em>Then add 2 cup flour, 1 pocket bookin power….</em></td>
<td><em>Her hobbits write sing and read a historical books</em></td>
</tr>
<tr>
<td>Wrong or missing preposition</td>
<td><em>I was born in 10th on the of April</em></td>
<td><em>I’m from in city Giresun</em></td>
</tr>
<tr>
<td>Wrong form</td>
<td><em>I am very nervously</em></td>
<td><em>We will conguralation something.</em></td>
</tr>
<tr>
<td>Spelling</td>
<td><em>Amasra is very niece.</em></td>
<td><em>Saddenly, they discovered her because very good sounds.</em></td>
</tr>
<tr>
<td>Fragment</td>
<td><em>My one sister. Her name is Şükran</em></td>
<td><em>Her very beautiful sounds.</em></td>
</tr>
<tr>
<td>Article Error (missing, wrong, extra)</td>
<td><em>I want go to the New York</em></td>
<td><em>Her hobbies play guiatar, meet her friends, play basketball</em></td>
</tr>
<tr>
<td>Tense error</td>
<td><em>I doesn’t like watch the theatre.</em></td>
<td><em>Poor children doesn’t wearing expensive clothes</em></td>
</tr>
<tr>
<td>Pronoun error</td>
<td><em>My mothers name is Fatma.</em></td>
<td><em>Her fourty years old.</em></td>
</tr>
<tr>
<td></td>
<td><em>She is name Adriana Lima.</em></td>
<td></td>
</tr>
<tr>
<td>Punctuation</td>
<td><em>Finish: bake for 1 hour.</em></td>
<td><em>They aren’t equally so students have to wearing uniform</em></td>
</tr>
</tbody>
</table>

**DISCUSSION**

The first research question was about the most common errors of Turkish EFL learners. When we look at the total errors and their frequency, the most ten common errors were faulty structures (11%), spelling (10 %), wrong or missing prepositions (10%) missing verbs (to be) (7%), wrong forms (7%), fragment (7%), wrong use of verbs (6%) article errors (6%), wrong words (6%), and pronoun errors (4%). They make 75 percent of all errors. There are similarities with other studies conducted about error analysis. In the study conducted by Lunsford & Lunsford (2008), four items in top 10 error list is the same with this study; faulty sentence
structures, wrong forms, pronoun errors, and spelling. Zheng and Park (2013) compared Korean and Chinese university students’ written errors in their study. Verbs, prepositions, ill formed sentences, articles and wrong forms (noun form, adjective form) were included in their top ten list. Nezami and Najafi (2012) studied the common error types of Iranian learners and lexical/phrases choices, spelling, articles, prepositions, clause structure (aberrant clause) errors were identified in their most frequent error list. Murrow (2005) conducted a study with Japanese learners and the researcher classified the most frequent errors in the following order; verbs, parts of speech, articles, pronouns, nouns, prepositions and conjunctions. When compared to the findings of the study, it can be argued that if the categorization was made in a similar way, the verbs in the list would have been the most frequent ones as well. In the missing verb category the most common error was found ‘to be’ in Murrow’s study which is ranked fourth in our list. Another study with a similar finding was conducted by Butt and Rasool (2012). In their study the most frequent error was spelling, and then the second one was the use of the verbs. Lin (2002) examined 26 essays from Taiwanese EFL students at the college level. The results of this study indicated that the four highest error frequencies were sentence structures (30.43 %), wrong verb forms (21.01%), sentence fragments (15.94%), and wrong use of words (15.94%), respectively (in Chen,2006).

The number of the words written in the exams and the number of errors made were compared and the error ratio was calculated. Error ratio was 15% for the first and second exam and 14 % for the last exam. When the total ratio is calculated, it is found15 % again. It can be suggested that there is a slight decrease in the last exam but overall the error ratio doesn’t change as they progress. In this study error ratio was not compared according to different levels but according to the progress of students. In a study conducted by Nezami and Najafi (2012) they compared error ratio of different levels as well, and found that 47.2% of the errors were observed in low groups, 38.4% in middle groups, and 14.4% in high groups. In our study such a difference was not found as they progressed during the year.

For the last research question we must look at the error types in each exam. It can be seen that in the first exam, there are no examples of shift in tenses, missing modals and wrong prefix error types and in the second exam there is no example of parallel structure errors. Moreover, ten most frequent errors are composed of 14 error types but their rank is different in each exam. For example; wrong use of verb is the most frequent error in the first exam but it is not among the top ten lists in the second and third exams. This can be explained by variety of writing topics. In the first exam most of them chose to write about the first topic and it requires them to write about likes and dislikes and most of them weren’t able to use “like” in the correct form (like+-ing participle, like +to infinitive). This is supported by Murrow’s (2005) findings. The researcher claimed that the topic played an important role in types of the errors and suggested that a different topic might have thrown a different grammatical construct into prominence. Another study supporting this finding was conducted with Tai students. Watcharapunyawong and Usaha (2012) compared errors according to genres, namely narration, description,
and comparison/contrast and find that genre did affect writing errors as different text types required different structural features.

REFERENCES


Appendix 1

(First Exam) WRITING
Choose one of the topics below. Write about 12-15 sentences.

1) Write on “an internet posting about yourself”.
   First Paragraph: About me (give your name, age, country/city, job, work/study)
   Second Paragraph: Interests/hobbies (What do you like doing?)
   Third paragraph: Requests (what do you want? Why do you want a pen pal?)
2) Write a “recipe for your special dish”.

First Paragraph: List of ingredients
Second Paragraph: How to cook

(Second Exam) WRITING
Choose one of the topics below. Write about 12-15 sentences.

1) Write about an exciting or frightening experience you have had.
   How old were you? /Where was it?/ What happened?/ How did you feel?/
   What happened in the end?/ How did you feel in the end?
2) Write an advice e-mail to the problem below.
   Help!
   I started a new job in a bank six months ago. The salary and holidays are good and I’ll get a better job in the future if I stay. But I hate it. I don’t like working in an office. I’d like to do something more interesting and may be work outside. I don’t know what to do. Any advice?
   Peter.

(Last Exam) WRITING
Choose one of the topics below. Write about 12-15 sentences

1) Write a paragraph with your opinion about wearing uniforms in schools. Do you think wearing uniforms is a good idea or bad idea? Why /why not?
2) Write a paragraph about a famous artist or someone from your country. The paragraph should include; Birthplace/Hometown/ His/her interests, hobbies etc. How he/she became famous
Chapter 4

A Framework for Knowledge Management

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INTRODUCTION

“Power lies in knowledge; nothing but knowledge is superior to the rest.”
Nizami (1141 – 1209)

One of the functions of the science is to keep the people away from the tension caused by obscurity and uncertainty, and from mental chaos by elucidating the incidents and facts. Science fulfills this function by accounting for the causes of the incidents and facts in the nature, making what is unknown known. Causality depends to the consideration that, the incidents develop in the cause-and-effect relationship. Science elucidates the incidents and facts, not by coincidence, spell and magic, or by divine will, but by making use of the mind, putting forth how an incident occurs, how the cause and effect thereof comes out with evidences.

One of the approaches that science resorts to in elucidating the incidents is classification. It also resorts to various classifications for elucidating the history of the mankind. For instance, it classifies the history: Ancient Age, Medieval Age, New Age, etc. There are also other classifications applicable today. A classification that was preferred generally by sociologists and economists hitherto, but is now adopted by more circles than them, is the classification being made according to the main sector in which production is made. This classification is also called the Three Waves Theory (Martell, 2007). It has been popularized by A. Toffler.

According to the Three Waves Theory, mankind adopted three different modes of production until now. First of these three was the first wave, in which production had been made by way of agriculture. It began with the invention of the plough (the tool for plowing the arable fields). The second wave was the Industrial Revolution, having begun upon the invention of the engine. Production began to be made in the factories. It paved the path to modernization. The revolution that brought about the third change in the production is the informatics (information and communication) revolution, having come out following the invention of the computer and the internet. Knowledge has thereby become the main input of production of our time. These three revolutions did not spread to the whole wide world instantly. Like waves spreading after throwing a stone in the water, they spread worldwide over time. Even today, there are countries and nations that live concurrently in both agricultural and industrial societies. Some of the countries have become information societies. However, there are also countries that live the three waves at a time; such
as Turkey. Turkey is among the lands where people live in the agricultural, industrial, and information societies concurrently.

The main production factor in the informatics society is the knowledge. The production in the agricultural societies, which had been made in the arable fields by the power of horses and oxen, was replaced by the production in the industrial societies that was made in the factories by the power of the engines. In the information societies, however, production is made by means of informatics (computer, internet), using knowledge as the raw material. Computer has replaced the arable lands and factories of the previous modes of production. Unlike the past, when arable lands and factories could have been legated to children, the skill of processing knowledge may not be legated in the information societies. Each and every generation has to learn processing and producing the knowledge or creativity again by itself. This assigns the education systems new tasks.

**INFORMATION SOCIETY AND ORGANIZATIONS**

Modern societies are organized societies, and it may therefore be said that, the societies which are organized the most are also the most developed societies. Without the organizations, it is nearly impossible to live in today’s world. People are born into organizations, live in the organizations, work in the organizations, and are buried by organizations when they die.

The development of the civilization and organization of the mankind runs in parallel with each other. From municipalities to public institutions, from enterprises to factories, from private corporations or NGO’s to the virtual organizations in the internet, any formation composed of people gathered in the pursuit of a common goal is an organization. Organizations not only organize the life, but also maintain the continuity, controllability, and sustainability of the flow of services. Organizations constitute a social system running like a machine, in which rules are complied with in a rational environment.

Organizations maintain specialization, and thereby begin to possess advanced level of knowledge. This sort of knowledge is utilized not only in operating the same organization, but also for obtaining results. Such knowledge possessed by the organizations has become so abundant and technical that, it may now be managed only by the specialists thereof.

**MANAGEMENT INFORMATION SYSTEMS-MIS**

Computer, intranet and internet had their impact initially on the bureaucratic functioning of the organizations. The works that may be done hardly by many people have become doable by one computer-using personnel. For instance, while such works as recording documents, processing salary payrolls of the schools were being done by assistant principals, they have now become doable much faster and accurately by a single person. Since such works of them have begun to be performed via computers, assistant principals have returned back to their original profession of teaching.

Nowadays, just like the rest of the state institutions, educational institutes have also assigned majority of their duties to their information systems. Ministry of
National Education performs most of its duties in electronic speed via a MIS, named MEBSİS, without using any paper. Turkish State similarly performs most of the citizenship processes via internet at the address of e-turkiye.gov.tr.

MIS is the outcome of the development, and increase in the usefulness of the computers, enabling them capable of establishing communication with other computers. It consists of the Decision Support Systems, Expert Systems, Executive Support Systems, Office Automation Systems, and Transaction Processing Systems, which are now integrated (Çınar, 1996: 35-50).

MIS is an informatics system, which collects the data sources of the management of the organization within a systemic integrity, provides IT support to the daily routines of the organization, and aims to provide continuous flow of information, particularly to various levels of the management, in a way to make their tactical and strategical decisions successful (Yarmah, 1995: 174).

**Figure 1.** MIS Resources and the Features Being Sought For In the Knowledge Required By the Management. Çınar, 2002: 13

MIS are management systems that are focused on machines and technique, just like IT centers, disregarding the human being. Their function was used to be exaggerated at times when they were popular, in a way to be regarded as “if information is blood, MIS are the veins”. At that time the heart and brain were also used to be neglected.

**BASIC CONCEPTS RELATED TO KNOWLEDGE MANAGEMENT**

Those who work on the subject of Knowledge Management (KM) should analyze the concept of knowledge, and the other concepts in respect of knowledge well (Nonaka & Takeuchi, 1995; Davenport & Prusak, 1998). These concepts related to the concept of knowledge may not be used in place of one another. The knowledge in question is not the encyclopedic information, but the knowledge being produced by creative effort, and bought by those being in need, for such knowledge may solve their problems. The concepts related to the concept of knowledge are as follows: Data, information, knowledge and wisdom. While an upper form is attained upon the procession of each and every one of these concepts,
they may also be used thereafter. In other words, the information is attained from the procession of the data, knowledge is attained from the procession of the information, and the wisdom, as a form higher than the foregoing, is attained from the procession of the knowledge. Production, innovation, and creativity come up following such a production of knowledge.

Another two critical concepts related to KM are the concepts of tacit and implicit knowledge. Having drawn attention to the tacit knowledge in his work The Tacit Dimension (1966), Polanyi removed the veil over the tacit knowledge by saying that, “we actually know more than what we think”. Tacit knowledge is the abstract knowledge stored in the individual’s brain. It is hard to be shared and conveyed. Tacit knowledge may be found in different intensities. While lower level of abstract knowledge is the one that belongs to the individual him/herself, and is hard to be applied by the other employees, higher level of tacit knowledge is the individual’s general knowledge that may be conveyed in a way that may be applied by the other employees (Kurgun, 2006). Implicit knowledge, on the other hand, is the knowledge, which is tangible, and may be shared and understood by nearly everyone, including remarks, images, legal regulations, etc., for being the most easily shared, used, and stored.

Implicit knowledge may be obtained by indirect ways. For instance, one may obtain implicit knowledge by way of reading written texts. It is therefore independent from person, space, and time. However, the tacit knowledge may be obtained only from the person possessing it. An employee may learn the importance of the service quality by reading books, but may not adopt the “smiling attitude” by reading (Haldin-Herrgard, 1998: 359). Furthermore, while the implicit knowledge may be stored by multiple technological methods, the tacit knowledge may be stored only in the human brain (Çınar, 2002: 9). Like Stewart’s (1997: 61) resemblance, while the tacit knowledge is concerned with the quality of the wine, the implicit knowledge is concerned with the bottle of the same wine.

**KNOWLEDGE MANAGEMENT**

This field related to the organizational use of knowledge is a discipline relatively at its prime. Having started to be mentioned in the early 1990's, its framework was drawn towards the end of the same decade. Thanks to its increased significance, and diversified subjects (Çapar, 2006), there are departments being opened in the universities nowadays named with and teaching “Knowledge Management”.

Knowledge management is the management of the process of obtaining the organizational knowledge with the contribution of the knowledge obtained from internal and external sources, experiences of the employees, and the informatics system, as well as sharing, utilizing, and storing the same knowledge for further use, in order to achieve the organizational goals more effectively (Çınar, 2002: 55). In other words, KM is a strategy that enables the transmission of the knowledge to the right person at the right time within an organization, and thereby to cause the same knowledge shared and utilized in parallel with the objectives of the same organization (O’Dell & Grayson, 1998; Oliver et al., 2003).
KM is a situation related to the intellectual capital of the organization. Successes of the organizations depend to the increase in and effective use of their organizational sources, human resources being in particular, in order to resume their superiority in their competitions and services.

Knowledge management improves the effectiveness of the organization. It fulfills more rational actions in the sector the organization operates, and thereby becomes more productive. While the employees become very well acquainted with the organization and its goals, the organization learns faster, and all the units thereof increase their performances. As the machine named organization works well, both the buyers and the sellers of the respective service become satisfied. Good performance of the organization is actually due to its correct use of knowledge. All these have increased the interest in the knowledge management.

KM’s purposes are to unveil the tacit information in the organization, to integrate it with the organization's implicit knowledge, and thereby to make the organization operate more effectively and productively in order to increase the accuracy of its decision making, to guarantee the continuity of its production, to perpetuate its effort to achieve excellence, and to accelerate its organizational decisions and actions.

KM involves such actions as to obtain information for gaining efficiency from it, to reproduce it, to utilize it making it useful, and to store it for further use at times when necessary.

**FUNCTIONS OF THE KNOWLEDGE MANAGEMENT**

KM is a purposeful initiative and effort. KM pursues such objectives as to provide the organization savings in terms of time and labor by avoiding routine repetitions, to facilitate the delegation of authority, to increase the organization's flexibility before the environment, to decrease the loss of knowledge and increase the continuity in the organizations with higher employee turnover, and to accelerate the managerial processes (Çınar, 2002: 22).

The amount of information available in our time is so huge that, it is like flying around us. Despite the abundance of the information available, it is scarcely useful, and the way to increase the amount of useful information is to produce it. In order to turn it into knowledge, the useful information that can be used in organizational activities should first be compiled, then be processed. Managing the knowledge has become a field of specialization by itself.

Determining the knowledge need of the organization, obtaining, producing, and utilizing such knowledge, and archiving the same knowledge for further use after receiving the feedbacks thereof comprise the functions of the knowledge management. KM has four functions: Creating, sharing, using, and storing the knowledge. These are explained below.

**a. Creating the knowledge**

The information that can be used in parallel with the goals of the organization must first be obtained, and then be turned into useful form, in other words, be processed. Knowledge is created from internal and external sources. Internal sources of an organization consist of its archive, its strategic plans, its statistics, and
the experiences of its employees. The experiences of the employees, as a part of its intellectual capital, comprise one of the most important sources of the organization. Although varying according to the sector in which the organization serves, collecting data about its rival organizations, or about those it competes with in providing services, compiling information in order to get acquainted with the characteristics and demands of its target population may help the organization to decide what sort of things it should do.

Information may need to be transformed as well. In particular, the implicit (explicit) explicit transformation ability of employees is a condition in which many organizations are not successful. Knowledge exists in employees, but it is not easy to obtain. It is not hard for employees to keep information, but information to be found implicitly in employees. The employee does not know how to have knowledge or can not explain it. Nonaka’ (1999: 34) the externalization experience of tacit knowledge is very teacher.

Data mining, which has gained much importance in recent years to acquire knowledge, requires intelligence and creativity in order to obtain big data and to analyze and synthesize them, to interpret them, to understand them and to use them.

b. Sharing the Knowledge
The information attained from internal and external sources, and reproduced thereupon, needs to be shared (pushing and pulling the knowledge) with the personnel who will use it for organizational purposes. The sharing of knowledge is to provide it to the employees of the organization in need of such knowledge at the right time and in the required amount. The knowledge required for each position should be shared in the intra-organizational knowledge sharing. Excessive share of information may cause information overload. Limited offering of knowledge, on the other hand, may hamper doing business, and lead to lack of confidence among the employees towards the senior management.

c. Use of knowledge
Knowledge is for being used, and solving problems. The user's ability to make use of knowledge, on the other hand, depends to his/her skill of interpreting and understanding the knowledge in the relevant context. An employee, who lacks knowledge literacy, cannot utilize the knowledge, due to having difficulty in not only analyzing or classifying it, but even in understanding it.

d. Storage of knowledge
Organizations store the knowledge they produce and learn for further use. Storage place is the organizational memory. Organizational memory is a very broad concept. It includes not only the organization's archive, but also the intellectual capital that accumulates in the organization’s employees. The resignation of the experienced employees from the organization as a whole may lead to loss of organizational memory. This situation is common especially in the organizations that have not been institutionalized, or that do not have established traditions. This is called organizational amnesia, likely to happen at times of change of government in the politically strained countries, where the new government attempts to change
all of the officers appointed by the previous government. Such actions as storing and extracting knowledge have led to the emergence of data mining. Organizations have been allocating substantial resources to data mining in recent years. In order to have an efficient knowledge accumulation and storage, a conscious knowledge management strategy should have been put in practice. Otherwise, the organization may suffer from the accumulation of redundant information (Milam, 2005).

KM is a two-dimensional field, namely the human and hardware dimensions. Managers tend to think they can make a great deal of difference in success by means of the latest computer hardware and software. One of the traps that should be avoided in KM is not to see the machines more valuable than the human resources. What should be valued the most is not the technology park, but the human resources.

CONCLUSION

Knowledge is a valuable organizational resource that is difficult to be obtained, and must therefore be produced. Knowledge is an indispensable asset in the information society. Today, nearly all of the organizations have become knowledge management centers.

In order to maintain the intra-institutional sharing of knowledge properly by the knowledge management system, some aspects need to be adopted faithfully by the management of the institute. We can specify them as follows:

Knowledge management should be acknowledged by the institution managers as an institutional strategy.

It is a fundamental condition to constitute in the institution the infrastructure that will maintain official and unofficial production, storage and access, sharing and utilization of knowledge.

More important than the foregoing is the creation and development of a democratic and open-minded institutional culture that encompasses an environment of trust and a rewarding system that will encourage in-house knowledge sharing.

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Chapter 5

Philosophy for Children: Basic Issues and Theoretical Explanations *

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INTRODUCTION

Since the idea that the human cognitive development can scientifically be analysed, the number of studies about human thinking and learning process has started to increase. Thinking is basically an abstract concept and throughout the history many philosophers have defined thinking and the concepts about thinking. While the Turkish Linguistic Society defines thinking as the skill of “making comparisons, separation, combination and the comprehension of the connections and styles”, Yüksel (2000) defined thinking as the process which includes the conceptualization, implementation, analysis and evaluation of the information, supplied by means of different resources such as observation, experiencing, intuition and reasoning.

The change of educational philosophy and approaches in the world occurred in the 1960s. The idea revealing that innate intelligence was dominant in the educational implementations (Nisbet, 1990) until those years changed in the framework of “constructivist philosophy” introduced by Vygotsky. Then, the idea based on the view that the learners do not acquire the information passively and they construct the information by themselves has started to become dominant thought in the field (Wilson, 2000). LeFrancois (1999) believes that there is a box of small tools with which we play the thinking game in our mind. These sets of tools are not the same in every individual and individuals can improve themselves about how to use these tools. Here, in fact, LeFrancois emphasizes that thinking is a skill which can be improved. In this regard, teachers must make the thinking processes of the children more apparent by using methods that intervene in the improvement of these skills directly. Many European countries have used the philosophy as a method or a tool to teach thinking and have included it in their curriculums (Nisbet, 1990).

The philosophy, which is difficult to agree on one single definition today, has

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been the subject for researchers to find out what it means, its research fields and how it can be done. If definitions of the philosophy are made within the framework of the ideas of Plato and Socrates, his master, the philosophy is a thinking method which is used by human beings to find answers for the most basic and general questions about the topics related with life such as knowledge, truth, reality, goodness and beautiful. The philosophy presents that there is not a single, excellent and constant way to understand and interpret the world. According to this point of view, the philosophy is the effort to question and search the best which is possible from among the existing alternative ways in philosophy (Pecorino, 2000). All knowledge around the individual is almost a pile of dung without philosophy. This senseless pile is organized, becomes meaningful, is restructured in time and can gain a new meaning thanks to philosophy. This process has to proceed continuously as long as the human being and context change as philosophy is the attempt to reach the knowledge that will take us beyond what exists. It is impossible to structure the ideas and learn meaningfully without philosophizing. Philosophy is nearly like the mind’s eye that sees, hands that touch and ear that hears. Philosophy is pressing the senses of the mind into service rather than human body’s five senses. Philosophizing means more than seeing, hearing, tasting, hearing and smelling. The person who philosophize can see what others can’t see, can hear what others can’t hear and can feel what others can’t feel while looking at the same thing. Philosophy gives new meaning to the knowledge which people gain through their sense organs. Philosophy can be used in expressing the sixth sense as it is a thinking method which exists in human beings innately. There are no ideas, behaviours or results which do not have philosophy in life. In this context, human beings and philosophy must be investigated together in the educational process as the human being finds meaning together with philosophy (Taş, 2017).

The results of the studies conducted in Turkey which investigated the educational system and curriculums revealed that the higher order thinking skills of the students were at low levels (Gelen, 1999). Similar results were obtained in the international examinations. The Programme for International Student Assessment [PISA] which was implemented by Organisation for Economic Cooperation and Development [OECD] is an international exam which is given every three years (PISA, 2015). According to the results of PISA 2015, the students’ scores from Turkey were very low at creativity, reasoning and critical analysis. The average scores which the students received were near zero. This showed that Turkish education system is failing to develop individuals with higher order thinking skills, to develop children's creativity and their critical thinking skills and abilities (PISA 2015). The reasons of this academic failure may derive from the fact that higher order thinking skills are not developed and reinforced in Turkey at a standard level.

The educational programmes in Turkey should be revised in line with children's interests and skills and in a way to develop children's thinking skills such as creativity, critical thinking, problem solving and reasoning. Also, thinking programmes, guiding children to question and to learn in a meaningful way, should be included in the educational programmes. In today’s world, called as the information age, it is not enough for individuals to have only the skills of
controlling their own learning in order to keep up with the developing technology and science. The individuals who can follow the requirements of the age must develop higher order thinking skills. Many countries include thinking training in the instructional programmes so as to develop the thinking skills of the children from early ages (Keskin, 2009). Different thinking training programmes are being used around the world. One of these programmes is “Philosophy for Children [P4C]”.

Turkey was so late to include thinking skills in the educational programmes when compared to other countries. After the changes in the primary school curriculum, the course of thinking education has been taken into the programme of 6th, 7th and 8th grades since the 2006-2007 academic year as an elective course (Keskin, 2009). According to the reports of “the Philosophy Education in the Primary and Secondary Education” meeting held by the Ministry of National Education, Board of Education on the 15th April, 2016, it was decided to change the title of "elective thinking course" to "secondary school thinking education course" and to revise the content of the course from the academic year of 2017-2018" (Çotuksöken, 2016). No attempts; however, have been initiated for preschool education. As it is important for children to come across philosophical thinking and philosophy from the early years (Çotuksöken, 2016), thinking education for young children should be taken as a component of the educational policy of the country.

When we talk about thinking education programmes, we, first, refer to the "Philosophy for Children" programme developed in the Monclair State University. This programme develops children's thinking skills and concentrates on not what children learn but on how they learn. In this programme, children are provided opportunities to discuss in groups, reflect their opinions, to listen to others and to learn from each other. P4C has been implemented in more than 50 countries in the world as it helps to develop empathy, collaborative thinking, self-confidence, not being afraid of unsuccessfulness, self-control, academic achievement, understanding what is read and listened, critical and creative thinking, reasoning and metacognitive skills (Gregory, 2008).

THINKING TRAINING PROGRAMMES

As a result of the researches which revealed that thinking skills are completely necessary and improvable in human’s life, the instructional programmes in which the individuals can be trained as experts are needed so as to develop thinking people. It is stated that more than 100 thinking training programmes are used only in the USA today (Wilson, 2000). In this part, thinking training programmes that are often used in the related literature are mentioned.

Thinking Training Programme of Edward De Bono (Cognitive Research Trust [CoRT])

CoRT thinking training programme is comprised of various techniques and tools that are used in order to develop the individuals’ thinking skills. This thinking training program was composed by Edward De Bono for teachers and students and it contains 60 lessons in six sections (McGregor, 2007). The lessons and sub-titles are presented below.
Cort 1 - Breadth: The lessons in this section, as understood from the title of the section, aim to make the students think more broadly. In this step, the children are guided to look from a broader perspective and think sophisticatedally and critically. The titles of ten classes in the extending section of Cort1 are presented in Table 1, respectively (De Bono, 2002).

Cort 2- Organization: The lessons in the section of organization are intended for making the students acquire some important skills such as recognizing individuals, making analysis, making comparisons, noticing and selecting.

Cort 3- Interaction: The lessons in this section contain the individuals’ criticizing and discussing based on the proofs.

Cort 4- Creativity: The lessons in this section are built on the individuals’ producing more alternatives against the problems and their thinking more effectively and creatively.

Cort 5- Information-Feeling: In this section, there are lessons for accessing and evaluating the information easily and for some emotions such as beliefs, expectations and attitudes.

Cort 6- Action: In this section, it is expected that the action of thinking would result in a “reaction” (McGregor, 2007).

The programme is often used in many countries in the world from America to Europe as it can be implemented in all educational levels starting from the age of six. According to the results of the research about the programme, the programme has positive effects on the students, regardless of their socioeconomic status (SES) (De Bono, 2002).

Feuerstein’s Instrumental Enrichment Programme
Instrumental Enrichment Programme is a programme which was developed by Israeli psychologist Reuven Feuerstein et al. in order to be a bridge by associating the academic issues at school and daily life skills of the students. The aim of the programme is to increase the comprehension skill that is effective on the academic achievement. Feuerstein’s Instrumental Enrichment Programmes consists of 14 activities lasting for two or three years and the teacher guidance which is presented in three stages. The value of the programme arises from the mediatory role, in other words guidance, of the trained teachers. The programme can be implemented in various age groups and societies and in student groups from different cultures and skills (Özüberk, 2002).

The Somerset Thinking Skills Course
The course of Somerset Thinking Skills contains a handbook and some various

<table>
<thead>
<tr>
<th>Table 1. Cort 1 The titles of the classes in the extending section</th>
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<tr>
<td>1. The way of handling with the ideas</td>
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<td>2. Factors that are included</td>
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<tr>
<td>3. Rules</td>
</tr>
<tr>
<td>4. Results</td>
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<td>5. Objectives</td>
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models such as problem solving, analysis, synthesis, spatial and time propositions, prediction and decision making. The activities that are conducted within the scope of the course can be used as both an independent instructional programme and by being integrated into an instructional programme. The programme is usually used in the last steps of the elementary education and in mixed talent groups in the secondary education (Blagg et al., 1988; in Wilson, 2000).

**Cognitive Acceleration through Science Education (CASE))**

CASE Programme contains the materials about structured formal operational thinking for teachers and educational materials suitable for the children aged between 11-13. Unlike the philosophy which uses deductive reasoning, CASE is based on inductive reasoning. The programme encourages the children to concretize the samples and reach abstract generalizations.

**Philosophy for Children Approach**

Matthew Lipman and Ann Sharp introduced the "Philosophy for Children" approach in the 1970s and developed a thinking training program using the same name. The main objective of Philosophy for Children thinking training is to make children produce hypotheses by asking questions, questioning over the questions that are asked, in other words, trying the hypotheses and sharing their thoughts freely with each other. In this context, P4C is a thinking training programme which is a guide for children about how they learn and think better and which makes the children acquire different perspectives. Lipman founded the Institute for the Advancement of Philosophy for Children [IAPC] in Montclair State University (Lipman, 2003). The institute is the journal is named "Thinking the Journal of Philosophy for Children", which contains plenty of implementations and course reports about this issue. Developing the approach of P4C, they were affected by the Socratic Method (learning based on questioning) founded within the frame of philosophical thinking, questioning the information and discussion (Marashi, 2008). In this context, the method is based on questioning and discussing. In the Socratic Method, a specific topic is questioned by establishing cause-result relationship by means of philosophical discussions and the process is developed gradually (Stanley & Bowkett, 2004). In addition to Socratic views, while Lipman and Sharp were composing the approach of P4C, they were also under the effect of the thoughts of Dewey, Piaget and Vygotsky about education (Matthews; 2000). In his approach, Lipman made quite comprehensive explanations on the topics of communication, language skills, social interaction and development which were not emphasized by Piaget. Vygostky's thoughts carry vital importance in terms of supplying convenient background for Philosophy for Children. The emphasis of Vygotsky on the idea that social learning is actualized by coordinating of the individuals who constitute a society has become the starting point of the approach (Roberts, 2007).

The philosophical discussions that the children take part in a group underlie the basis of the P4C programme. The matter if the philosophy is suitable for children has been a topic that has been under debate for many years in history. The main source of these discussions is stated to be not being able to make a common definition of philosophy and the disaccord between those who think philosophy is a
philosophical way of thinking on a problem and those who consider philosophy as lesson (Murris, 2000). The issue of how to provide young children with thinking training via P4C has drawn attention as the number of researchers who argue that children can think philosophically starting from very early ages and young children can be philosophized increased. Karin Murris, a German philosopher and educator has made it possible for P4C to be used with young preschool children. Murris met with Lipman and started to work together so as to conduct studies about the programme which attracted her attention in the 1990s. As a result of this collaborative work, Murris developed story books and philosophical applications that made the programme become applicable for young children (Stanley & Bowkett, 2004).

The purpose of the philosophical discussions in P4C is not to teach the philosophies of philosophers like Plato or Aristoteles (Marashi, 2008). The main objective of P4C is to make children acquire thinking skills by encouraging them to make discussion on a specific topic and think by means of remarkable stimuli. The stimuli used at the beginning of the discussions can generally be short philosophical stories or short texts. A poem, a movement, a photograph or an object which has an enjoyable and exciting philosophical value can be used as stimuli.

Splitter and Sharp (1995) believe that P4C is an attempt to restructure the discipline of philosophy to make it accessible and attractive for children and it allows children to acquire the tools, skills and talents that are necessary to philosophize. Many children are innate natural philosophers and they have the talent of thinking philosophically. P4C enables children to discover some concepts which they need to transfer their experiences such as right-wrong, beautiful-ugly, real-fake, good-bad and fair-unfair. P4C also enables children to reflect their own opinions, have better reasoning skills and making decisions. P4C encourages children to think critically and creatively in terms of direct participation in the discussions (Gregory, 2008).

PHILOSOPHY FOR CHILDREN INSTRUCTIONAL PROGRAMME

The purpose of P4C, founded on John Dewey and Lev Vygotsky’s approaches which depends on thinking rather than memorizing is to support the children to gain the ability to establish cause-effect relationships by making them ask questions, question, and think about some situations that are often presented in a philosophical text (Estarellas, 2007). The Institute for the Advancement of the Philosophy for Children has provided the educators with many resources. The institute has published Philosophy for Children novels (story books) in which various philosophical texts for different age groups and manuals for teachers. The training sets which contain P4C novels, target age group and teacher manuals are presented in Table 2.
As it can be seen in Table 2, Lipman used novels as the stimuli in the Philosophy for Children approach. In this programme, it is not intended to teach philosophy to children in the manner of Plato or Aristoteles (Marashi, 2008). The aim of the P4C programme is to guide children to acquire thinking skills by motivating them to discuss and to think through interesting stimulants. At the beginning of discussions, short philosophical stories, short texts such as amusing, exciting poem, action, photo or an abject with a philosophical value can generally be used as stimulants to raise children's attention.

Indenting to work on the programme that attracted him, Murris met Lipman in the 1990s and started to work together. As a result of this collaboration, Murris developed stories and philosophical applications for young children (Stanley & Bowkett, 2004). Table 3 includes stories (novels), topics and teacher’s manuals that can be used at P4C sessions.

### Table 2. IAPC Philosophy for Children novels, target age group and teacher manuals

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<tr>
<th>Target Ages</th>
<th>Novel</th>
<th>Teacher’s Manual</th>
<th>Objective</th>
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<tbody>
<tr>
<td>5/7</td>
<td>Elfie</td>
<td>Getting Our Thoughts Together</td>
<td>Reasoning About Thinking</td>
</tr>
<tr>
<td>7/8</td>
<td>Kio &amp; Gus</td>
<td>Wondering at the world</td>
<td>Reasoning About Nature</td>
</tr>
<tr>
<td>8/9</td>
<td>Pixie</td>
<td>Looking for meaning</td>
<td>Reasoning About Language</td>
</tr>
<tr>
<td>9-11</td>
<td>Nous</td>
<td>Deciding What to Do</td>
<td>Reasoning About Ethics</td>
</tr>
<tr>
<td>10/11</td>
<td>Harry Stottlemeirer’s Discovery</td>
<td>Philosophical Inquiry</td>
<td>Reasoning About Reasoning</td>
</tr>
<tr>
<td>12/13</td>
<td>Lisa</td>
<td>Ethical Inquiry</td>
<td>Reasoning in Ethics</td>
</tr>
<tr>
<td>14/15</td>
<td>Suki</td>
<td>Writing: How and Why</td>
<td>Reasoning in Language Arts</td>
</tr>
<tr>
<td>16+</td>
<td>Mark</td>
<td>Social Inquiry</td>
<td>Reasoning in Social Studies</td>
</tr>
</tbody>
</table>

### Table 3. Resources for the education of the P4C and activity plan samples

<table>
<thead>
<tr>
<th>Novel</th>
<th>Teacher’s Manual</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Doll Hospital</td>
<td>Making Sense of My World</td>
<td>Personhood</td>
</tr>
<tr>
<td>Geraldo</td>
<td>Discovering Our Voice</td>
<td>Language</td>
</tr>
<tr>
<td>Elfie</td>
<td>Getting our Thoughts Together</td>
<td>Thinking</td>
</tr>
<tr>
<td>Your Place or Mine?</td>
<td>Thinking Stories 1</td>
<td>Alike and Different</td>
</tr>
<tr>
<td>The Bird’s Nest</td>
<td>Thinking Stories 1</td>
<td>Feelings</td>
</tr>
<tr>
<td>A Night Under the Stars</td>
<td>Thinking Stories 1</td>
<td>Friendship</td>
</tr>
<tr>
<td>Linda and Clara</td>
<td>Thinking Stories 1</td>
<td>Crying</td>
</tr>
<tr>
<td>Frog is my Friend</td>
<td>Thinking Trees and Laughing Cats</td>
<td>Friendship</td>
</tr>
<tr>
<td>They are all the Same and Different</td>
<td>Thinking Trees and Laughing Cats</td>
<td>Same and Different</td>
</tr>
<tr>
<td>Do I Know You?</td>
<td>Thinking Trees and Laughing Cats</td>
<td>Knowing People</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>--------------------------------------</td>
</tr>
<tr>
<td>How Do we Choose our Puppy’s Name</td>
<td>Thinking Trees and Laughing Cats</td>
<td>Family/Name</td>
</tr>
<tr>
<td>My Robot Puppy</td>
<td>Thinking Trees and Laughing Cats</td>
<td>Alive</td>
</tr>
<tr>
<td>Colors in Books and Stories</td>
<td>Thinking Trees and Laughing Cats</td>
<td>Colors</td>
</tr>
<tr>
<td>Pixie’s Birthday Party</td>
<td>Thinking Trees and Laughing Cats</td>
<td>True Friend</td>
</tr>
<tr>
<td>Which we need more-</td>
<td>Thinking Trees and Laughing Cats</td>
<td>Needing</td>
</tr>
<tr>
<td>The Sun or the Moon?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scary Things</td>
<td>Thinking Trees and Laughing Cats</td>
<td>Fear</td>
</tr>
<tr>
<td>The Teddy Bears’ Picnic</td>
<td>Philosophy for Young Children</td>
<td>Fairness: equality/need</td>
</tr>
<tr>
<td>School Rules</td>
<td>Philosophy for Young Children</td>
<td>Obeying the rules</td>
</tr>
<tr>
<td>Emerald the Elephant</td>
<td>Philosophy for Young Children</td>
<td>Wasting Water</td>
</tr>
<tr>
<td>Benny the bean</td>
<td>Philosophy for Young Children</td>
<td>Recycle</td>
</tr>
<tr>
<td>Maisie the Sheep</td>
<td>Philosophy for Young Children</td>
<td>Being different from others</td>
</tr>
<tr>
<td>Kirsty</td>
<td>Philosophy for Young Children</td>
<td>Telling the Truth</td>
</tr>
<tr>
<td>The Magic Words</td>
<td>Philosophy for Young Children</td>
<td>Saying thank you</td>
</tr>
<tr>
<td>Teddy Scrooge</td>
<td>Philosophy for Young Children</td>
<td>Giving Presents</td>
</tr>
<tr>
<td>Beautiful Things</td>
<td>Philosophy for Young Children</td>
<td>Beauty</td>
</tr>
<tr>
<td>Rabbit and mouse</td>
<td>Philosophy for Young Children</td>
<td>Fear</td>
</tr>
<tr>
<td>Happy Suzy</td>
<td>Philosophy for Young Children</td>
<td>Happiness</td>
</tr>
<tr>
<td>Sad Teddy</td>
<td>Philosophy for Young Children</td>
<td>Sadness</td>
</tr>
<tr>
<td>Isaac The Robot</td>
<td>Philosophy for Young Children</td>
<td>Person</td>
</tr>
<tr>
<td>Milly’S Bad Dream</td>
<td>Philosophy for Young Children</td>
<td>Dreams and reality</td>
</tr>
<tr>
<td>Numbers</td>
<td>Philosophy for Young Children</td>
<td>Are numbers real?</td>
</tr>
<tr>
<td>Angus the cat</td>
<td>Philosophy for Young Children</td>
<td>Do animals in the stories really exist?</td>
</tr>
</tbody>
</table>

As seen in the Table 3 above, children are encouraged to think and question through different topics and different stories.
The Application of Philosophy for Children Activities

In the training of Philosophy for Children, circle seating arrangement is preferred so as to enable the students to see each other and to build face-to-face interaction. Then, the rules are generally reminded to the students or they are expected to remember these rules after being seated in a circle seating arrangement. Next, P4C training is followed in five steps which follow each other. These steps are as follows (Gregory, 2008);

1. The stimulus
2. The agenda
3. Community of Inquiry / The dialogue
4. The assessment
5. Philosophical exercises and activities (reinforcement philosophical activity and implementations)

In the training of P4C, the educator has the role of facilitator throughout the implementations. The educator first starts the philosophical discussion with the students and presents the stimuli that attract the students’ attentions and revive their interests. In this step, it is generally preferred to read a story as a stimulus. As young children have shorter attention spans, the philosophical texts and stories must be short and brief. This way, the children can concentrate on the message that is intended to be given to them. As young children can learn with concrete images more easily, illustrated story books are also frequently used in P4C activities (Stanley & Bowkett, 2004) although some field experts claim that the children can ignore the message that is intended to be given to them by concentrating more on the images than the story itself (Lipman, Sharp & Oscanyan, 1980).

In the step of the agenda, inquiry group determine the topics/concepts/questions that will be discussed, the educator does not ask the questions that will be discussed to the children directly by himself. He encourages the children to ask questions about the story and he guides the children by asking new questions when necessary, instead. The educator does not judge the children’s questions as good or bad as making non-constructive comments and labelling about their questions might break their courage (Gregory, 2008). It is important in this stage to encourage children to ask more general questions rather than simple questions that are based on the story and to make them infer general messages by focusing on the topic (Kennedy, 1994).

In the step of community of inquiry, the children ask questions as a group and think about their answers. The topic is investigated and examined deeply in the group of inquiry (Kennedy, 1994). In the step of assessment, the purpose is that the participants in the inquiry group share their opinions about the whole process. It is not aimed reach a conclusion on which everybody agrees. In the assessment step, it is generally tried to answer the questions of “Were the rules about philosophical discussion obeyed?”, “Were enough philosophical questions produced?”, “Did the participants listen to each other effectively?”, “Did the participants produce new opinions over each other’s opinions?”, “Were enough hypothesis produced?”, “Was there anybody whose opinion changed during the process?”, “Was the question clarified enough?” and “Did we stay in context?”. In the fifth and last step of
reinforcement philosophical activity and implementations, some activities such as playing games, writing poems, drawing pictures or making similar discussions with siblings or parents at home can be applied after the philosophical discussion. A sample philosophy session planned within the framework of the revised Early Childhood Education programme in 2013 in Turkey is given below.

**Session Plan Sample 1**

**Session title:** Are we same or different?

**Activity type:** Philosophy for children (Big group activity)

**Age group:** Children of 48-66 months old

**Area of Development, Objectives and Outcomes**

1. **Social-Emotional Development**
   
   Objective 3: Children are supposed to express themselves creatively. (Outcomes: Children reveal their feelings, opinions and dreams in a unique way. They use objects in an extraordinary way. They make objects with special characteristics.)

   Objective 4. Children are supposed to give others' feelings about an event or a situation. (Outcomes: They talk about others' feelings. They talk about the reasons of others' feelings. They talk about the results of others' feelings.)

   Objective 8. They respect differences. (Outcomes: They talk about their different characteristics. They play in activities with children who have different characteristics.)

2. **Cognitive Development**

   Objective 1. Children are supposed to give their attention on the object/situation/event. (Outcomes: They focus on the object/event which requires attention. They ask questions about the objects/situations/event raising their attention. They explain objects/situations/events raising their attention.

   Objective 8. Children are supposed to compare objects and entities. (Outcomes: They differentiate objects/entities regarding colour, shape, size, length, material, noise, smell, taste, quantity and use.

3. **Language Development**

   Objective 5. Children are supposed to use the language as a communication tool. (Outcomes: Children keep eye contact during communication. They understand body language. They start and end the communication. They use polite words in their talks. They participate in the talks. They wait for their turn to talk. They talk about their feelings, opinions and dreams. They talk about the reasons of their feelings and opinions.

   Objective 6. Children are supposed to improve their lexicon. (Outcomes: They realise new words while listening and ask for the meaning of the new words. They remember new words and say their meanings. They use new words they have learnt appropriately. They use synonyms, antonyms and homonyms.

   **Materials:** photographs, pictures and puppets about animals and their shelters

   **Concepts:** similar-different
Learning Process

Warm-Up Activity
Zoo (to be done before or after reading).

Zoos are places where animals are shown. In our zoo, we want our animals to go out of their cages and go back to their natural habitats. However, as you see that they are a bit confused about the shelters of animals. Which animal should go to which shelter? Can you help animal keepers to find the right shelter for the animals? Be careful! There are some points to consider. You should explain animal keepers why you chose shelter X for animal Y. (Animal keepers are so stubborn. You should find various reasons to persuade them.)

<table>
<thead>
<tr>
<th>Animal</th>
<th>Shelter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camel</td>
<td>Glaciers</td>
</tr>
<tr>
<td>Bat</td>
<td>Moss/Swamp</td>
</tr>
<tr>
<td>Lion</td>
<td>Rivers</td>
</tr>
<tr>
<td>Polar bear</td>
<td>In trees</td>
</tr>
<tr>
<td>Fish</td>
<td>On land/earth</td>
</tr>
<tr>
<td>Monkey</td>
<td>On desert areas</td>
</tr>
<tr>
<td>Crocodile</td>
<td>In caves</td>
</tr>
</tbody>
</table>

1. The Stimulus

The story "Is this your place or mine?" is read aloud to children by means of puppets. The story is like that:

"Bobi lives a cage in a zoo near bushes where there are different wild animals, where there are trees, birds and delicious beehives. Also, there is a lake near Bobi's cage. This is the lake where Bobi met Nemo. Nemo had lived in the lake with other fish, frogs, insects and snakes. Other animals sometimes came to the lake to drink water, feel fresh and to find something delicious to eat as did Bobi on that noon.

Question: Which animal may Bobi be? Why?

Bobi is a bear. When Bobi sees Nemo, alone swimming in the lake, he immediately thinks and says "Ohhhh, how delicious this fish is. I am so hungry. I should catch this fish." When Bobi is about to catch Nemo with his big paws, Nemo starts to swim fast but she does not escape. Instead, she changes her mind, stops and thinks "Who is this big and beautiful creature? I should speak with him." Nemo takes her head out of the lake and calls Bobi:

"Hello, my name is Nemo and who are you??" Bobi gets shocked by Nemo's reaction and sits down, his paw in the air and says "Haaa??". Nemo gets out of the lake gently and says "You said your name??". The bear answers softly "Bobi" and then says "Haaa??" once more.

Question: Why did Bob get shocked? Why did the fish decide to talk instead of escaping?

When Bobi utters her name "Nemo", she finds it so funny because the bear's voice is so different from hers. When Nemo laughs, all her body shakes and waves appear on the lake. Bobi forgets about eating Nemo for his lunch. He pulls his paws
back on his sides and sits in the middle of the lake. Nemo swims gently around Bobi draws circles and talks. Bobi stops and says "How beautiful she is!" Nemo is surprised that Bobi is much bigger than herself and asks him “How did you manage to be that much big?". Bobi answers "It may be because I eat much honey". Nemo asks again "If I eat much honey, can I grow up and be like you?" Bobi keeps silent for a while and looks around. All living creatures around differ from each other. Plants, fish, turtles and frogs. Each has its own characteristics. Then, Bobi turns and says "I think that we will never look alike as you eat honey". Nemo replies "No, we are alike in fact. You move too, you eat too. Your hair is brown, so are my scales. If we want, we may find more similarities." Bobi feels confused. How possible is it for a big bear to a small fish?" Then Bobi goes away, thinking "Am I similar to or different from a fish?"

2. The Agenda
Concepts and situations that the story is based on are discussed. Children are instructed to ask questions about the situation, concept and event underlined. The researchers encourage children as a facilitator to ask appropriate questions and helps when needed. When children are in difficulty, the teacher determines the philosophical question to discuss to raise children's attention. When there are more than one question, children vote and the selected question is discussed.

3. Community of Inquiry / The dialogue
Potential Questions:
1. Is it possible for two animals to be similar and different at the same time?
2. Which characteristics of a fish make it different from a bear?
3. Are human beings and animals similar or different? Why?
4. How different are human beings and animals?

4. The Assessment
The researcher wants children to evaluate the questioning process. Children are guided to raise their hands for the evaluation. If they want to make a positive evaluation, they should raise their thumbs upwards. If they want to make a negative evaluation, they should raise their thumbs downwards. If they are hesitant or in between, they should raise their thumbs at the mid-height position.

• Did we share the reasons of our decisions/opinions with each other?
• Did we listen to each other?
• Did everybody talk?
• Did the discussion go on in the relevant way?
• Did we consider each other's opinions while thinking?
• Was our discussion enjoyable?
• Did we change our idea during the discussion?

5. Philosophical Exercises and Activities
Children are instructed to find a pair as A and B. Then, all children tagged as A should choose two items in the class, should explain why they are similar or
different, should justify their decisions and should discuss with children tagged as B. They are given 5-10 minutes to discuss. At the end of the allocated time, B children are supposed to raise green card if they are persuaded, red card if they are not persuaded. Then, they should explain why they are persuaded or not.

**Family Participation**

A Family conversation about similarities and differences occur at home.

**Adaptation**

If there are students with special needs in the classroom, required adaptations are done in line with the disability.

**The Relationship between Philosophy for Children, Metacognition, Theory of Mind and Creativity**

"Being conscious of thinking (metacognition)" can be gained by questioning (Seferoğlu & Akbıyık, 2006). Philosophy for Children is an important tool in supporting the development of metacognition in terms of providing the children with the opportunities to question all the time. P4C provides the children with opportunities to learn mutually by discussing, reflecting their opinions, listening to other’s opinions, understanding and making sense of information in addition to making inquiries by asking questions (Gregory, 2008). In this sense, thinking training and the theory of mind, which means being conscious of other’s thinking are closely interrelated with each other.

The individuals have the chances to express their opinions freely, share them with the other members of the group and also listen to the other members’ opinions in the community of philosophical inquiry, which is a component of P4C. In the community of philosophical inquiry, the children notice that the other individuals can have different perspectives from theirs on the same topic or problem and there are no definitely right or wrong opinions. Therefore, the dialogues between the individuals in the inquiry group of P4C are effective on development of the theory of mind, which means the skills of getting other individuals’ perspectives and thinking about what others think. As the program aims to develop the creative thinking of children fundamentally, it also affects the development of creativity positively (Gregory, 2008). The researches that were conducted about this topic revealed the relationship between P4C, the theory of mind and creativity. According to the findings obtained from the researches, P4C has an important effect on the children’s development of the theory of mind and creativity. Ornaghi, Brockmeier and Gavazzi (2011), for example, found out in their study that thinking training which was given by using 16 stories that contain mental condition statements such as emotion and belief was effective on the group of three-year-old children’s understanding the misconception attribution. Jahani, Nodehi and Akbari (2016) carried out a research which aimed the effect of P4C on the male sixth-grade students’ creativity developments and determined that the programme increased the creativity of the students and encouraged them to think. Similarly, Jahani (2006) also revealed that education that was given by using philosophy improved the creativity and reasoning skills of the students. Cotton (1991) presented in his study...
that the programmes of thinking training improved the creativity and critical thinking skills of the students.

**The Responsibilities of the Teacher in Philosophy for Children Education**

The researches about the development of thinking skills have shown that the students can gain the skills of thinking in line with their intelligence and abilities in all educational levels. In this context, the importance of the educational programs which improve the thinking skills has increased (Trickey & Topping, 2004). Thinking training is not only improves students' thinking skills but also helps them to understand the reasons of their existence and helps them make the right decisions about their future (MEB, 2007). At this point, teachers who are one of the most important social elements in the child's educational environment, have some responsibilities.

The teachers are expected to be guides teaching the children how to access, process, criticize, introduce and use the information. In P4C, the teachers take the roles of a guide and a facilitator. As the language skills of young children are not developed as well as the adults, they might not always express themselves clearly. The educators, especially who study P4C with young age groups, need to provide the children with different ways and alternatives in which they can express their opinions more comfortably and more clearly. Young children can be encouraged to express their opinions by pictures, dancing, music or movements. It is important that the teacher makes use of the spontaneous opportunities in P4C. Therefore, the teachers who work in all levels of education and who are from different branches must acquire the P4C oriented information and skills. Teachers should provide rich environments for children in which they can express their opinions freely and different opinions can be discussed. These environments must be away from prejudice and criticism. The teachers should be a model for the children and encourage them to think philosophically.

The children in pre-schools can generally have the tendency of sitting next to their friends who they love and with whom they play games and interacting mostly with them. The teacher can change the places of the children and want them to sit in different places in each session as it is important for the children to interact with the other children in P4C. It is important to perceive the topic which is the focus of the philosophical text and ask questions about it in P4C. Implementing the activities of understanding what is listened, asking right questions or choosing the right questions more in the first sessions with the children will increase the efficacy of P4C. The teacher must definitely include the evaluation step in the process of P4C. The views that are presented must be summarized and it must be exhibited that who agrees or disagrees with which view and their reasons must also be exposed. The teacher can leave the evaluation process to the children completely or help them with short reminders. Therefore, the teachers must follow the conversations and the opinions that are presented closely.
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Chapter 6

Game Therapy and Connection

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INTRODUCTION

The game, which is a common language in children's life, is interpreted as a serious occupation of the child. The game became an educational event. All theorists working on the development of the child have argued that it has an important advantage in the development of the children’s interests and abilities (Miller and Almond 2009, Fleer 2010). Vygotsky has done a number of studies that have shown positive effects of the game on children's learning, and recently expressed the positive interaction between child and play self-regulation skills development, visual arts skills, symbolic representation skills, imagination and symbolic language using success. He emphasized that the game has a magical role in positive developments, especially on the basis of abstract thinking. He also stated that the game is a tool that helped to reflect the child's inner world in terms of both academic achievement and emotional expression power gain (cited in Tuğrul et al., 2015). The study was conducted by the Hong Kong Institute of Education in order to determine the opinions of preschool and elementary school teachers about the play; teachers have seen the game as a struggle for children to just fill their spare time (Wong et al 2011). Pestalozzi and Froebel emphasize to children the benefits of the interaction between play and nature. Froebel described the game as a learning environment for the child. Locke stated that the game during the first years of the child's life will facilitate the learning process throughout the life of the child. Rousseau, in his book Emila, first stated that children and childhood should be recognized and emphasized that the child's essential needs are play and nature. It is expressed that the powerful factors of the game are being healer, developer and instructor (cited in Tuğrul, 2009, 2010, 2013).

The strong points of the game are the focus point in solving many problems that are observed in children. It is emphasized that the concepts of play and therapy, which have been studied for many years, are effective in solving the problems, and that there is a close relationship between these two concepts. Among the methods effective in solving the problems, game therapy includes practices that can focus on supporting the development of children and overcoming their inadequacies. Game therapy also includes practices aimed at strengthening the mother-child relationship through attachment (Ozkaya, 2015). When the problems in children are examined,
It appears that most of the problems are caused by the attachment in infancy. It is known that during infancy the baby is completely dependent on the person providing care, and that the attachment relationship between the infant and caregiver is important in the mental and emotional aspects of the adherence process. Attachment is expressed as the bond that the newborn has developed towards the person who fulfills the social needs. Ainsworth, who made home visits and made these visits with his students, assessed the relationship between the mother and the infant, the necessity of the baby in this process through observation. He also determined that the relationship of safe attachment between the baby and the mother is important for the social emotional development of the baby (cited in Tüzün & Sayar, 2006). It has been noted that children are experiencing a number of problems in situations where secure attachment is not possible. In this context, Theraplay and Filial Play Therapy have appeared to be the foreground in resolving the emotional and behavioral disorders and problems that arise in the context of parent, infant. Lassenius et al. (2007) applied Therapy sessions to the applicants and their parents due to attachment and behavior problems in a study they conducted and found positive developments especially in behavior problems and parental child interaction as a result of the sessions (cited in Gençer & Aksoy, 2016). Filial therapy has also been found to be effective in solving the problems of children with attachment problems, and creates positively relations to parent and child behavior (Akt, Özkaya, 2015). This situation, which emerged with the results of the study, also reveals a significant relationship between play therapy and attachment. In this section, the game therapy and attachment will be examined in detail and the emphasis will be placed on the therapies in the game therapy and the relation between the attachment and these therapies will be examined.

1. GAME THERAPY

The Game Therapy Association define the play therapy as; to prevent or solve psychosocial problems of counselors, and to help them achieve ideal growth and development by educated play therapists and the systematic use of a theoretical model to establish an interpersonal process for the game's therapeutic power (URL, 2018). This definition indicates that gaming therapy is a well-established therapeutic approach to theoretical models. This power of the game, also known as the mechanism of change, stems from the active force within the game which helps the clients to come up from the psychosocial difficulties and achieve positive development (Schaefer, 2013).

Therapeutic power of the game comes up with eight categories which are communication, emotional regulation, relationship development, moral judgment, stress coping, ego upgrade, life preparation and self-realization. These change mechanisms shape the basis of theoretical models and thus constitute the essence of gaming therapy. Regardless of age, there are countless benefits of the game to the life of a person as supporting game creativity, alleviates stress, promotes positive social interaction and communication. When children play, they learn to fold obstacles, manage their emotions, and be successful in developmental tasks. Children can try new skills within the game in a way that makes sense to them.
without the need to use structured boundaries or language of the "real world." As children create, evolve, and pursue their own self-perceptions through play, the game gives them the chance to master their own world. The game, which provides such important gains, can be effectively used to solve many problems. Play therapy can also be used as an effective method for solving problems in children. Play therapy; can be effectively applied to babies or newly walked children (Schaefer et al., 2008), and pre-school children or primary and secondary school children (Gallo Lopez and Schafer, 2005).

Play therapy can be performed in adults or at different socioeconomic levels, including homeless. While game therapy applications with adolescents and adults continue to gain popularity, most of the therapeutic interactions currently available are with children aged 3-12 years. So, during this episode, the child's statement will be used to point to the game therapy client. Play therapy is a flexible approach about space. The place where the game therapy is practiced can be a clinic or office that provides outpatient services, a school (Ray et al., 2008), or a playground. Game therapy can be carried out in a game room equipped with all sorts of things or with a bag full of material. Gaming therapy is limited only by the flexibility and creativity of the therapist. Children use the game to communicate with adults in order to understand their tongue and not have the words to share their needs (Schaefer, 2013). Landreth's (2002) on-the-spot detection says the language of the child is play, and the words are toys.

2. ATTACHMENT

In order to be able to explain the concept of attachment, it is first necessary to explain the attachment theory briefly. The concept of attachment theory includes cybernetics, information processing, developmental psychology, and psychoanalysis. John Bowlby and Mary Ainsworth, who developed the theory of attachment, explained primarily the connection between children and their mother. Later, after attachment, they carried out studies that included serious awareness on the social perspective of separation, disappearance, and death. Ainsworth's current terminology and Bowlby's experimental point of view are important factors in the development of attachment theory.

Ainsworth stated that a person who provides care to the child outside of his mother could be described as a connecting figure. They also formulated the theory of mother-child attachment after a study of the child's feelings towards his mother (Bee & Boyd, 2009).

Attachment theory, when examined on a theoretical basis, has improved its work by adding concepts related to two different sciences, which discovers age science and behavior. Following this developmental process, attachment theory; being in the direction of establishing emotional strong relationships with the one who close to you is considered an inevitable part of the ordinary life of the individual (Bowlby, 1988). The emotionally established relationship of the baby is crucial to meet the most basic care needs in terms of survival. This relationship develops instinctively between the baby and the caregiver (Bee & Boyd, 2009).

Concepts frequently searched in the development of attachment theory;
affective bonding, attachment and attachment behaviors. Ainsworth described the affective bonding as a long-established, rather close relationship, like a friend and cannot be replaced with someone else (Bowlby, 2012).

Attachment is explained by different binding systems by researchers. It is known that there is a direct relationship with the child's internal working model in relation to the first attachment relationship. Mary Ainsworth's work as a category system is universally accepted (Ainsworth et al., 1978). As a result of this work, the foreign environment method emerged by separating the secure connection between the two types of insecure attachment (Bowlby, 2012).

The foreign media method was applied to 12 to 18 month old infants by performing sequential sessions in the laboratory environment. In the context of the session, the child first participates in a laboratory session with his mother at a later session with a stranger. Then the mother is separated from the session and the baby is left alone with stranger. Finally, the foreign leaves the session and the baby is left alone. Wait for a while and then the session will include the mother and the foreigner again. The whole session is observed, and according to Ainsworth, in the type of secure attachment and two types of insecure attachment, the response of the child during the session is interpreted by one of these three attachment types (Berk, 2013).

According to Ainsworth, if the child is having a secure connection, parents can be easily separated. If he gets restless, he can easily settle. In the two types of insecure attachment, the child will be very uncomfortable to stay with a stranger. He shows shyness against strangers. If he feels separation he will panic. He does not calm down when his mother returns from to place. Mary Main also found that a similar subfield, which is a different type of attachment, expressed as unsafe / unbalanced / scattered attachment (Main & Hesse, 1990).

In an inner relational model of secure connection, the child thinks that the parents are a safe haven that he always feels safe and he is easily subsiding with his parents. In an insecure connection, which is an internal relational model, the child feels his parents insecure, refuses to receive parental support even when he is in a difficult situation, becomes irritable and refuses to be controlled. Insecure attachment is divided into its own as evasive, ambivalent and irregular / disorganized (Berk, 2013).

Attachment refers to the need for the child to be assessed emotionally in terms of the accessibility of the caregiver in a study conducted on the parent-child relationship (Bringen, 2000).

If the caregiver can establish an emotional relationship with the baby, the baby will not have problems with the development of attachment. However, babies who are with their parents cannot develop safe attachment in babies even if they are in the same environment with the mother, when their parents neglect their babies due to the anxiety and stress of daily life. Infants cannot feel emotional interaction from their parents. In different studies, including intercultural communication studies, the bond between baby parents in terms of attachment is strengthened if the baby is first accepted by the parent and if the baby is the desired baby, then the baby can feel constantly sensitive. This is referred as reciprocal or positive response sensitivity.
(Isabella, 1993; Pederson et al., 1990; Posadan et al., 2002; Thompson, 1998; Wolff & Vanlijzendoorn, 1997). This process seems simple, but requires more than can be expressed as a qualified, not simple, deep love and emotional interaction. In order for this process to be in the specified qualities, the baby should be positively responsive to behavioral observations of attachment. Also, if the baby can synchronize with the parents positive comments about attachment may emerge (Ainsworth and Marvin, 1995: Sroufe et al., 1999).

Details of the above-mentioned reactive sensitivity of scientists working in the field of child development have been supported by an experimental study by Van Den Boom (1994) in the Netherlands (Bowlby, 2012).

Van Den Boom's experimental study included 100 mothers whose income level was low, and whose sensitivity level soon after birth was excessive. The specimens were determined in two groups according to the criteria. First group is how to improve the responsiveness of three short-training babies. The other group did not receive any training. Van Den Boom who gave time to mothers until their babies become 12 months, observed babies with their mothers in the home environment, laboratory and standard foreign environment at the end of the twelfth month. As a result of his observations, it was found that mothers who were educated were more sensitive than those who did not. This explains the effect of education given to mothers (Bowlby, 2012).

On the whole of this interpretation and experimental study conducted by Van Den Bloom (1995), it has been found that the different approach to educated mothers and non-educated mothers continues to have positive effects until 18 months (cited in Schaefer, 2013).

Clear explanation of the attachment problem experienced with the care giver by the growing children is described as a lack of interaction with responsiveness. It is known that there are different precursors for infants experiencing attachment problems resulting from different problems. For example; it is emphasized that children who are abused, have witnessed their parents abused or infants who have lost their parents have an irregular / disorganized attachment pattern (Cassidy & Berlin, 1994; Main & Hesse, 1990).

Problems experienced in connection with the mother when she wants to be separated from her baby for reasons such as depression are considered as anxious pattern (Teti et al., 1995). When the mother rejects the baby or escapes from the interaction with the baby, the binding problem expressed as avoiding attachment pattern is observed (Bowlby, 2012).

**3. GAME THERAPY AND ATTACHMENT**

The most important work of the child is play, which is used by adults as an effective method in the observation of the child, in solving their problems, in the discovery of their interests and abilities. For this reason, the combination of play and therapy is important for solving many problems. Especially in young age groups (0-3 years), it is possible for children to express their feelings of insecurity, depression or self-reliance through game therapy which is one of the indispensable therapy methods for infants who have a problem with mother/caregiver attachment.
In the attachment process, it is emphasized that many of the problems that parents cannot notice can be used actively in the play therapy. In this direction, here are some of the types of game therapy that are used competently to solve the problems of attachment.

3.1. Theraplay Game Therapy

Theraplay is a gaming therapy that exemplifies the responsive, integrated and player co-operation between parents and children. The goal of the therapy is to bring positive examples for both sides (parent and child), to secure connections, to improve the self-regulation field, improve learning ability and positive contribution to long term mental and sanity health (Bıyıklı and Tuncel, 2017).

Theraplay is a form of planned gaming therapy aimed at increasing parental and child bonding, self-respect and trust of the child. It usually reveals meaningful changes over a short period of time and can be applied to all age groups and people with various emotional and social difficulties. The basis of the therapy is based on the binding theory whose effects are based on a solid research (Gerhardt, 2004, Sunderland, 2006). Theraplay tries to repeat normal parent / child interactions, especially those that occurred when the child first learned to associate with the primary caregiver (Biyikli and Tuncel, 2017).

Theraplay is not a verbal therapy. No comment can be made, but the child's emotions become clear; so the child feels that the adult is compatible with him. Parents are guided to see the emotions underlying the child's behavior. The child is encouraged by verbal means so that they can be revealed by means of reflecting the child's feelings. The content of the Theraplay gaming therapy is consistently helping parents become compatible and responsive to their children's needs. Families and therapists need to support the child when they can regulate and control their behavior to ensure that the children are cheerful, happy, confident, quiet and calm. The child perceives this support positively when parents share the excitement and joy of children in a balanced and harmonious way. It is very important for parents to be able to support the child for "self-perception, optimism, motivation, development of sense of curiosity, behavioral control" in times when the child needs to balance his or her mental health. The removal of this need by the parents ensures that the child developed and alerted in a positive sense. The child feels positive emotions (Sunderland, 2006).

What is important for the child during the attachment process is that parents help to organize their emotions and feelings. This helps the child's brain development positively. Schore, a psychobiologist who researches this area; (Schore, 1994; 2005; Schore & Schore, 2008) found that there is an explicit effect of harmony, attachment and emotional regulation processes to the development of the orbitofrontal cortex, which is an important task in the development of empathy and emotional memory of adjustment, (Gerhardt, 2004).

Toys should not be used in Theraplay practice. In the practice of theraplay, parents should first observe the practice of the therapist, and in this direction parents should consider game-based communication and positive steps of physical interaction. Observing families should act as active practitioners of activities that
need to be done in the second stage. In this process, the therapist observes the practice of family and welcomes the remarkable negative behaviors of the parents and the child and focuses on promoting continuity by turning to affirmative actions. It can be observed that the self-image of the child develops while there is a positive connection between the parents and the children with this success of the therapist (Bıyıklı and Tuncel, 2017).

When Theraplay is examined from the theoretical point of view, it is evaluated in terms of attachment process, attachment theory, self-psychology and object relations of parents and baby. This assessment suggests a strong relationship between Theraplay and the interpersonal attachment relationship. In the research results on how attachment problems affect the child's life, attachment problems experienced by the child during infancy negatively affect the interpersonal interaction process throughout his life (Goldberg, 2000; Siegel & Hartzell, 2004).

Theraplay argues that processes such as massage by fattening the baby's body, taking the baby to arms, maintaining skin contact, meeting the need for food, establishing positive parental baby contact during diaper change can be solved by repetition in childhood (Bıyıklı and Tuncel, 2017).

In children who are exposed to abuse or parental deprivation, actions such as feeding the child in the arms, singing songs to the child can be reminiscent of the child's attachment during infancy. The child who is traumatized in this way will feel stronger in the face of events and situations. This can be a remedy for the emotional period that the child cannot live with and will make sure that the good days you have lived in the past are alive and feel good. This is regarded as an opportunity to re-establish a bond for the child (Bıyıklı and Tuncel, 2017).

The child can learn the process of connecting, accept and accepting with the caregiver. In the later phases of Theraplay, when everything goes as planned, therapies are continued by making applications that are appropriate to the child's age and development level. Careful attention should be paid to the high level of awareness of the parent at every step of the therapy from the beginning to the end of the practice (Booth and Jernberg, 2010, Muuns, 2000, 2009).

The inner working model, an important concept of attachment theory, is a model that is emphasized in the positive psychology of the content of Theraplay (Seligman, 2007), which focuses on the formation of the positive self-image from Theraplay's purposes. When Theraplay develops self-perception, he first seeks to create a consistently high self-perception with unconditional love and unconditional value focused performance (Bowlby, 2012).

Theraplay is an application approved and supported by neuroscientists. One of the researchers who gave the most support and who had a hard time in developing was a doctor who developed a sequential neurological program. Bruce Perry. Dr. Perry notes that the functioning of the body-controlling mechanisms, such as the brain, body structure, heart rhythm, breathing level, blood pressure, and "back, battle or runaway" instinct, primarily develops in the brain stem and intermediate brain. Following this function, emotional behavioral development progress. The most recent developmentally evolving part is expressed as the upper part of the cortex or brain where complex processes such as speech, language, abstract
thinking, planning and decision making are developed and the processes in the individual's life are most influenced by the development process (Perry & Salavitz, 2006).

The neurological support of Theraplay is also evidence of how powerful the practice is. When the principles of theraplay applications are examined, it is seen that the importance of the first three years of neurological functioning in the brain of the individual is emphasized. In this period, if the baby experiences extreme anxiety or stress, studies on the effect of the brain's functioning on the negative level are made by Dr. Perry. Dr. Perry noted that, unlike the chronological age of the individual, other factors that affect the level of development should also be focused (Sunderland, 2006).

4.2. FILIAL GAME THERAPY

Filial therapy is an application that should be actively and consciously involved of the family in the practice. While the results are positive when the family can be committed to a stable and consistent support, it is known that applications that do not supported by the family also have positive results. The basic rationale is that parents living permanently with the child must apply permanent solutions by ensuring that they have full control over the application (Schaefer, 2013).

Although Filial therapy is a game therapy, it is known as in the essence family therapy type. The family, which realizes the role related to the practice of filial therapy, aims to support the process of positive psychological development by being able to carry out a positive sense of association and communication in a focused way, focusing on family child interaction. Filial therapy, which is translated into these dates from the Latin as parent and child, is expressed as the first meaning girl and boy. As it can be understood from the content, it is a family therapy oriented game therapy. First researchers were Dr. Bernard and Louise Guerney. Researchers have focused their whole careers on this area with their Filial therapy application. Filial therapy work was carried out in the late 1950s and early 1960s. From since then now it has been developed and applied effectively (Guerney, 1964, Guerney, 1983, Van Fleet, 2005, 2006, Van Fleet & Guerney, 2003).

Although many negative criticisms have been made at the beginning about filial therapy, it is seen that the viewpoint changed as time progressed through changes in the experimental results of the studies. Filial therapy, as it has been in the past, is an application that is highly demanded by families and therapists and whose results are positive. The difference from other gaming therapies is that they are used to record important developments such as respect for the world-wide problems of multicultural environments, empowering approach, adaptation process. Practice in Filial therapy is primarily directed towards the transformation of parents. Parental turnaround is important in terms of ensuring the continuity of the therapy process, given the opportunities for spending too much time with children when considering the continuity of family interactions. To make this process is carried out correctly; a supervision should be given to the parents. First, families who carry out their practice with the therapist continue to carry out what they have learned in the home environment. This process is routinely followed by therapists for a while in
the home environment. Before terminating the follow-up process, the therapist should teach practices about how to generalize practices on daily life skills (Schaefer, 2013).

In interviews with family members, it was determined that the family continued this process for a long time due to the fact that they had applications that provided the continuity of their qualified time passing with their children although the therapist follow completed. Filial therapy is implemented by structuring between ten and twenty sessions in accordance with three types of problematic family types: extreme problem families, families with moderate problems, family ties are weak and need primary prevention to strengthen families (Bıyıklı and Tuncel, 2017).

Van Fleet (2006, 2008), Filial therapy has been used in some cases in individual family practice, but also in some special cases developed on parental child relationship. But as the most radical trial site, it is programmed for twelve-week-old groups in families scattered in the Katrina Crash.

Filial therapy is a holistic approach developed by researchers working in different fields, including many disciplines in their own context. When Filial therapy examined with the point of view of the period in which it was developed, it is seen that it has been developed with a point of view far ahead of time. How effective it is in the past can be focused on today's problems in the same way today, and the family can solve child problems. Filial therapy was first recognized by play therapists. Later, when the practices gave positive results, family therapists, psychologists, psychiatrists, social workers, consultants, and trainers reached success with Filial therapy in their cases (Bıyıklı and Tuncel, 2017).

Filial therapy, a psycho-educational practice, is structured on ideas about how people should deal with the problems they experience. Filial therapy focuses on psycho-educational practices, first of all identifying the problem, then clarifying whether it is a family-oriented problem or an individual problem. It does not accept treatment with medication or medical intervention. Although psycho-educational practices are used in conjunction with medical interventions in themselves, Filial therapy does not look favorably on this. The content and dynamics of filial therapy can vary considerably. Therapists think of themselves as an educator only by applying a psychiatric approach. But when they choose Filial therapy to intervene, they act on the details of intervention methods for client problems, ways to cope with family dynamics, and acquisition of knowledge and skills focused on permanent solutions. This therapy can be handled with different practices such as psychologically, in terms of emotional behavior disorders, and social and developmental contexts. When filial therapy is applied, a number of clinically determined points are important to give an idea to the therapists for the start. Filial therapy, a process-focused approach, is an application that recognizes empathic thinking skills and requires clients to become self-sufficient, even if they are no longer therapists at the end of therapy. Purpose of Filial Therapy is to create a parent-and-family-focused physical environment and strengthen relationships in all circumstances. For this reason, Filial therapy is planned and implemented with objectives for a longer period of time, focusing on the game, fun, and persistence of
resolution, instead of aiming directly to the goals. The therapist is the founder, actor and the evaluator of this order. If followed in this way, the application will be successful in the form of play therapy (Schaefer, 2013).

Filial therapy aims to help children and their parents to deal with their traumatic problems in their family and lives, and try to overcome their fears. It is important that individuals during and after therapy are able to tell, express and outburst their own problems or traumas. Therapeutic practices provide parents with the ability to develop and protect the parental role in accordance with their character. The role of families in the practice of filial therapy should be child-centered thinking and child-focused correct intervention practices (Schaefer, 2013).

Just as the role of the therapist creates a safe environment for the children, they must create a safe environment for parents too. With this balance of the therapist, the positive change of the parents is reflected directly to the children. The balance in the family environment becomes clearer first. This clarity can be sustained as parents are reinforced with empathy, respect, skill training, and a supportive environment (Schaefer, 2013).

Although there are therapists who practice filial therapy, the best practitioners of filial therapy are parents who live in the same environment with their children. They need to believe that they can make parenting roles consciously and professionally. Whatever the therapist, he cannot know the child better than his parents. When the relationship between the parent and the child is evaluated, the parent may not adequately know the child. Inability to develop parental roles can be seen. Even in such a situation, parents always understand what their children want. How much the parent knows the details of the child, the practice of filial therapy will work at that level. In the observation of the therapist, it is important to remember that the parent and child seem very distant from each other, but the bond is intimate. For this reason, the therapist must be in business with the parent at each stage of filial therapy. In filial therapy, it is very important to reach the parent and communicate properly to ensure continuity of therapy and conclusion. The goal of filial therapy is to develop healthy attachment. In the treatment of attachment-focused problems, play is the best choice (Schaefer, 2013).

Van Fleet (2008) describes play therapy as a broad area that encourages children to communicate and interact, and as a means of creating an emotionally safe therapeutic environment. Play therapy by experts is a developmentally sensitive treatment option for children's problems. The goal of Filial Therapy is to be involved in family communication and strong love and communication while another goal is to be process-oriented for suddenly developing conditions for family and children's needs (Cavedo and Guerney, 1999).

By eliminating the needs of filial therapies, parents can have the solutions they need for their routine lives and start the desired change. In this respect, filial therapy is consistent with the democratic parenting approach to effective parenting styles.

In a survey conducted by Guerney, he found that parents showed their children how they could improve their attitudes and behaviors with their social attributes. In addition, empathic approach during free play has identified positive attitudes and behaviors of children towards parents (Guerney, 1997).
In the result of Filial therapy, it is seen that how children behave in a way that is incompatible and freedom at the time of free play. During the application there must be file opened one for parent one for child. At the end of each session, the developments and stresses in the session should be written in this file. Regular interviews are held with parents after each child session. It has been identified as one of the most important criteria that increase the effectiveness of filial therapy (Schaefer, 2013).

RESULTS

It is known how important the play is in the life of the child. When it is evaluated with this consciousness, it is known that the child can be reached through game therapies in the solution of social emotional development problems as well as in all development areas. It is known that the therapist and the family can focus on solving their problems through games by giving tips on the child behavior and emotional sharing and especially the attachment process in the game therapy process. Attachment process is known as a process that brings emotional and behavioral problems in the baby's future when it cannot be performed between mother and baby during infancy. The relationship between play therapy and attachment has emerged to solve the problems of infants whose process has not developed properly. As seen in the researches, it is seen that the causes of childhood and later emotional and behavioral disorders are caused by the problems related to mother / caregiver infant relation to the attachment in the first three years of life. For this reason, knowing the importance of the attachment period and benefiting from the therapy support in solving the problems related to this turnaround gives positive results.

This therapy support is applied as play therapy in the infant and children group. It is known that Theraplay and Filial game therapy applications are beneficial from therapies that have positive results in connection and play together. Theraplay and Filial Therapy are known to be important because both the baby and the parents are educated about their children. Theraplay and Filial play therapy has a multidisciplinary work team and research areas and back issues in its discovery and implementation. In this case, Theraplay and Filial can also mean that the outcome of their practice with respect to gaming therapy can be tolerated and other problems that may arise can be overcome more easily. Therefore, Theraplay and Filial game therapy can be suggested as a game therapy for solving the problems of attachment in children.

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Chapter 7

Technology Addiction in Children

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INTRODUCTION

Addiction is defined as an inability to stop doing or using something (Addiction, 2018). It is characterized by lack of control in the consumption of a product or in certain behaviors (Griffiths, 1995). Addiction causes an excessive consumption or a limitless behavior to continue despite its adverse effects. After a period of time, the adverse effects become a health risk both physically and psychologically. Addiction may involve the use of substances such as drugs, alcohol or behaviors such as gambling, overeating (Robinson & Berridge, 2000).

The neurobiological researches reveal that the addictive substances and behaviors intensely activate brain pathways of reward, reinforcement and involve the neurotransmitter dopamine. Dopamine is a chemical messenger that carries signals between brain cells. It is suggested that dopamine may be involved in ‘desire’ to repeat the addictive behavior which plays a critical role in addiction (Lingford-Hughes & Nutt, 2003).

For many years, the word ‘addiction’ recalled mostly substances such as drugs, alcohol or addictive behaviors such as gambling, overeating, over-exercising, but today in the first stage it is associated with technology use or screen time especially among children. Griffiths (1995) defined technological addiction as a non-chemical (behavioral), passive (e.g. TV) or active (e.g. computers) human-machine interaction that induces or reinforces the features of addictive tendencies. The researcher referred that there was a little empirical evidence for technological addiction at the time that the study was conducted and predicted that it will exist in the future. The study concluded with a suggestion to the clinical psychologists to prepare their intervention, prevention and treatment techniques for technology addiction (Griffiths, 1995).

Today, a growing body of literature is exploring the excessive screen time and technology addiction. As a consequence of internet access and mobile technology facilities, use of technology among children for a variety of purposes such as watching videos or movie, listening to music, playing online/offline games on computer or on game consoles, texting with friends or using mobile apps for social media is on the rise, regardless of time and place. OECD report (2012) reveals that children spend more time on the Internet than before, compared with 2005 records. According to the Global Digital Report 2018, the number of children between 5-14
years old who use the Internet is more than one billion (URL, 2018). While the range of technology user’s age is expanding, the duration of the usage is extending as well. The American Academy of Pediatrics (AAP) recommends to limit screen use to 1 hour per day of high-quality programs for children ages 2 to 5 years and to place consistent limits on the time spent using types of media, to make sure that the media does not take the place of adequate sleep, physical activity and other behaviors essential to health for 6 years and older. According to the OFCOM report (2015), the media consumption of the children between ages 8-11 increased from 4.4 hours in 2005 to 11.1 hours in 2015. As it can easily be seen, the numbers are far above the suggestions of the American Academy of Pediatrics.

The actual data about the technology use initiated a discussion about the effects of screen time on children’s developmental areas. Some researchers are deeply concerned with the adverse effects of excessive technology use. An opposing group claims that quality research and evidence is necessary to support their concerns.

**POSSIBLE EFFECTS OF EXCESSIVE TECHNOLOGY USE**

A group of scientists from different countries with research expertise and experience in screen time and child development shared their concerns about the adverse effects of technology use on children. They raised a claim that the physical and mental health problems among children and young people are approaching crisis levels. There are a number of studies classifying the adverse effects of excessive technology use on children. Lissak (2018) grouped the effects according to their impact area as physical and psychological. According to this study, the physical health effects are listed as poor sleep cycle, risk factors for cardiovascular diseases such as high blood pressure, obesity, low HDL cholesterol, poor stress regulation, insulin resistance, impaired vision and reduced bone density. The study declares that novel findings suggest an inverse association between sleep duration and subsequent screen time. It is also claimed that screen time sedentary behavior increases the risk of obesity, HDL dysfunction, and high blood pressure which are major risk factors for cardiovascular morbidity. The psychological effects are listed as depressive symptoms, suicidal, ADHD-related behaviors, violent and fast-paced content risk for antisocial behavior and decreased prosocial behavior.

A study by Mills (2016) integrates the latest empirical evidence on Internet use with relevant experimental studies to discuss how online behaviors and the structure of the online environment might affect the cognitive development of adolescents. Mills specified the effects of Internet use of teenagers in their cognitive development as memory, analytical thinking, multitasking, processing social cues, social competence and social evaluation. The findings of the study validate the cognitive changes associated with Internet use and reveal that the changes are not impeding adolescents’ ability to successfully navigate the highly-connected world. On the contrary, the researcher presumes that any change in cognition that accompanies Internet use could be a positive adaption to a changing environment.

There are more studies from different parts of the world, indicating various adverse effects of excessive screen time or technology use among children. Maras, et al. (2015) examined the relationship between screen time and symptoms of
depression and anxiety in a sample of 2482 Canadian children and found that screen
time is associated with depression and anxiety. Cao et al. (2011) analyzed 5003
children in China to test the association of screen time, physical activity and mental
health among urban adolescents. Their results revealed that high screen time and
insufficient physical activity interact to increase depressive, anxiety symptoms and
studied the effects of screen time and physical activity on mental health symptoms
in a sample of 315 Icelandic adolescents and their study revealed that less screen
time and more frequent vigorous physical activity is associated with lower risk of
reporting negative mental health symptoms. In their study Heshmat et al. (2016)
studied the joint association of screen time and physical activity with
cardiometabolic risk factors in a national sample of 5625 Iranian adolescents. The
findings of their study showed that the joint association of high screen time and low
physical activity have direct association with abdominal obesity, overweight and
low high-density lipoprotein-cholesterol. Kanburoğlu et al. (2014) investigated the
influence of screen time and study time to the academic performance of adolescents
in a sample of 2104 students aged 11 to 13 from 13 different cities in Turkey.
Academic performance of adolescents was found to be decreased as their and their
parents’ time spent in front of a television increased.

Some other risks of unrestrained technology use of children related to their
social relations are cyber-bullying, exposure to inappropriate adult content (e.g.
pornography, tobacco or alcohol trade), improper social relations and online
solicitation. Regarding cyber-bullying and internet use relation, a study with 239
adolescents by Cinar, et al. (2017) revealed that there is a significant positive
correlation between cyber-bullying and Internet addiction. Hood and Duffy (2017)
investigated the psychological actors associated with cyber-bullying and surveyed
1,344 children. Their findings show that parental monitoring has an effect to
weaken the cyber victim-bully relationship. The results of Özdemir and Akar’s
study (2011) imply that cyber-bullying among Turkish high school students is as
common as in other countries and it is seen that “Facebook”, which is the most
preferable social sharing website on the Internet, is a platform where the cyber-
bullying mostly takes place.

Mills (2016) states that most of the studies investigating the adverse effects of
screen time or technology use focus specifically on a subgroup of adolescents with
disordered Internet use. She remarks that despite the high rates of Internet use
among American teenagers, the prevalence of disordered Internet use remains low.
A survey conducted with a sample of 11,956 adolescents, investigated the
prevalence of Pathological Internet Use (PIU) in 11 European countries and found
that only 4.4% of adolescents met the criteria for PIU (Durkee et al., 2012). In their
longitudinal study with 1,444 adolescents, Strittmatter et al. (2015) found that PIU
rates ranged between 4.4% and 3.1% in their sample. Another longitudinal study
found a significant decrease in PIU between ages 14 to 16 years (Barrense et al.
2015).

Apart from its risks, technology use among children comes with some
advantages. It is reported that a responsible and restrained use of technology -which
means usage with a productive purpose, for a limited duration, and with a quality content- is critical in obtaining positive results. Using technology for purposes such as design, coding or robotics, utilizing qualified tools with these aims in mind, and ensuring this usage is appropriate for the requirements of each age group will help suppress concerns and increase efficiency (Yüceliyiğit & Aral, 2018). In their study Borca et al. (2015) interviewed Italian adolescents and the children in their study group reported that the Internet facilitated the tasks of forming one’s identity, establishing personal autonomy, and strengthening peer relationships. Another study that interviewed American 13–14-year-olds obtained similar reports, as these adolescents largely expressed positive perceptions of the effects of technology on their cognitive and social development (Fitton et al. 2013).

**ACTIONS TO BE TAKEN**

Technology use and screen time have already become a fact of life. Parents, educators, researchers, policymakers are trying to adapt it beneficially. The research results suggest both benefits and risks of technology use for the health and development of children. It is the responsibility of the adults in terms of parents, teachers, program developers, pediatrics, psychologist and policymakers to avoid risks and to get use of beneficial consequences for their children.

Although parents hold the lion’s share in decreasing the amount of technology use of their children, not all of the parents are aware of their competence. Some of them face challenges in using technology properly, serving as an ideal role model and monitoring their children’s technology use. According to the Media Policy Brief 17 parents reduce the potential negative effects of screen media on children, by restricting the time spent on screen media. The report defines parental mediation types as restrictive and enabling. Heavily restriction that aims to reduce the exposure to risks also reduce the opportunities for learning and engagement. Besides, there is little evidence that the use of heavy restrictions reduces children’s risk of harm but still, active mediation of the parents is associated with increased positive outcomes (Blum-Ross & Livingstone, 2016).

The empirical studies present different types of parental mediation. The results of the study by Schoeppe, et al. (2016) with 2,034 Australian adults showed that most adults agreed to limit screen time of the children no more than 2 hours on school days. According to the research results, it is seen that mothers impose higher screen time restrictions for children than fathers. The researchers investigated the parent’s technology use. Their results revealed that parents themselves spent more than 2 hours on watching TV and using the computer at home on both work days and non-work days. The findings of the study also indicate that adults spending less than 2 hours a day at leisure-related screen time were less likely to permit children more than 2 hours a day of screen time. The findings of Odabaşı’s (2005) research with 94 families exploring parental views on Internet use of their children concluded that most of the parents reported a positive perception regarding the technology use of their children on their academic success while they recognized the negative effect of it on family relations. Connell et al. (2015) examined the representative sample of 2,326 parents in the USA regarding the factors associated
with parent-child digital media co-use. Results indicate that parents are more likely to co-use traditional media such as television and less likely to co-use video games whereas the recommendations of the AAP (2016) for parents is to engage technology actively instead of using it passively, as it is, in the case of TV watching.

While the previous studies put the emphasis on parent’s restrictions to avoid the risks of excessive technology use among children, novel studies suggest moving beyond restrictions. They invite parents and educators who are in contact with the children in the first place to involve them with the options of productive use and to raise their awareness of beneficial use instead of just focusing on the limits (Blumm-Ross & Livinstone, 2016). More researches are necessary to make evidence-based recommendations that will be used by parents and teachers for a deeper understanding of excessive technology use with both productive and harmful consequences and to avoid the health risks. It is important that the researches and their recommendations be tailored according to the diversity of family demographics, values, skills, and interests. The support and advice given to a boy who is struggling to stop spending long hours in front of his computer for online gaming because of his ambition to win would not fit in the one given to a girl who lives connected all day on social media because of having no better alternatives. Sanders, Parent, Forehand, Sullivan, and Jones (2016a) suggest that improving parental self-efficacy help parents manage better the screen time of their children. In another study Sanders, Parent, Forehand, Sullivan and Jones (2016b) highlight the content of technology use and participatory parenting, which can be interpreted as an engaging use of technology together with the children with age appropriate high-quality sources. Research projects of numerous types and large scale can be carried out by initiatives dedicated to public well-being. A limited number of countries have reliable organizations such as Common Sense Media (US), and Parent Zone (UK) to provide information for families and children-focused professionals about the secure and appropriate use of digital media and technology. Every country needs to establish such organizations to educate the society for a digital future.

**CONCLUSIONS**

The new generation is immersed in a nonstop data flow and they have a variety of options for entertainment on digital platforms which play a tantalizing and stimulating role to spend long hours connected with their digital devices. Addiction is a product of a complex process in which potentially rewarding activities take the control over the addicted ones. The studies show that technology use is on the rise among the children. The current status rings the bell for the risks it brings. Although not every excessive use can be diagnosed as ‘technology addiction’, there surely are risks to encounter. The risks of excessive technology use among children are classified as content risks such as violent, racist or pornographic content; contact risk, such as stranger danger or stalking; conduct risks such as cyber-bullying or misuse of personal information and commercial risks such as advertising, hidden marketing, and in-app purchases. Most of the studies investigating the excessive
technology use or screen time of the children conclude by recommending parents to take the control of their children’s use of technology, however, it is time to go beyond the restrictions, focus on the opportunities and guide children with real-life practices in which technology is used beneficially. It is believed that parents can shorten the children’s screen time if they help their children to set a productive goal, such as coding, designing or arts to use technology except for using just social media or just video/internet gaming. Balancing the purpose of technology use inclusively, without ignoring the requirements of adolescents, can satisfy both sides on the appropriate use of the digital devices. The children need guidance at the very early ages of their first interactions with digital devices. If parents and educators can make their presence felt at this stage, rewarding habits will start forming and become permanent in the long run. Setting the limits, being a role model, keeping the potentially addictive devices out of the bedrooms are necessary actions to avoid misuse of technological devices, but raising children’s awareness by talking to them, encouraging them to productive use and guiding them at home and at school is more critical and essential to attain tactile consequences.

Since the emerging developments are rapidly changing the researches should catch up the speed of transformation and keep their efficient guidance. At this stage, researchers of governmental or non-governmental organizations and the industry are expected to derive results from their methodological and longitudinal studies and share their results with the public. The research results should not be limited to generic recommendations instead they should be capable of presenting effective solutions tailored for a diversity of families according to their demographics, skills, values, and requirements. Health service personnel such as pediatricians, psychologists, child development specialists play a role of a bridge to pass the latest study results to the public by working in coordination with both families and schools.

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Anecdotes of Oral Performance among First Year English Language University Students

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INTRODUCTION

Anxiety in the Oral English Context

Learner anxiety gained significant attention as an affective variable in second language research since 1970s. Several studies indicate that “learners” affective domain does matter in the learning and teaching process” (Alico, 2015). There are different types and degrees of learner anxiety. This research focuses on the types of anxiety that generates in the face of oral performance when students are asked to perform in the target language (English). Speaking is one of the most challenging areas for language learners especially at the early stages of the language development. Many language learners experience language anxiety (Horwitz, 1986; Horwitz et al., 1986; Young, 1986; Liu, 2006). “Research in speech communication also suggests anxiety can affect an individual’s performance” (Young, 1986, p. 440). Some learners exhibit their language learning challenges whereas some others keep quiet, show no response or may look negligent to the untrained eye. In this case, instructors may wrongly categorize these learners as uncaring and may give up on them. It is necessary to understand that anxiety is a complex concept. It can appear in a variety of ways and forms. “…research into the relationship of anxiety to foreign language learning has provided mixed and confusing results… suggesting that anxiety itself is neither a simple nor well-understood psychological construct” (Scovel, 1978, p.132). This dilemma is partially solved as researchers have now consensus that a little bit of anxiety is claimed to boost the learning energy which assists the learning process whereas higher levels of anxiety impedes the learning process.

Learners in different cultural contexts suffer from detrimental consequences of anxiety in language classrooms. Awan, Azher, Awan and Naz (2010) state that anxiety is a state of fear, panic and worry. Learner anxiety should be noticed by instructors and alleviating steps should be taken because unnoticed or ignored anxiety lowers learner performance. Young (1986) highlighted the effects of anxiety on second language oral production by noting that “…anxiety could materially affect an individual’s avoidance behavior and the quality of language input” (p. 440) in language classroom. Also, Liu (2006) found in a Chinese educational context that one third of the Chinese students were anxious in an Oral Communication class. Also, Wu (2010) found in a U.S. secondary school context
that as many as one third of students expressed anxiety in a foreign language class. These studies as well as others indicate that foreign language anxiety is not experienced only in specific geographical locations pointing to the global significance of this topic.

Researchers agree that anxiety can be experienced by anyone who attempts to learn a new language. According to Clement, Gardner and Smythe (1997) high levels of anxiety can take one in a psychologically aroused position where the individual feels a constant state of apprehension and worry. Performance anxiety in L2 is a more common experience than previously acknowledged. Striving students sometimes cannot reach their best potential because of the interference of anxiety in their learning process. This research discusses the characteristics of anxious students as it appears in the oral and written expressions of 1st year 2nd semester university students who major in English Language Teaching. Instructor observations, instructor-learner interactions, and oral & written anecdotes of learners provide a closer understanding of the anxiety experience of language learners and consequences of anxiety in the learning process. Some practical applications are experimented in the language class. Results of the study imply pedagogical possibilities and further research for educators and researchers.

**Position of English in the Turkish Educational Context**

It is necessary to look at the place of English at schools in order to better understand the position of learners in the universities. According to Solak and Bayar (2015) Turkish education system valued teaching of English since the westernization efforts of Turkey and it progressively increased with the establishment of Republic of Turkey. Increasing globalization caused more interaction with other countries for technological and trade exchanges which led to increasing popularity of English teaching/learning (Doğançay-Aktuna, 1998). In 1997, 8 year compulsory education was introduced which lowered the foreign language learning age to 4th grade in elementary school. Previously there was almost no English class in elementary school curriculum. Teaching at a younger age is undertaken to take advantage of benefits associated with earlier language learning. New steps continued to be taken such as 4+4+4 educational endeavor in 2013, which included 12 year of compulsory education. 2nd grade becomes the starting age for learning English. Despite these efforts the learning of English did not improve as planned and English proficiency of learners were far from the desired level (Karahan, 2007). In comparison to other European countries Turkey is at a lower level in English proficiency. Researchers rationalize this lower performance to the over reliance on grammar-based teaching as opposed to communicatively-oriented teaching. Low English proficiency of learners are also partially due to a centralized test, TEOG (Test for Entrance to High School) which all secondary school students have to take before high school.

TEOG test score determines which high school students can attend. In this test, all school subject areas are equally tested. The courses students are tested for are English, Turkish, Mathematics, Science, Religion, and History. English teachers try to prepare their students to the exam by focusing on grammar. Little or no attention
is given to English oral proficiency, because the test does not evaluate oral proficiency. With the latest regulations TEOG test format has changed and now English, History and Religion has fewer questions than Mathematics, Science and Turkish. English has less priority and students prefer to study other subjects which are more influential in their overall score. Theoretically, it is no longer compulsory to enter this exam but if the student does not take the test, s/he automatically have lesser quality school options to choose from. Those who aim better quality schools have to take the test to compete with their peers. Thus, teachers cover a series of topics geared towards the test as dictated by the curriculum which leaves little room for creativity. Students finish high school with limited or no communicational skills in the English classes. Learners come to university with inadequate English skills. Understandably learners in universities feel different levels of anxiety in an Oral Communication class when they are called upon participation.

Anxiety: Types of Anxiety in the English Educational Context

Anxiety is a complex concept. There are different types and levels of anxieties which affect the learning process and performance in a variety of ways. Horwitz (1986) identifies three types of anxieties in the educational context which are (I) Communication Apprehension, (II) Test Anxiety, and (III) Fear of Negative Evaluation. Communication Apprehension occurs when the learner is called upon to communicate in the target language. Test Anxiety occurs when the learner needs to take a test and fear of failure causes anxiety. Fear of Negative Evaluation occurs when one is called to perform in front of a teacher, learners or other audience and the learner feels agitation for the possibility of negative evaluation from others.

These three anxieties are relevant for this research, because an Oral Communications class involves aspects of these three anxieties. Nature of the Oral Communication class includes several incidents of performing in front of a class. Some students express high levels of anxiety at the idea of public speaking. Several students report experiencing communication apprehension. Oral Communication exam situation can include a complex array of anxieties for some students. Not only they experience communication apprehension because of the challenges of L2 communication, but also they feel the fear the possibility of failing in a test situation. In addition to these, several students fear peer judgment and negative evaluation from others.

We might not always see the signs of anxiety and can oversee the revelations of anxiety in students. Some learners have obvious anxious characteristics like shaking hands, change of voice whereas some learners keep silent, look unresponsive or careless. Instructors may wrongly label these students as unmotivated or uninterested. The concept of anxiety should be studied more closely in order to better understand the experience of anxiety born by learners. This is a classroom-based case-study aiming to better understand the characteristics of anxious students. Learning more about the experience of anxiety, anxious behavior and its consequences in the learning act, we will be able to offer some classroom strategies to better serve our anxiety-laden learners.
MATERIALS AND METHODS

Research Questions
The research questions of the study are:

a) What are the characteristics of anxious students participating in the Oral Communications course of first year ELT (English Language Teaching) students?

b) How does anxiety affect EFL (English as a Foreign Language) learners in oral performance context?

c) What are some of the pedagogical steps that could be utilized in the classroom to alleviate anxiety in speaking situations and achieve full capacity of learning?

Research Aim: Previous research already acknowledged the relationship between anxiety and performance. Several researchers agree that a little bit anxiety boost the learning capacity of the learner whereas high levels of anxiety obstruct learning. This classroom based research provides a closer look into anxiety in an actual classroom atmosphere and its impact on learning. The findings in the study can guide educators with pedagogical endeavors to reduce anxiety, increase motivation and accomplish full-capacity learning.

Participants: The course consisted of 60 students majoring in ELT (English Language Teaching) in the 2nd semester of the 1st year of university education. Ages of the students ranged between 18-28 with the exception of one student who was in her 40s. The course held three-hours long gathering once a week. The class was a heterogeneous group of learners with lower intermediate, higher intermediate as well as native and native-like speakers, even though they were all supposed to be above intermediate-level of proficiency. 34 of the students are categorized as somewhat anxious learners, who are the focus of the study. Teacher observations, teacher-learner interactions, and oral & written anecdotes of these 34 learners categorized as anxious are studied. 5 of the 34 students are assigned as highly anxious learners. These learners received the most attention in face-to-face interactions with the teacher.

Data Collection: This case study utilized qualitative data collection techniques because a detailed description of the classroom data is valued in explaining the phenomenon of the anxiety and anxiety-laden learning experience. These techniques are as the following:

(i) direct observation (in group discussions & individual and/or group performances),

(ii) one-to-one teacher-student interactions (in class & office hours), and

(iii) writing assignments (on a number of diverse topics, including reflective journaling of their language experiences).

RESULTS
The results of the study indicated that 5 of the students were experiencing extreme anxiety to the extent that they stopped their oral performance a number of times in front of the class. Their anxiety was due to (i) the fear of negative judgment...
from their peers and (ii) lagging behind their peers (being much worse in proficiency than their peers) and not being as good as they should have been. The findings resemble previous studies undertaken such as Tsiplakides and Keramida (2009), and Alico (2015). In this research there were 34 students who expressed feelings of anxiety when called upon performing in front of the class. 5 of these 34 students were extremely anxious. The writings of these students indicated that approximately half of the students expressed that their performance were negatively influenced because of their anxiety. About one third of the learners who are categorized as anxious expressed that they did not always feel comfortable to speak only occasionally in class discussions. Several anxious students preferred to speak occasionally in the class sessions. Student writings and face-to-face conversations revealed that silent posture of learners is not because they did not like English or they were lazy. Their narratives indicated that they thought their oral English proficiency was not good and they feared that their peers can evaluate them negatively because of their English.

One student expressed:
“I like English. I want to be an English teacher in the future. But I don’t want to speak in the lesson, my English is not very good. They will laugh to me”.

Another student’s writing had similar concerns:
“I don’t like speaking in class because some students are too good. They are native speakers. I cannot speak like them. I feel bad”.

It is possible to see that learners are concerned about what their peers think about them, their level of English. These quotes indicate that they have social image concerns. Several students expressed similar concerns of being ridiculed by higher performing students. Students were more at ease when they were speaking with the class instructor on one-on-one during office hours:
“I feel Ok now...speaking with you..., but in class I am not Ok. I want to speak...but I cannot speak. I think on my head a lot... but when I speak ...I cannot say everything...”

Some students were overly concerned about creating grammatically perfect sentences that stopped them from speaking:
“I don’t like speaking, because I make stupid mistakes...like tenses. I sometimes use past tense, but it should be simple present tense, I know it. I make many mistakes if I speak in the lesson”

This quotation indicates that learners overthink before they speak, because they want to create error-free speech. This also hints at the concern for being assigned a bad social image by others in the class.
“I dislike when you say speak to us a lot, because I feel bad. They speak so good...like native. I cannot speak like them. My heart beats very fast. I cannot do it...”

We can feel above speaker’s low self-esteem because of the fear of losing face. She was mostly silent in class. Interestingly, both face-to-face interaction with the instructor and writings revealed that they overvalued their peers’ English and undervalued their own English proficiency.
“I feel good when I speak with you. But I feel excited too much in the class”.

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Some students avoided eye-contact which shows unwillingness to participate. Interestingly most of the students welcomed instructors’ invitation to the office hours, and did not express great levels of anxiety while speaking to the instructor.

*I become nervous a lot, but... I do not show it. ...I pretend that I am not nervous... it helps me to speak”*

As the above quote indicates there are also some successful attempts tried by students to control their anxiety. This particular student was able to overcome her anxiety by pretending.

“My heart beats faster when I participate. But I say to myself, you have to speak. If you don’t participate, your English will not be good. So, I force me and I encourage me. But I feel very nervous always”.

Student in the above quote directs her anxiety into participation by reminding herself her goals of becoming a good English teacher.

**DISCUSSIONS**

**Implementing Pedagogical Alterations in the Classroom**

After noticing that around half of the class feels some level of speech anxiety, some classroom alterations are implemented to help these students reduce their burden. These classroom measures are taken in response to student revelations in writings as well as face-to-face interactions with the instructor.

**Classroom Applications and Syllabus Alterations**

Since several students expressed a strong fear of mistakes, the instructor reiterated many times that mistakes help the learning process. Students are encouraged to participate without the fear of making mistakes. Teacher explained that all participation in the classroom is valued regardless of the level of accuracy or fluency. It is included in the syllabus that no one is permitted to laugh at others because of mistakes, fluency or accent issues etc. Concept of respect is highlighted in the syllabus, as well as equality of all learners.

**Increased Teacher-Student Interaction in Office Hours**

Teacher utilized extra office hours to give extra support to students who need it. Teacher invited students and, especially more anxious learners in hopes of providing emotional support, enabling more opportunities of speaking or allowing discussions about the course. Almost all students appreciated the attention given to them in the office hours. However, a few students never visited during the office hours.

**Incorporating more Group Work, and Creating Group Presentations**

Realizing that many students feel anxiety in the face of oral performances, a change is made in the syllabus and more group activities are added to the course. Instead of coming in front of the class individually, students are asked to practice speaking with their peers. Later, students are asked to come in front of the class as a group of two. This helped reduce much of the anxiety. Yet, one disadvantage was switching of students to Turkish in group activities.

**Teacher Strategies of Error Correction and Progress Follow-up**

Instructor adopted indirect strategies of error correction to reduce student anxiety. Instructor took note of the incorrect language uses or grammar mistakes
when individuals or groups were performing in front of the class. The instructor went through these mistakes only at the end of the class aiming to camouflage who uttered the mistakes. This indirect correction style saves student(s) from losing face, which is particularly important for shy or anxious students. Also it gave the message that fluency is valued over accuracy. Also, student grades are never shared publicly, so students had privacy about their grades and progress.

**Evaluation of the Pedagogical Alterations: Positives and Negatives**

Students showed more willingness to come in front of the class when asked to speak as a group. This shows that group activities were a useful strategy in lowering the anxiety especially for anxious students who would rather avoid speaking before an audience. Group performance allowed sharing of the responsibility and reduced the load of work for each individual. Also, appearing as two people in front of the class allowed fewer staring eyes on one person at a time thereby lessening the anxiety of the individual. There were some shortcomings associated with the small group activities/group presentations: One person occasionally spoke more than the other individual. Some students received less time to speak either by choice or because of the dominance of their partner. Another unwanted consequence of the group activities was switching to mother tongue (Turkish). Also, few students disliked the idea of groupwork. They preferred doing oral performances alone. Still considering the number of people experiencing anxiety, it is worthwhile to include the option of group work as an alternative to individual performance. This way students will have the two options to choose from: individually speaking or speaking as a group.

Indirect strategies of error correction welcomed by learners. This enabled learners to not lose face in front of other learners. Student correction was delayed until after all oral performances are over. Mistakes and their corrections are mentioned at the end of the course, after all presentations were done. Not correcting instantaneously prevents the interruption of fluency. Also, having finished the presentation task, students would be able to give full attention to the teacher while she is going over mistakes. Another advantage of delaying mistakes is nobody relates teacher corrections to a particular student(s). This is particularly important for shy or anxious students. All students welcomed this intervention and no objections came from any of the students.

Students appreciated that their grades are not revealed in class (though few students were too curious and wanted to know others’ grades, too). Almost everybody appreciated the privacy about their grades, and welcomed the idea of visiting the instructor’s office for receiving individual feedback. However, some students never stopped to receive feedback on their oral development. Even though most students appreciated individual attention they are receiving, others chose not to take advantage of this opportunity. This shows that it is challenging to attract all students in new classroom interventions. Yet, still most of the invited students visited the instructor. Of course, new strategies need to be developed to increase the participation of all students.

Instructor made sure that she treated all students equally and provided informal cues of support for everybody. So, all presenters and performers received ample eye
contact and nodding regardless of the student grade or performance quality. Students were also pleased by the inclusion of concepts: ‘respect’ and ‘not laughing at mistakes’ of others in the syllabus. Before this implementation there was one instance of laughing at someone during a presentation because the performer was too shaky. The instructor warned the person about her behaviour. Classroom intentionally tried to be a more supportive learning ground, where everyone promised to be respectful and supportive of each other. Inviting for participation also helped increase general participation in the classroom. Students are reminded frequently that participation is vital for oral improvement.

CONCLUSIONS

Students’ performance of speech improved by the end of the second semester in comparison to the previous semester. Pedagogical implementations were directly and indirectly influential in the improvement of speaking skills. Both grades and fluency rates of students showed some progress. Because, it is the second semester of the 1st year, and this means students had experienced a number of opportunities for presentation and speaking in front of the class. Going from the motto, ‘practice makes perfect’, it can be thought that these ample opportunities to practice fluency and accuracy skills enabled learners to develop these skills. In addition to the improvement observed in the speech of learners, we saw a drop in the anxiety of learners because of group work/group performance. Some steps are taken to make classroom more supportive and this created a more respectful learning community, which encouraged student participation. Also, teacher’s reminder of the importance of participation encouraged learners to take more risks and speak more. Another strategy that assisted language learning was not correcting students on the spot as they made mistakes. This allowed for uninterrupted speech as well as full attention of students. Anxiety is a prevalent condition in language classrooms, especially in Oral Communication classes, which calls for attention from educators. Only with careful planning of the educator, we can improve the learning conditions and help our learners actualize their learning to the full capacity. The above classroom interventions are by no means unique or an end in itself. Similar steps could be tried in other contexts to better address learner needs. As this research shows no pedagogical step is perfect or all inclusive on its own, but a step towards a better teaching practice and full actualization of learning.

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Chapter 9

Mathematics Teaching Anxiety of Classroom Teachers

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INTRODUCTION

Academic achievement of students is affected by cognitive features as well as affective characteristics. One of the affective characteristics is ‘anxiety’. The moderate level of anxiety towards a lesson increases the academic achievement but the increase in the level of anxiety decreases the achievement unfortunately. And if this course is mathematics, the anxiety of students is increasing even if they hear the name of the course (Deringöl, 2017). The anxiety of a student against a lesson includes feelings and behaviors such as fear, hesitation or distress, insecurity, reduced enjoyment of the lesson, excitement. One of the lessons in which the most common emotional features of these feelings and behaviors significantly influence the learning-teaching process are mathematics (Biber, 2012; Suinn & Edwards, 1982). Math anxiety is one of the factors that prevents individuals from learning mathematics (Bai, 2011; Cates & Rhymer, 2003; Pajares & Miller, 1994). The first math anxiety in students is usually manifested by a variety of negative experiences experienced at primary and secondary levels (Harper & Daane, 1998; Jackson & Leffingwell, 1999). Unfortunately, mathematical experiences in primary education create math anxiety in many cases, these experiences tend to reduce confidence in math skills (Bursal & Paznokas, 2006; Hadfield & Lillibridge, 1991 as cited in Harper & Daane, 1998) as well, leading to the avoidance of mathematics until the age of middle school (Ashcraft, 2002; Karimi & Venkatesan, 2009; Royse & Rompf, 1992).

Researchers have searched for the first appearance of mathematics anxiety by returning to elementary school years of high school and university students’ first experiences in education in their studies. One of the most important factors in the emergence of mathematics anxiety is the negative experiences of students in elementary school age, this proves to what extent primary school teachers bear great responsibility in this point. It is also a fact that teachers who have math anxiety transmit their anxiety to the students during the instruction (Buhlman & Young, 1982 as cited in Kanbir, 2009). As you can see, it does not seem to be enough for teachers to make arrangements only in teaching mathematics. To prevent negative attitudes and anxiety from being passed on to students, they must first start to work themselves and do what they need to be done in this sense (Deringöl, 2017).

As a result, another factor that affects the success of the students is the teachers as seen. It is known that the attitudes, behaviors and beliefs of teachers towards
elementary school mathematics also affect students' positive attitudes towards mathematics (Peker & Mirasyedioğlu, 2003). Mathematics teaching anxiety can be described as 'teacher anxiety arising during teaching or solving mathematical concepts, theorems and formulas' (Peker, 2006). Mathematics teaching anxiety is observed even in the primary school education teacher candidates who have not yet started their profession. Teacher candidates stated that the factors that cause mathematics teaching anxiety are their own mathematics anxiety (Hacıömeroğlu, 2014; Vinson, 2001), lack of internship, lack of self-confidence, and mathematical content knowledge (Hoşşirin, 2010).

In addition, in some researches, it is seen that mathematics anxiety existing in teachers are transferred to the students (Unlu, Ertekin, & Dilmac, 2017) and their teaching practices are seen as a reason for the formation of mathematical anxiety of the students (Baydar & Bulut, 2002; Gresham, 2007; Harper & Daane, 1998; Jackson & Leffingwell, 1999; Sarı, 2014). Therefore, having a high level of mathematics anxiety negatively impacts the vast majority of classroom teachers' teaching processes is an important issue that can lead to serious concerns. In this context, in this study classroom teachers' mathematics teaching anxiety are examined with some variables. Based on the general purpose of the study, answers to following research questions were sought:

1. How are classroom teacher’s mathematics teaching anxiety?
2. Is there any statistically meaningful difference in classroom teachers’ mathematics teaching anxiety scores based on gender?
3. Is there any statistically meaningful difference in classroom teachers’ mathematics teaching anxiety scores based on their profession selection status?
4. Is there any statistically meaningful difference in classroom teachers’ mathematics teaching anxiety scores in terms of they like teaching mathematics or not?
5. Is there any statistically meaningful difference in classroom teachers’ mathematics teaching anxiety scores in terms of seniority?

**METHOD**

A survey (descriptive-survey) model was employed in this study. The survey model aims to describe the past or present situation as it is (Karasar, 2005).

**Research Group**

The sample of the study is composed of 66 teachers, selected by simple random sampling method, who works in various primary schools in Istanbul-Turkey province. The frequency distributions of the teachers in the study group according to their gender and the classes they instructed are as shown in Table 1.
Table 1: Frequency and Percentage Values of Teachers according to Gender and Instruction Class Variables

<table>
<thead>
<tr>
<th>Grade</th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>1st grade</td>
<td>16</td>
<td>66.7</td>
<td>8</td>
<td>33.3</td>
<td>24</td>
<td>36.4</td>
</tr>
<tr>
<td>2nd grade</td>
<td>8</td>
<td>57.1</td>
<td>6</td>
<td>42.9</td>
<td>14</td>
<td>21.2</td>
</tr>
<tr>
<td>3rd grade</td>
<td>14</td>
<td>73.7</td>
<td>5</td>
<td>26.3</td>
<td>19</td>
<td>28.8</td>
</tr>
<tr>
<td>4th grade</td>
<td>9</td>
<td>100.0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>13.6</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>71.2</td>
<td>19</td>
<td>28.8</td>
<td>176</td>
<td>100</td>
</tr>
</tbody>
</table>

The sample consisted of 66 class teachers, 47 (71.2%) were female and 19 (28.8%) were male. In this study group, 24 of the teachers were 1st grade, 14 of them 2nd grade and 19 of them 3rd grade and 9 of them were fourth grade teachers.

Data Collection Tools

As a data collection tool in the study; “Personal Information Form” and “Mathematics Teaching Anxiety Scale” were used. From these data collection tools, the “Personal Information Form“ were developed by the researcher. This form consists of demographic information about classroom teachers and questions about whether or not they choose to this profession voluntarily, whether they like mathematics teaching, and seniority of teachers. Another measurement tool was “Mathematics Teaching Anxiety Scale” developed by Sarı (2014); consisting of 23 items and composed of 3 sub-dimensions as ‘Anxiety Regarding the Process of Teaching’ sub-dimension, ‘Anxiety Regarding the Field Knowledge’ and ‘Anxiety Regarding Self-Efficacy’.

‘Anxiety Regarding the Process of Teaching’ sub-dimension consisted of 11 items and scores between 11-50 could be obtained. ‘Anxiety Regarding the Field Knowledge’ sub-dimension consisted of 6 items and scores between 6-30 could be obtained; ‘Anxiety Regarding Self-Efficacy’ sub-dimension consisted of 6 items and scores between 6-30 could be obtained. A total of scores 23-115 can be obtained from overall scale. Internal consistency coefficient for this scale is .89; in this research it is found as .88.

Data Analysis

The statistical analyses of the collected data for the problems sought within the scope of general aim of the study were carried out using SPSS 16.0. The results of the Kolmogorov-Smirnov normality test, in which distributions of data at each dependent variable level were normalized before the analysis, were examined. However, since the data distributions were less than 30, it was decided to use nonparametric tests. In the analysis of the data; Mann-Whitney U Test and Kruskal Wallis Test were used.

FINDINGS

This section contains the findings of the research. Findings of the first subproblem are given in Table 2.
Table 2: Mean scores of teachers’ mathematics teaching anxiety

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>Mean</th>
<th>Std.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety Regarding the Process of Teaching</td>
<td>66</td>
<td>2.41</td>
<td>.90</td>
</tr>
<tr>
<td>Anxiety Regarding the Field Knowledge</td>
<td>66</td>
<td>1.07</td>
<td>.17</td>
</tr>
<tr>
<td>Anxiety Regarding Self-Efficacy</td>
<td>66</td>
<td>1.22</td>
<td>.26</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>1.75</td>
<td>.46</td>
</tr>
</tbody>
</table>

To determine the level of classroom teachers according to the scores they receive from the scales, the range width of the scale was calculated by using the formula "sequence width / number of groups to be made" (4/5 = 0.80) (Tekin, 1993). Arithmetic mean ranges of scales was determined as: 1.00-1.79 ‘Very low’, 1.80-2.59 ‘Low’, 2.60-3.39 ‘Medium’, 3.40-4.19 ‘High’, 4.20-5.00 ‘Very high’. Based on this, as seen in Table 2, the teachers received low scores in ‘Anxiety Regarding the Process of Teaching’ dimension; and very low scores in ‘Anxiety Regarding the Field Knowledge’ and ‘Anxiety Regarding Self-Efficacy’ dimensions. When we look at the overall scale scores of teachers, it can be said that classroom teachers’ mathematics teaching anxiety are very low.

Table 3: “Mathematics Teaching Anxiety Scale” Score Difference in terms of Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARFK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>32.79</td>
<td>1541.00</td>
<td>413.00</td>
<td>-.475</td>
<td>.635</td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>35.26</td>
<td>670.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARPT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>31.36</td>
<td>1474.00</td>
<td>346.00</td>
<td>-1.994</td>
<td>.046</td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>38.79</td>
<td>737.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARSE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>33.15</td>
<td>1558.00</td>
<td>430.00</td>
<td>-.245</td>
<td>.806</td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>34.37</td>
<td>653.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>32.41</td>
<td>1523.50</td>
<td>395.50</td>
<td>-.723</td>
<td>.470</td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>36.18</td>
<td>687.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mann Whitney-U Test was performed to determine the significant difference between the rankings of “Mathematics Teaching Anxiety Scale” subscales of the sample and the scale averages of the scale total scores according to the ‘Gender’ variable as given in Table 3. As a result of analysis; the difference between the gender of the sample in the dimensions of “Mathematics Teaching Anxiety Scale” and ‘Anxiety Regarding the Process of Teaching (ARPT)’ (z = -1.994, p<.05) is significant. Female classroom teachers’ anxiety about teaching are lower than those of male teachers. There is no statistically significant difference detected in the sub-dimensions of ‘Anxiety Regarding the Field Knowledge (ARFK)’ (z=-.475, p>.05), ‘Anxiety Regarding Self-Efficacy (ARSE)(z=-.245, p>.05) and the overall scores of the scale (z=-.723, p>.05).
Table 4: Differences in teachers’ scores in “Mathematics Teaching Anxiety Scale” in terms of the answers given to the question of “Did you choose this profession willingly?”

<table>
<thead>
<tr>
<th>Ans.</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARFK</td>
<td>Yes</td>
<td>62</td>
<td>33.62</td>
<td>2084.50</td>
<td>116.500</td>
<td>-.202</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>31.62</td>
<td>126.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARPT</td>
<td>Yes</td>
<td>62</td>
<td>33.48</td>
<td>2075.50</td>
<td>122.500</td>
<td>-.056</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>33.88</td>
<td>135.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARSE</td>
<td>Yes</td>
<td>62</td>
<td>33.52</td>
<td>2078.00</td>
<td>123.000</td>
<td>-.028</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>33.25</td>
<td>133.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Yes</td>
<td>62</td>
<td>33.64</td>
<td>2085.50</td>
<td>115.500</td>
<td>-.229</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>31.38</td>
<td>125.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 4, the Mann Whitney-U Test was conducted to determine the significant difference between the rankings average according to the answers given in the question "Did you choose this profession willingly and the sub-dimension scores of “Mathematics Teaching Anxiety Scale”.

As a result of analysis, based on whether they choose their profession willingly or not, no statistically significant difference was detected for the average scores in the dimensions of “Mathematics Teaching Anxiety Scale” as ‘Anxiety Regarding the Field Knowledge (ARFK) (z= -.202, p > .05), ‘Anxiety Regarding the Process of Teaching (ARPT), (z= -.056, p > .05), ‘Anxiety Regarding Self-Efficacy (ARSE) (z= -.028, p > .05) and overall score of the scale (z= -.229, p > .05). When we assessed the obtained scores, the teachers who chose their profession willingly have higher mathematics teaching anxiety compared to the ones who did not.

Table 5: Differences in teachers’ scores in “Mathematics Teaching Anxiety Scale” in terms of the answers given to the question of “Do you like teaching mathematics?”

<table>
<thead>
<tr>
<th>Ans.</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARFK</td>
<td>Yes</td>
<td>36</td>
<td>32.97</td>
<td>1187.00</td>
<td>521.000</td>
<td>-.245</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>34.13</td>
<td>1024.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARPT</td>
<td>Yes</td>
<td>36</td>
<td>34.86</td>
<td>1255.00</td>
<td>491.000</td>
<td>-.884</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>31.87</td>
<td>956.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARSE</td>
<td>Yes</td>
<td>36</td>
<td>33.56</td>
<td>1208.00</td>
<td>538.000</td>
<td>-.027</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>33.43</td>
<td>1003.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Yes</td>
<td>36</td>
<td>33.36</td>
<td>1201.00</td>
<td>535.000</td>
<td>-.064</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>33.67</td>
<td>1010.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Mann Whitney-U Test was conducted to determine the significant difference between the rankings average according to the answers given in the question “Do you like teaching mathematics?” and the sub-dimension scores and overall scores of “Mathematics Teaching Anxiety Scale”. As a result of analysis, based on whether they like teaching mathematics not, no statistically significant
difference was detected for the averages scores in the dimensions of “Mathematics Teaching Anxiety Scale” as ‘Anxiety Regarding the Field Knowledge (ARFK)’ (z=-.245, p>.05), ‘Anxiety Regarding the Process of Teaching (ARPT)’ (z=-.884, p>.05), ‘Anxiety Regarding Self-Efficacy (ARSE)’ (z=-.027, p>.05) and overall score of the scale (z=-.064, p>.05).

As a result of the Kruskal Wallis Test to determine whether the arithmetic mean of “Mathematics Teaching Anxiety Scale” is significantly different in terms of the seniority variable, no statistically significant difference was detected in the means scores of seniority groups in the sub-dimensions of ‘Anxiety Regarding the Field Knowledge’ (x²=5.452, p>.05) ,‘Anxiety Regarding the Process of Teaching’(x²=1.305, p>.05), ‘Anxiety Regarding Self-Efficacy (ARSE)’ (x²=5.722, p>.05) and overall score of the scale (x²=5.576, p>.05) (Table 6).

Table 6: The result of Classroom Teachers’ score difference in “Mathematics Teaching Anxiety Scale” in terms of seniority variable

<table>
<thead>
<tr>
<th>Score</th>
<th>Year of teaching</th>
<th>N</th>
<th>Mean Rank</th>
<th>Kaykare</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARFK</td>
<td>1-10 Years</td>
<td>7</td>
<td>44.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11-20 Years</td>
<td>9</td>
<td>34.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21-30 Years</td>
<td>31</td>
<td>35.24</td>
<td>5.452</td>
<td>.142</td>
</tr>
<tr>
<td></td>
<td>Over 30 years</td>
<td>19</td>
<td>26.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toplam</td>
<td>66</td>
<td>35.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARPT</td>
<td>1-10 Years</td>
<td>7</td>
<td>34.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11-20 Years</td>
<td>9</td>
<td>31.53</td>
<td>1.305</td>
<td>.728</td>
</tr>
<tr>
<td></td>
<td>21-30 Years</td>
<td>31</td>
<td>35.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 30 years</td>
<td>19</td>
<td>46.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toplam</td>
<td>66</td>
<td>39.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARSE</td>
<td>1-10 Years</td>
<td>7</td>
<td>31.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11-20 Years</td>
<td>9</td>
<td>29.13</td>
<td>5.722</td>
<td>.126</td>
</tr>
<tr>
<td></td>
<td>21-30 Years</td>
<td>31</td>
<td>45.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 30 years</td>
<td>19</td>
<td>35.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toplam</td>
<td>66</td>
<td>34.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1-10 Years</td>
<td>7</td>
<td>26.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11-20 Years</td>
<td>9</td>
<td>44.86</td>
<td>5.576</td>
<td>.134</td>
</tr>
<tr>
<td></td>
<td>21-30 Years</td>
<td>31</td>
<td>34.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 30 years</td>
<td>19</td>
<td>35.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toplam</td>
<td>66</td>
<td>26.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DISCUSSION and CONCLUSION**

The classroom teachers received low scores in ‘Anxiety Regarding the Process of Teaching’ dimension; and very low scores in ‘Anxiety Regarding the Field Knowledge’ and ‘Anxiety Regarding Self-Efficacy’ dimensions. Also, they
received low scores when we considered the overall scale scores. Accordingly, it can be said that mathematics teaching anxiety of the classroom teachers in this research is very low. The fact that the teacher candidates have lower mathematics teaching anxiety may suggest that they will not have difficulty in teaching mathematics. In many studies, it has been found that teacher candidates' mathematics teaching anxiety are low (Bekdemir, 2007; Elmas, 2010; Hacıömeroğlu; 2014; Peker, 2008; Tatar, Zengin and Kağızmanlı, 2016).

When the teaching mathematics anxiety was examined according to gender of class teachers; it was found that female teachers had lower anxiety about the teaching process than male teachers. One of the possible explanation for this result is in Turkey women prefer teaching as a profession more than males. This may lead low mathematics teaching anxiety in female teachers. In other dimensions and in overall score of the scale, gender was found not to make any difference in mathematics teaching anxiety. In the same way, there are many studies showing that female and male teacher candidates’ mathematics teaching anxiety levels do not differ (Altundal, 2013; Ameen, Guffey & Jackson, 2002; Demir et al. 2016; Marso & Pigge, 1998; Peker, Halat & Mirasyedioğlu, 2010; Tatar, Zengin and Kağızmanlı, 2016).

There was no significant difference in the answers to the question “Did you choose this profession willingly?”. When we look at the scores; interestingly the teachers who chose their profession willingly have higher mathematics teaching anxiety compared to the ones who did not. There was no significant difference in the answers to the question ‘Do you like teaching mathematics? ’However, when we look at the total scores of the scale; anxiety scores of teachers who like mathematics teaching are less than mathematics teachers who do not like. The final result of the research is that the difference in the mathematics teaching anxiety of the classroom teachers with respect to their seniority is not significant. The following suggestions were made based on the findings of the research:

- It should be ensured that teacher candidates acquire enough content knowledge and pedagogical content knowledge in the university years.
- To reduce classroom teachers’ mathematics teaching anxiety, environments that will enable classroom teachers to cooperate with mathematics teachers should be established, and in-service training seminars should be provided to get help in this issue.

Acknowledgement
This research is an extension of the report presented at the 16th International Primary Teacher Education Symposium (USOS 2017).

REFERENCES


Hoşşirin, E. S. (2010). The Pre-service Primary School Teachers’ mathematics


Chapter 10

Investigating the Relationship between the Teacher-Child Relationship and Academic Self-Esteem as well as Social Adaptation to School of 48-60 Months Preschool Children

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INTRODUCTION

As communication has become continuous the social connection, social relationship, or affection occurred at least between two people are defined as interpersonal relationships (Siyez, 2015, p. 68). Interpersonal relationships include all of the effect and reactions among people. A person cannot live alone. In other words, a person is born in the society and interacts with the people forming the society. Continuously, a person both affects others and is affected by others either positively or negatively (Baymur, 1990). Humans whose biological development continues starting with fertilization lead their life after birth in a social environment, and the relationships with all of the living beings and non-living things affect the psychological side of a human (Ayvalı, 2012).

School and teacher are the basic elements of education life (Yavuzer, 2012, p.160). In order for a successful education, a love-based confidence relationship between child and teacher who is the person that the child spends most of his/her time with, along with the parents, must be formed (Aktan-Kerem, 2007). The person with whom the children spend most of their time other than their family is the teacher in the school. Today, especially due to the workload of the family some teachers spend more time with the children than their parents (Kıldan, 2011). The relationship with the teacher is an important factor in decreasing the school problems (Pianta, Nimetz, and Bennett, 1997). The teacher is another adult that plays an important role in the experiences of a child other than the family. The child is together with the teacher for most part of the day. The child plays games, sings songs, draws, and eats with the teacher. The child shares his/her happiness and sadness that is important for him/her with the teacher (Koçyiğit, 2011, p. 192). The most intense relationship in the classroom is between the teacher and student. The quality of this relationship leads to positive results regarding classroom management and learning. The quality of the relationship established with the teacher has positive influences on children’s adaptation to the school. The quality of the teacher-student relationship in the early childhood period is effective in the upcoming years on many different situations such as the academic success of the child, social skills, interpersonal relationships (Baker, 2006; Demirkaya, 2013;
Children experience the first attachment relationship with their preschool teachers except for their relatives. For a child who has separated from his/her family; school and the teacher are mysterious phenomena. Until starting the school, the child only has the rumors about the teacher and school. However, upon starting the school the first teacher-child relationship in which many communication and relation experiences in terms of academic and social aspects will be gained (Kıldan, 2011). For a child, the teacher is like an extension of parents. At the beginning, the child behaves the teacher as though she was his/her mother (Bilgin-Aydın, 2004, p. 56). S/he compares his/her parents to the teacher regarding their approach to him/her (Ataç, 1991, p. 164).

Since preschool teachers are the first teachers that the children meet, the relationship of preschool teacher with the children is quite valuable because of establishing the first attachment relationships with them apart from their parents (Kıldan, 2011). A secure child-teacher attachment undertakes a balancing role in the insecure child-mother attachment. However, the healthy attachment established between the child and teacher must be assuring, answering, warm, and consistent as in mother-child attachment relationship (Tok, 2011).

The preschool period refers to a relationship that will affect the whole life of an individual in terms of the first introduction to the school, while the teacher-child relationships in the primary school and high school affects the life of an individual regarding the identity achievement (Kıldan, 2011). In this period, the child-teacher relationship and the quality of this relationship are quite important. The quality of the child-teacher relationship has positive influences in all developmental areas especially the social-affective development of a child. The quality of the relationship between the child and the teacher is a supportive element for the children’s self-perceptions, the style of regulating their relationships, and their communications with their peers (Tok, 2011).

The teacher’s building good and harmonious relationships with students are activities towards knowing them, knowing their needs and helping them meet those needs, motivating them, rewarding and praising, facilitation, supporting, valuing, giving them responsibility, making them feel useful, listening them with interest, informing, directing them towards their areas of interest, being reliable, and providing them with a chance to contribute to decision-making processes (Başar, 2011, p. 68). The child-teacher relationships have positive influences on the child regarding his/her development. The preschool education institution has a separate place in the child’s life regarding the teacher and peers. When the children develop positive relationships with their teachers, they may have emotional satisfaction, they may take the behaviors of the teacher with a more intensive attention, and they may give more importance to being loved by their teachers. As a result of the reflections of this positive, warm, and close teacher-child relationship the children may reflect the behaviors of the teacher, who is a role model for them, in their peer relations, and they may be careful to become agreeable in their peer group since they attach importance to their teachers (Baker, 2006; Gülay-Ögelman, Körükçü and Ersan, 2015). The close relationships that a child experiences with the teacher
decrease the social anxiety, enables the child to love the school, and increase the level of adaptation to the school and the academic success (Birch and Ladd, 1997; Buyse, Verschueren and Van Damme 2009; Durmuşoğlu-Saltalı, 2013).

While it is considered that the positive relationships that a child establishes with the teacher have positive effects in the life of a child, in the current study, the effect of the teacher-child relationships on academic self-respect and the adaptation to the school will be investigated. The main purpose of this study is to investigate the teacher-child relationships of children aged 48-60 months who are attending a preschool education institution and the relationship between their academic self-respects and their social adaptation. With this purpose in mind answers for the following questions will be sought:

1) Is there a statistically significant difference in the scores collected by means of Teacher-Child Relationships Scale regarding the teachers’:
   - Age
   - Gender
   - Background education
   - Teaching experience
   - The residential area where the institution is situated
   - Contract status
   - Classroom population

2) Is there any correlation between the scores revealed through the Teacher-Child Relationships Scale, Academic Self-Respect Scale, and the School-Social Behaviors Scale?

**METHODOLOGY**

The current study is designed as a descriptive study. The population of the study was composed of the children who were attending their preschool educations in Doğubeyazıt district of Ağrı, in the 2014-2015 academic year and their teachers. At least 264 informants were determined by means of simple random sampling, and 272 children were reached. In the collection of the data Teacher Background Information Form, Teacher-Child Relationships Scale, Academic Self-Respect Scale, and the School-Social Behaviors Scale were administered to the teachers.

The Cronbach Alpha coefficient of the Teacher-Child Relationships Scale which was adapted to Turkish by Kıldan (2008) was found as .90, the Spearman-Brown Split Half Test Correlation was found as .86, the item-total correlations were found between .35 and .69, and the factor loadings were found as between .42 and .75. In the internal consistency reliability analysis of the Academic Self-Respect Scale which was adapted to Turkish by Cevher (2004) the Cronbach Alpha correlation was found as .9565. Since a split half test reliability was conducted for reliability the reliability coefficient for the first half was found as .90, and for the second half it was found as .93, the Spearman-Brown coefficient between the two halves was found as .86 and the Guttman Split-Half reliability coefficient was found as .92. In the adaptation study by Yukay-Yüksel (2009) the School Social Behavior Scale developed by Kenneth W. Merrell in 1993 was found as having a strong
reliability. At the end of the item-total, and item remainder analysis, the correlation coefficients of the “Social Proficiency” was found as ranging between $r=.88$ and $r=.44$, as for “the Negative Social Behaviors Scale” the correlation coefficients were found ranging between $r=.92$, and $r=.48$. The internal consistency of the scale was separately calculated for the two scales and each of their sub-dimensions. The results were found as significant with a $p<.001$ level. The Cronbach α, Spearman-Brown, and Guttman Split-Half reliability coefficients obtained from the sub-scales were ranged between $r=.98$ and $r=.91$.

The data obtained in this study were analyzed through SPSS 20 package program. Since the variables were not normally distributed in the groups, the data were investigated by means of Mann Whitney U Test and Kruskal Wallis-H Test. Since the unit numbers were larger than 20 the standardized $z$ value was given for Mann-Whitney U Test. When significant differences were found in Kruskal Wallis-H Test, the groups which revealed differences were determined through Post-Hoc Multiple Comparison Test. In the analysis of the relationships between the variables which do not have a normal distribution, the Spearman’s Correlation Coefficient was utilized. The significance level was used as 0.01, 0.05 and a significant relationship was considered when it is $p<0.01$ or $p<0.001$.

**FINDINGS**

**Findings regarding the data obtained from the teacher-child relationships scale**

By means of the scores obtained from the teacher-child relations scale the gender of the teacher, the relationships among educational background of the teacher, teaching experience, the residential area of the institution in which s/he works, the teacher’s contract status, the teacher’s age, and the population of the classroom were investigated. In the analysis of the gender, educational background, teaching experience, the residential area of the school, and the contract status of the individual were analyzed though Mann Whitney U test. On the other hand in the age and classroom population variables, Kruskal Wallis H variables were utilized. The results of the analyses were given in Table 1-7.

There is a statistically significant difference between the scores of teacher-child scale and teachers’ genders ($p<0.01$). The scores of female teachers’ teacher-child relationship scale were significantly lower compared to male teachers.

**Table 1:** The Results of Mann Whitney U Test Regarding the Difference in the Scores Obtained from the Teacher-Child Relationship Scale According to the Teachers’ Gender

<table>
<thead>
<tr>
<th>Teacher’s Gender</th>
<th>The Scores of Teacher-Child Relationships Scale</th>
<th>Mann Whitney U Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
</tr>
<tr>
<td>Male</td>
<td>69</td>
<td>81,2</td>
</tr>
<tr>
<td>Female</td>
<td>203</td>
<td>74,2</td>
</tr>
<tr>
<td>Total</td>
<td>272</td>
<td>76</td>
</tr>
</tbody>
</table>

96
Table 2: The Results of Mann Whitney U Test Regarding the Difference in the Scores Obtained from the Teacher-Child Relationship Scale According to the Teachers’ Background Education

<table>
<thead>
<tr>
<th>Background Education</th>
<th>n</th>
<th>Mean</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
<th>sd</th>
<th>Mean Rank</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Degree</td>
<td>77</td>
<td>68.8</td>
<td>71</td>
<td>36</td>
<td>95</td>
<td>14.4</td>
<td>97.69</td>
<td>26.17</td>
<td>**0.001</td>
</tr>
<tr>
<td>Undergraduate Degree</td>
<td>195</td>
<td>78.9</td>
<td>80</td>
<td>39</td>
<td>95</td>
<td>12</td>
<td>151.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>272</td>
<td>76</td>
<td>78</td>
<td>36</td>
<td>95</td>
<td>13.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<0.01

There is a statistically significant difference between the scores of teacher-child relationships scale and the background education levels of teachers (p<0.01). The teacher-child relationships scale scores of teacher who have an associate’s degree are lower compared to the scores of teachers with an undergraduate level educational background.

Table 3: The Results of Mann Whitney U Test Regarding the Difference in the Scores Obtained from the Teacher-Child Relationship Scale According to Teachers’ Teaching Experience

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>n</th>
<th>Mean</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
<th>sd</th>
<th>Mean Rank</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 Years</td>
<td>252</td>
<td>75.4</td>
<td>77</td>
<td>36</td>
<td>95</td>
<td>13.6</td>
<td>132.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10 Years</td>
<td>20</td>
<td>83.9</td>
<td>85</td>
<td>66</td>
<td>95</td>
<td>8.9</td>
<td>183.48</td>
<td>7.705</td>
<td>0.006</td>
</tr>
<tr>
<td>Total</td>
<td>272</td>
<td>76</td>
<td>78</td>
<td>36</td>
<td>95</td>
<td>13.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05

There is a statistically significant difference between the teaching experiences of teachers according to the scores obtained from the teacher-child relationships scale (p<0.05). The teacher-child relationship scale scores of the teachers who have 1-5 years of teaching experience are significantly lower compared to the teachers who have 6-10 years of teaching experience.

Table 4: The Results of Mann Whitney U Test Regarding the Difference in the Scores Obtained from the Teacher-Child Relationship Scale According to the Residential Area Where the Institution is situated

<table>
<thead>
<tr>
<th>The Residential Area Where the Institution is Situated</th>
<th>n</th>
<th>Mean</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
<th>Sd</th>
<th>Mean Rank</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Center</td>
<td>173</td>
<td>77.1</td>
<td>78</td>
<td>36</td>
<td>95</td>
<td>12.7</td>
<td>142.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>99</td>
<td>74.1</td>
<td>74</td>
<td>45</td>
<td>95</td>
<td>14.6</td>
<td>126.29</td>
<td>1.62</td>
<td>0.105</td>
</tr>
<tr>
<td>Total</td>
<td>272</td>
<td>76</td>
<td>78</td>
<td>36</td>
<td>95</td>
<td>13.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There is a statistically significant difference between the residential area where the institution is situated according to the scores obtained from the teacher-child relationships scale (p>0,05).

**Table 5:** The Results of Mann Whitney U Test Regarding the Difference in the Scores Obtained from the Teacher-Child Relationship Scale According to the Contract Status of Teachers

<table>
<thead>
<tr>
<th>Contract Status</th>
<th>The Scores of Teacher-Child Relationships Scale</th>
<th>Mann Whitney U Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
</tr>
<tr>
<td>Permanent Teachers</td>
<td>164</td>
<td>80,1</td>
</tr>
<tr>
<td>Contract-Based Teachers</td>
<td>108</td>
<td>69,9</td>
</tr>
<tr>
<td>Total</td>
<td>272</td>
<td>76</td>
</tr>
</tbody>
</table>

**p<0,01**

There is a statistically significant difference between the teachers’ contract status according to their scores obtained from the teacher-child relationship scale (p<0,01). The teacher-child relationship scores of contract-based teachers are significantly lower compared to the teachers with permanent status.

**Table 6:** The Results of Kruskal Wallis H Test Regarding the Difference in the Scores Obtained from the Teacher-Child Relationship Scale According to the Teachers’ Ages

<table>
<thead>
<tr>
<th>Teachers’ Age</th>
<th>The Scores of Teacher-Child Relationships Scale</th>
<th>Kruskal Wallis H Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
</tr>
<tr>
<td>20-25</td>
<td>201</td>
<td>74,9</td>
</tr>
<tr>
<td>26-30</td>
<td>59</td>
<td>79,2</td>
</tr>
<tr>
<td>31 and upper</td>
<td>12</td>
<td>79,9</td>
</tr>
<tr>
<td>Total</td>
<td>272</td>
<td>76</td>
</tr>
</tbody>
</table>

There is no statistically significant difference between the teachers’ ages according to the scores obtained from the teacher-child relationship scale (p>0,05).

**Table 7:** The Results of Kruskal Wallis H Test Regarding the Difference in the Scores Obtained from the Teacher-Child Relationship Scale According to the Population of the Classroom

<table>
<thead>
<tr>
<th>Population</th>
<th>The Scores of Teacher-Child Relationships Scale</th>
<th>Kruskal Wallis H Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
</tr>
<tr>
<td>Less than 10 (1)</td>
<td>8</td>
<td>73,3</td>
</tr>
<tr>
<td>10-15 (2)</td>
<td>121</td>
<td>74</td>
</tr>
<tr>
<td>15-20 (3)</td>
<td>105</td>
<td>80,1</td>
</tr>
<tr>
<td>20-25 (4)</td>
<td>38</td>
<td>71,7</td>
</tr>
<tr>
<td>Total</td>
<td>272</td>
<td>76</td>
</tr>
</tbody>
</table>

Paired Comparison: 4-3 2-
**p<0.01**

There is a statistically significant difference between the populations of the classroom according to the scores of teacher-child relationships scale (p<0.01). The teacher-child relationship in classrooms where population is “10-15” and “20-25” children is significantly lower compared to the classrooms with “15-20” children.

**Findings regarding the relationship among the teacher-child relationship, academic self-respect, and social adaptation to the school**

The correlation between the Teacher-Child Relationships Scale, Academic Self-Respect Scale, and School Social Behavior Scale scores was investigated. The results of the analysis were given in Table 8.

**Table 8: The Results of Correlation Test between the Scores of Teacher-Child Relationships Scale and Academic Self-Respect Scale and School Social Behaviors Scale**

<table>
<thead>
<tr>
<th></th>
<th>The Scores of Teacher-Child Relationships Scale</th>
<th>The Scores of Academic Self-Respect Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Scores of Academic Self-Respect Scale</td>
<td>r 0.608**</td>
<td>p 0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n 272</td>
</tr>
<tr>
<td>The Scores of Social-Efficacy in School Sub-Scale</td>
<td>r 0.649**</td>
<td>p 0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n 272</td>
</tr>
<tr>
<td>The Scores of Social-Efficacy in School Sub-Scale</td>
<td>r 0.845**</td>
<td>p 0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n 272</td>
</tr>
<tr>
<td>The Scores of Negative Social Behaviors in School Sub-Scale</td>
<td>r -0.521**</td>
<td>p 0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n 272</td>
</tr>
<tr>
<td>The Scores of Negative Social Behaviors in School Sub-Scale</td>
<td>r -0.442**</td>
<td>p 0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n 272</td>
</tr>
</tbody>
</table>

A statistically significant relationship between the Teacher-child relationships scale and academic self-respect scale was found in the current study. Though it is not a strong relationship it is positive (r=0.608). There is a statistically significant relationship between the scores of teacher-child relationships scale and the Negative Social Behavior in School Sub-Scale of the School Social Behavior Scale; however, this relationship is negative and it is not strong as well (r=-0.521). As the teacher-child relationships scale score increase the scores of academic self-respect and social efficacy in school sub-scale scores increase as well. Conversely, as the scores of teacher-child relationships scale increase the scores of negative social behaviors in school sub-scale decrease. There is a statistically significant relationship between the scores of social efficacy in school sub-scale and the scores of academic self-respect scale, and this relationship is strong and positive (r=0.845). There is a statistically significant relationship between the scores of negative behaviors in school sub-scale and academic self-respect scale, this relationship is negative and not strong (r=0.442). As the scores of academic self-respect scale increase the social efficacy in school sub-scale scores increase as well; nevertheless, the negative behaviors in school sub-scale decrease.
DISCUSSION AND CONCLUSION

The results revealed a significant difference in the teachers’ scores on the teacher-child relationships scale according to the teachers’ gender, background education, contract status, and classroom population ($p<.05$).

The female teachers’ scores on the teacher-child relationships scale were significantly lower than the scores of male teachers ($p<.01$). In the Turkish society, the duties and responsibilities regarding childcare and education are generally ascribed to females. Just as mothers are considered an important element and responsible for childcare and education, the teaching profession, particularly preschool education is more associated with females. However, fathers or males as teachers in childcare and education have essential roles. The gender factor has both advantages and disadvantages in the professional life. The differences in self-efficacy perceptions of male and female teachers, their strategies of classroom management and their attitudes towards undesired behaviors may have led the male teachers to establish more positive relationships with their students. Gömlekçi and Serhatoğlu (2013) in their study reported that male preschool teachers’ self-efficacy mean scores are higher than the mean scores of female preschool teachers. In a different study, Fagan (1996) put forward that compared to female teachers, male teachers participate more in moving games, show more tolerance in noisy environments, and are more successful and tolerant in resolving students’ conflicts and coping with aggression (Anlıak, 2004). This situation may have provided an advantage for the male teachers in establishing positive relationships with their students and caused the male teachers’ scores on the teacher-child relationship scale to be significantly higher than the scores of the female teachers.

The teachers with an associate degree had significantly lower scores than the teachers with an undergraduate degree ($p<.01$). This result may stem from the fact that undergraduate education is effective in equipping teachers with competencies regarding the teacher-child relationships. Courses supporting communication and classroom management that the teachers with an undergraduate degree could increase their relationship with their students in their professional life. According to the results put forward by Yüksek-Usta (2014), teachers with an undergraduate degree expressed more positive relationship and closeness compared to teachers with an associate degree.

The teacher-child scale scores of the teachers with 1-5 years of teaching experience were significantly lower than the scores of the teachers with 6-10 years of teaching experience ($p<.05$). Teachers are thought to exhibit more positive attitudes in their relationship with their students as they gain more professional experience. In the first years of their profession, teachers may not have enough experience regarding difficulties encountered in practice and the ways of overcoming these difficulties. Internship in the higher education may have been insufficient in the development of preservice teachers’ behavior management skills. Additionally, teachers develop awareness regarding all of the components of a classroom setting as they gain more professional experience. This situation may have also led the teachers to form a more positive classroom atmosphere. In addition, component teachers from the perspectives of students increase their
respect towards such teachers. This may have also led the more experienced teachers to establish more positive behaviors with their students. Kildan (2011) similarly underlined that the variable of years of experience substantially affects the teacher-child relationship and that teachers establish a more positive relationship with their students as their years of teaching experience increases.

The substitute teachers’ scores on the teacher-child relationship scale were significantly lower than the scores of the regular teachers ($p<.01$). Substitute teachers have a relatively lower income, which, in turn, causes stress and decreases their professional satisfaction. All of the aforementioned points could negatively affect the teachers’ professional performance and their relationship with the students. This result of the study may also stem from the fact that all of the regular teachers within the scope of this study have an undergraduate degree, while 64% of the substitute teachers have an associate degree. The relatively lower percentage of undergraduate degree among the substitute teachers could negatively affect their relationship with the students. Gürkan (1983) mentioned that the staff who will serve as preschool teachers should have at least four years of higher education.

The results of the study failed to reveal a significant difference between the teachers’ scores on the teacher-child relationship scale according to classroom population ($p>.01$). A classroom of 15-20 individuals was found to be optimum according to the results of this study. As the classroom population increases, the individual time a teacher can allocate for each child decreases. Therefore, their teacher-child relationship scores also decrease. The classroom population may not influence the quality of the relationships until it reaches a particular number. Compared to the classrooms with less than 15 individuals, children can experience more peer relationship, collaboration, and group studies in classrooms of 15-20 individuals. Accordingly, children’s higher level of social skills may have positively influenced the teacher-child relationship in a positive way. Demirkaya (2013) reported a negative relationship between the dependency scores of the teacher-child relationship scale and the variable of classroom population. This result contradicts with the relevant result of the current study. This difference may stem from the fact that Demirkaya (2013) conducted his study in inclusionary classrooms. The increase in the classroom population can have more negative effects in classrooms containing inclusive students.

No significant difference was found between the teachers’ scores on the teacher-child relationship scale according to gender ($p>.50$). This result implied that rather than age, the experience gained and the education received are effective for teachers to establish positive relationships with their students. Similarly, Emrem (2008) and Kildan (2010) highlighted no significant relationship between teachers’ age and their communication and interactions with children.

There was a significantly positive relationship between the teachers’ scores on the teacher-child relationships scale and the academic self-respect scale ($r=0.608$). Students with close relationships with their teachers receive interest, appreciation, and closeness of their teachers and this gives them the feeling of being a competent individual. Therefore, the academic self-respect of such children is higher. In addition, students with a high academic self-respect level may have higher levels of
motivation in learning and be more positive towards education. Their positive attitudes towards education may have strengthened their relationships with their teachers. Piyancı (2007), Göktaş (2008), and Gökmen (2009) reported positive relationships between academic self-respect level and achievement. Children with a high level of academic self-respect level have positive relationships with their teachers. Since children with a high academic self-respect level are more successful, teachers may exhibit more positive relationships towards such children.

There was a positive significant relationship between the teachers’ scores on the teacher-child relationships scale and the sub-dimension of social competence in school (r=0.649), while a significant relationship was found between the teachers’ scores on the sub-dimension of the negative behaviors in school and the teacher-child relationships scale (r= -0.521). Students with a more positive relationship with their teachers have higher scores of social competencies in school and less negative social behavior scores. It can be said that students with a more positive relationship with their teachers have a higher level of social adaptation in schools. The positive relationship with the teacher may have caused the students to more easily adapt their teachers’ values and the rules set up. Children with positive relationships with their teachers are more likely to tend to display that they adapt the rules encountered in schools. This situation may have led them to display more positive behaviors and prevented negative social behaviors. The children’s high level of social adaptation in schools may have also led their teachers to display more positive attitudes towards such children and to establish more positive relationships with them. Blankemeyer et al. (2002) in their study underlined a positive relationship between both female and male students’ relationship with their teachers and their adaptation to school. Tatlı (2014) revealed that children’s social skill level increases as the relationship between the teacher and child increases. Demirkaya (2013) reported that the closeness of the relationship with the teacher increases as students’ scores of social interaction and social acceptance, and their independence scores increase (as their social skills increase). Based on the results of Demirkaya (2013), a positive relationship was found between problematic behaviors and conflicting student-teacher relationships and the problematic behaviors are a powerful predictor of the conflicting student-teacher relationship. Runions, Vitaro, Cross, and Boivin (2014) similarly detected that the aggressive behaviors of kindergarten children are related to the conflicting teacher-student relationship. Gülay-Ogelman et al. (2015) found in their studies that the social behaviors of children with the ages of 5-6 to help others significantly increase, as preschool teachers’ level of closeness with that group increases, and that the social behaviors of these children decrease, as the level of conflict between the teacher-child increases.

There is a statistically significant relationship between the scores of social efficacy in school sub-scale and academic self-respect scale scores (r=0.845). As the scores of social efficacy in school sub-scales increase the scores of academic self-respect increase as well. There is a statistically significant relationship between the subscales of negative behaviors in school subscale and academic self-respect scale scores (r=-0.442). The children with high academic self-respect may have a
higher level of social efficacy in school and less negative social behaviors. In other words, the children with high academic self-respect have high adaptation to the school as well. The children with lower academic self-respect perceive themselves as insufficient in learning. The feeling of inadequacy may have led the children to be reluctant in performing social behaviors such as undertaking responsibilities in a group, cooperating, and helping in school. Considering themselves as inadequate in terms of learning may lead to sadness and stress. These feelings may lead them to reveal the negative social behaviors such as being bad temper, aggressiveness, a burst of anger in school. At the same time, having a high level of social adaptation to the school may lead the children to perceive themselves as a part of the group, and therefore undertake more active roles in activities. Taking an active role in activities will increase their level of learning, so it may have increased their academic self-respect levels. The results obtained in Ayvalı’s (2012) study revealed that as self-respect increase the level of social adaptation increase as well, and as it decreases the level of social adaptation also decrease. Gizir and Baran (2003) found out that there is a positive relationship between the dimensions belonged to identity and the dimension belonged to social behaviors. The findings of Ayvalı (2012) and Gizir and Baran (2003) support the results of the present study. Additionally, in the experimental study conducted by Uysal and Kaya-Balkan (2015) found out that the social skills overall scores and the identity concept scores of children who received social skills training were increased. In the follow-up studies after the completion of the training, it was observed that the children preserved the social skills and identity concept levels that they gained. In this study, the relationship between the identity concept and social behaviors were revealed in the present study.

The quality of teacher-child relations influences the academic self-respects of children and the social behaviors that they show in the school. In order to increase the children’s academic self-respects and the social behaviors that they show in the school, as well as in order to decrease the negative behaviors that they show in the school; a more qualified teacher-child relationship is required. To achieve this course on communication and classroom management can be increased in the undergraduate education, and teacher-child relationships seminars can be organized for teachers. The prospective teachers can be provided more opportunities for teaching practice during their undergraduate education and their quality can be improved in this way. The associate level education is not sufficient to provide the occupational and field proficiency of teachers. The preschool education institutions must be enabled to employ the teachers with a Bachelor’s degree education. The population of the classroom where preschool education is conducted should not exceed 20 children in order for a more qualified teacher-child relationship. This study investigated the effect of teacher-child relationship on social adaptation in the school environment and only the academic dimension of identity. The effects of teacher-child relationships on the students’ life out of the school and learning concept can be investigated as well.


Chapter 11

A Study of Problem Solving Skills of Children Attending Preschool and Parental Attitudes

Emel OKUR METWALLY¹ and Aysel KÖKSAL AKYOL²

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²Prof. Dr.; Ankara University, Faculty of Health Sciences, Department of Child Development, Ankara, Turkey.

INTRODUCTION

When a person tries to reach a certain goal, he/she overcomes obstacles by using problem solving skills (Bingham, 1983). Problem solving can be defined as the interaction of person and environment that is emerging from balance between goals at present and problem solving skills of the person. Effective problem solving is the ability to respond to a problem situation appropriately and flexibly despite internal and external factors (Nezu et al., 2013). Childhood is a time period that many changes happen in a limited time. At this time child faces big problems for himself/herself. It is important to support children during their developmental period and provide opportunities and environments to let them solve problems they are experiencing. To provide an effective educational environment for the child and to enable him/her to solve the problems that are appropriate for his/her developmental stage allows child to become more independent and responsible. Supporting the problem solving skills of children in the process from birth to preschool age is important in terms of adaptation to daily life. With problems children get a chance to discover their own style. Children first learn the methods of coping with the problems that they meet from their family. Growing up in a positive family environment allows them to develop effective problem solving skills (Aşkınl, 2006; Kesicioğlu, 2015; Zembat & Unutkan, 2005).

It is important for the healthy development of the children to have an educational and family environment with rich stimuli in their surroundings, especially in early childhood that they grow rapidly (MEB, 2013). The right parental attitudes of parents help the child to confront the problem and find solutions when they meet the problem situations. It is possible for the child to cope with negative environmental conditions and to continue to develop without being affected by these negative circumstances when the relationship between child and parents is based on trust, acceptance, consistency and love. When parents display healthy parental attitudes and gives opportunities to the child it helps the child to be peace with the environment and to be successful in social relations (Erkan, 2010; Kandır & Alpan, 2008).

Attitudes of parents towards their children are; Baumrind’s democratic, authoritarian and permissive parental attitudes and Levy’s overprotective parental
attitude. Democratic parents are loving and sensitive to their children. They allow their children to participate in family decisions and also they expect their children to behave mature and obey the rules. They control their children but they don’t limit them. They are open to dialogue, hear objections and explain the causes of rules. These parents support their children’s independence. They have standards in their future expectations about their children as well as they accept the characteristics of their children (Baumrind, 1966). Parental tolerance of a sufficient level helps the child to be self-confident, creative, and useful to the society (Yavuzer, 2007). It has been determined that children whose parents have democratic attitudes have developed positive personality traits (Kuzgun, 1991). Parents with authoritarian attitudes expect their children to obey them and follow the rules. They want their children to accept their rules even there is confliction. They do not exchange ideas with their children, they do not allow their children to question the facts, and they believe that every word they say must be accepted as a truth by their children (Baumrind, 1966). As a result of authoritarian education, children can’t express their emotions and thoughts, they tend to have insecure, anxious and introverted personalities. Also children tend to obey the rules when there is authority and they tend not to obey the rules when there is no authority. While these children obey the stronger ones than themselves, they try to crush the weak ones (Kuzgun, 1991).

Permissive parents don’t control their children at all. The level of parental acceptance in this attitude can sometimes be defined by neglect. Such parents do not control their children in everyday life, they have very little expectation from their children. Such parents allow their children to eat, sleep, watch television and go out whenever they want (Baumrind, 1966). Children who grow up with permissive attitudes believe that every wish they have will be fulfilled and they want the rights that are not given to them (Yavuzer, 2007). Parents who have overprotective attitudes prevent their children from learning by doing and living, and becoming self-confident. Children who grow up with this attitude may become undecided, overly dependent on others, sensitive and insecure (Işık Taner, 2011, Karabulut Demir & Şendil, 2008).

In their studies Özyürek (2015), Querido et al. (2002), Kesicioğlu (2015), Altay & Güre (2012) determined that; parents' democratic attitudes have generally positive effects on children's skills. Begde (2015) and Korkut (2002) found that there is no significant relationship between problem solving skills of preschool children and parental attitudes. In their study Ari & Seçer (2003) concluded that overprotective attitudes cause children to have decrease on psychosocial based problem solving skills; increase on democratic attitudes and decrease on authoritarian attitudes cause children to have higher level psychosocial problem solving skills. Kesicioğlu (2015) determined that children who have democratic parents have better problem solving skills than the children who have authoritarian, permissive and overprotective parents. When the studies are evaluated, it is seen that there is a significant relationship between problem solving skills and parental attitudes. It is seen that democratic attitude is the healthiest one among the parental attitudes and it affects the problem solving skills of the children positively.

In this research, it is aimed to determine whether the gender of the children has
an effect on problem solving skills of the children and parental attitudes, whether there is a relationship between problem solving skills and parental attitudes and whether there is a relationship between mothers’ parental attitudes and fathers’ parental attitudes. Also it is aimed in this study to support the studies on this subject with the findings and suggestions obtained.

MATERIALS AND METHODS

This study was conducted to determine the problem solving skills of children attending kindergarten and its relation with their parent’s attitudes.

Model of the Study

This was designed as a descriptive study in a survey model aiming to reveal attitudes of parents with children who attended kindergartens in the city center of Çorum in Turkey. Descriptive studies are objective researches in which it is tried to describe an existing situation as it is and to identify the individuals in the study within the existing conditions. Researchers summarize the characteristics of individuals, groups or physical environments in such studies (Büyüköztürk et al., 2002; Karasar, 2008).

Sample Group of the Study

Normally developed 110 girls and 118 boys, a total of 228 children, who are being educated at preschools in primary schools attached to the Çorum Provincial Directorate of National Education during the 2015-2016 academic year, and their parents create the sample of the research. Children whose parents live together and their parents were included in the study group voluntarily.

Data Collection Tools

In this research, the "General Information Form" was prepared by the researchers in order to obtain demographic information about the children and their parents, "Problem Solving Skills Scale for Children" (PSSS) as developed by Oğuz & Köksal Akyol (2015) was used to determine the problem solving skills of children and "Parents Attitude Scale (PAS)" as developed by Karabulut Demir & Şendil (2008) was used to determine parental attitudes.

General Information Form

In the General Information Form, developed by the researchers to obtain information about the children and their family, there are questions about the child’s gender, birth order, number of siblings, duration of preschool education, age of the parents, educational level of the parents, and working status of the parents.

Problem Solving Skills Scale (PSSS)

In this study, Problem Solving Skills Scale that was created by Oğuz & Köksal Akyol (2015) was used. The scale has 18 items, each item scored between “0” and “4”; the lowest score of "0" and the highest score of "72". The higher points mean higher scores of problem solving skills. PSSS includes eighteen problem situations and eighteen drawings relevant to these problem situations. The PSSS was measured on a five-point Likert-type scale. The validity of the scale was tested by means of the content-validity index and exploratory factor analysis. The reliability
of the scale was tested through Cronbach’s alpha internal consistency coefficient and test-retest reliability coefficient. The indexes were calculated for two aspects: The appropriateness of the items and the appropriateness of the drawings. Finally, the content-validity indexes for the two aspects were 0.99 and 0.96 respectively. The exploratory factor analysis concluded that the PSSS had a one-factor structure, which accounted for 30.68% of the total variance. Cronbach’s Alpha Internal Consistency Coefficient was $\alpha=.86$. The Correlation Coefficient was .60, which was significant and intermediate. The mean scores in the first and second administrations of the PSSS did not differ significantly. The validity and reliability analyses demonstrated that the PSSS is an appropriate instrument for children aged 60 to 72 months. The Scale is applied by the researcher. The researcher interacts with the child in an appropriate place provided by the school and shows pictures of the problem situations to the child and records the answers given by the child to the problem situations in these pictures. The child's scores on the Problem Solving Skills Scale are evaluated by considering the number of solutions the child produces for each problem. For example a problem situation of “This kid could not unbutton his shirt” determined by considering the number of solutions produced by the child. The total score the child gets from the scale is obtained by summing the points he/she has received from each item. In this way, it is tried to determine the problem solving skills of the child (Oğuz & Kőksal Akyol, 2015). In this study, it was determined that the lowest score of the “Problem Solving Skills Scale was “11” and the highest score was “54”.

**Parents Attitude Scale (PAS)**

The Parents Attitude Scale (PAS) was used in this study. This scale was developed by Karabulut Demir & Sendil (2008) in order to determine the parental attitudes the parents display while raising their 2-6 year-old children. The Parents Attitude Scale (PAS) consists of four subscales namely, “democratic”, “authoritative”, “overprotective” and “permissive”. The first subscale is named as democratic attitude since it expresses accepting the child’s independence, encouraging the child to express his/her own ideas and his/her personality development; the second subscale is named as the authoritarian attitude since it contains subjects like rejecting that the child is a separate individual, on the contrary adopting that the parent are the owner of the child, one-way communication, pressure, unconditional obedience to the rules, verbal and physical punishment; the third subscale is named as the overprotective attitude since it expresses the belief that the child is not self-sufficient, so he/she needs to be followed and protected continuously, inappropriate interventions, excessive control and avoidance of giving responsibility to the child and the fourth subscale is named as permissive attitude since it contains the behaviors like welcoming every attitude of the child, providing freedom more than necessary and over-pampering the child. The prepared scale is in the Likert style and the items are in the behavior pattern and there are 5 options, which differ according to the frequency rates, to be chosen by the respondents against each behavior pattern. One of these options is marked for each item. “He/she is always like this” is 5 points; “he/she is mostly like this” is
4 points; “he/she is sometimes like this” is 3 points; “he/she is rarely like this” is 2 points, and “he/she is never like this” is 1 point. Thus, the responding parents are provided to express how often they do the mentioned behavior. In the scale consisting of 62 items, 17 of them belong to democratic attitude, 11 belong to authoritarian attitude, 9 belong to permissive attitude, and 9 belong to overprotective attitude. It is determined that while the lowest score to be obtained from the democratic attitude subscale of the scale is “17”, the highest score is “85”; while the lowest score to be obtained from authoritarian attitude subscale is “11”, the highest score is “55”; while the lowest score to be obtained from permissive attitude subscale is “9”, the highest score is “45”; and while the lowest score to be obtained from the overprotective attitude subscale is “9”, the highest score is “45”. Parents themselves fill the scale. For the reliability study of your scale, 420 mothers and fathers having children between 2-6 years of age and low, middle and high income levels were studied. In order to control the construct validity of the scale, the scale was applied to 56 mothers and fathers together with the Family Life and Child Raising Attitude Scale (FLCRAS) with the original name of Parental Attitude Research Instrument (PARI) measuring the parental attitudes. As a result of Basic Components and Varimax Rotation analysis carried out within the framework of validity studies, 16 items were omitted from the scale and it takes final form with 46 items. As a result of the reliability analysis, Cronbach’s alpha values were determined as 0.83 for "democratic" subscale, 0.76 for "authoritarian" subscale, 0.75 for "overprotective" subscale, and 0.74 for "permissive" subscale. According to the analysis results, Parents Attitude Scale (PAS) is an adequate assessment instrument for measuring the attitudes of parents (Karabulut Demir & Şendil, 2008).

In this study, the general reliability coefficient (Cronbach’s Alpha) calculated for the Parents Attitude Scale scores of the mothers was Alpha=0.675. Similarly, the general reliability coefficient (Cronbach’s Alpha) calculated for the Parents Attitude Scale scores of the fathers was Alpha=0.770. These values mean that the scale is reliable.

Data Analysis

In this study, it was examined whether or not the distribution was normal by examining the kurtosis and skewness values and the distribution was seen to be normal. Values between -1 and +1 indicate that the data show normal distribution. In addition, it is also possible to apply parametric tests if normality condition is not met in large sample data (n>100) (Şencan, 2005). For these reasons, parametric tests were applied in the analyses. Unrelated samples t-test was used in order to investigate the effect of two variable factors on parents’ mean scores for Parental Attitude Scale and one-way ANOVA was used for unrelated samples to examine the effect of factors with two or more variables. The Post Hoc Tukey and Scheffe’s tests were applied for the purpose of determining which groups have the difference in significant results (Büyüköztürk, 2002).

Data Collection

Before starting to the application, necessary permissions were obtained from Çorum Provincial Directorate of National Education. By interviewing with
principals and preschool teachers of 6 primary schools affiliated with Corum Central Provincial Directorate of National Education selected for the study, they were informed about the Problem Solving Skills Scale (PSSS) to be applied to the children, General Information Form and Parents Attitude Scale (PAS) to be applied to the parents.

First, permission was obtained from parents to study with children. Available days and hours determined to apply Problem Solving Skills Scale to children whose parents agreed to join the study. A place that was silent and away from destructions chosen to study with children. Before the study researcher introduced herself and explains the reason she was there. The child who wanted to join the study has taken to the study room. While the researcher spoken with child she introduce herself and ask the child to introduce herself/himself. The Scale was applied as a play and enough time has been given to the child. The Scale applied two times in a week, few hours in a day and everyday about to 15 child. In order to inform the parents in the schools participating in the study, informative meetings were held on parents’ attitudes and voluntary parents filled the General Information Form and Parents Attitude Scale before the meetings. In the schools where the meeting was not held, the times of the children for going to school and leaving the school were interviewed with the parents, the forms were applied to the families, who were voluntary to participate, in a suitable space shown by the school.

RESULTS AND DISCUSSIONS

The results of the present study conducted to determine the effect of gender on the problem solving skills of children and attitudes of parents, relationship between problem solving skills of children and attitudes of parents with children attending kindergarten are presented in tabular form below and discussed using the related literature.

Table 1: T-Test Results on the Scores obtained by the Children from the Problem Solving Scale for Children According to the Gender of Children

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>(\bar{x})</th>
<th>S</th>
<th>Sd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girl</td>
<td>110</td>
<td>29,05</td>
<td>7,670</td>
<td>226</td>
<td>2,079</td>
<td>0,039</td>
</tr>
<tr>
<td>Boy</td>
<td>118</td>
<td>31,31</td>
<td>8,664</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When the Table 1 examined, it was identified that; the average score that girls got from Problem Solving Skills Scale was \(\bar{x}=29,05\); and the average score that boys got from Problem Solving Skills Scale was \(\bar{x}=31,31\). According to the t-test results gender found to be effective on problem solving skills of children and boys had higher level problem solving skills than girls\([t(226)=2,079, \ p<0,05]\).
Table 2: T-Test Results on the Scores obtained by the Parents from the Subscales of the Parents Attitudes Scale According to the Gender of Children

<table>
<thead>
<tr>
<th>Mother’s Attitude Subscales</th>
<th>Gender</th>
<th>N</th>
<th>x̄</th>
<th>S</th>
<th>Sd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democratic</td>
<td>Girl</td>
<td>110</td>
<td>68,28</td>
<td>9,182</td>
<td>226</td>
<td>0,144</td>
<td>0,886</td>
</tr>
<tr>
<td></td>
<td>Boy</td>
<td>118</td>
<td>68,47</td>
<td>10,121</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permissive</td>
<td>Girl</td>
<td>110</td>
<td>21,95</td>
<td>4,700</td>
<td>226</td>
<td>1,361</td>
<td>0,175</td>
</tr>
<tr>
<td></td>
<td>Boy</td>
<td>118</td>
<td>22,83</td>
<td>5,089</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritarian</td>
<td>Girl</td>
<td>110</td>
<td>22,92</td>
<td>6,814</td>
<td>226</td>
<td>0,438</td>
<td>0,662</td>
</tr>
<tr>
<td></td>
<td>Boy</td>
<td>118</td>
<td>22,52</td>
<td>7,012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overprotective</td>
<td>Girl</td>
<td>110</td>
<td>34,06</td>
<td>5,354</td>
<td>226</td>
<td>0,450</td>
<td>0,653</td>
</tr>
<tr>
<td></td>
<td>Boy</td>
<td>118</td>
<td>33,73</td>
<td>5,845</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When Table 2 examined, it was concluded that gender of the children has no effect on mothers’ democratic attitudes \([t(226)= 0,144, \ p>0,05]\), permissive attitudes \([t(226)= 1,361, \ p>0,05]\), authoritarian attitudes \([t(226)= 0,438, \ p>0,05]\) and overprotective attitudes \([t(226)= 0,450, \ p>0,05]\). Also it was determined that gender of the children didn’t have any effect on fathers’ democratic attitudes \([t(226)= 0,663, \ p>0,05]\), permissive attitudes \([t(226)= 0,687, \ p>0,05]\), authoritarian attitudes \([t(226)= 0,663, \ p>0,05]\) and overprotective attitudes \([t(226)= 0,063, \ p>0,05]\).

Table 3: Correlation Coefficient Test Results on the Scores Obtained by the Children from the Problem Solving Skills Scale for Children and by the Mothers from the Subscales of the Parents Attitude Scale

<table>
<thead>
<tr>
<th>Problem Solving Skills of the Children</th>
<th>Mother’s Parental Attitudes</th>
<th>Democratic</th>
<th>Permissive</th>
<th>Authoritarian</th>
<th>Overprotective</th>
</tr>
</thead>
<tbody>
<tr>
<td>r</td>
<td>0,345**</td>
<td>0,108</td>
<td>-0,248**</td>
<td>-0,227**</td>
<td></td>
</tr>
<tr>
<td>p</td>
<td>0,000</td>
<td>0,104</td>
<td>0,000</td>
<td>0,001</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td></td>
</tr>
</tbody>
</table>

According to Table 3, it was determined that there was a positive and medium level relationship between problem solving skills of the children and mothers’ democratic attitudes \((r=0,345, \ p<0,01)\). Based on coefficient of determination \((r^2=0,12)\), it can be concluded that total variation of 12% of problem solving skills
of the children was caused by mothers’ democratic attitudes. It was understood that there was a negative and low level relationship between problem solving skills of the children and mothers’ authoritarian attitudes \((r=-0.248, \ p<0.01)\). When coefficient of determination considered \((r^2=0.06)\), it can be said that total variation of 6% of problem solving skills of the children is caused by mothers’ authoritarian attitudes. A negative and low level relationship determined between problem solving skills of the children and mothers’ overprotective attitudes \((r=-0.227, \ p<0.01)\). According to coefficient of determination \((r^2=0.05)\) total variation of 5% of problem solving skills of the children caused by mothers’ overprotective attitudes. The relationship between problem solving skills of the children and mothers’ permissive attitudes was statistically insignificant \((p>0.05)\).

**Table 4:** Correlation Coefficient Test Results on the Scores Obtained by the Children from the Problem Solving Skills Scale for Children and by the Fathers from the Subscales of the Parents Attitude Scale

<table>
<thead>
<tr>
<th>Problem Solving Skills of the Children</th>
<th>Father’s Parental Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Democratic</td>
</tr>
<tr>
<td>r</td>
<td>0.483**</td>
</tr>
<tr>
<td>p</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>228</td>
</tr>
</tbody>
</table>

**. \ p<0.01,  \ *. \ p<0.05**

According to Table 4, it was determined that there was a positive and medium level relationship between problem solving skills of the children and fathers’ democratic attitudes \((r=0.483, \ p<0.01)\). According to coefficient of determination \((r^2=0.23)\), it can be concluded that total variation of 23% of problem solving skills of the children was caused by fathers’ democratic attitudes. It was observed that there was a positive and low level relationship between problem solving skills of the children and fathers’ permissive attitudes \((r=0.161, \ p<0.05)\). Based on coefficient of determination \((r^2=0.03)\) it was seen that total variation of 3% of problem solving skills of the children was caused by fathers’ permissive attitudes. It was determined that there was a negative and low level relationship between problem solving skills of the children and fathers’ authoritarian attitudes \((r=-0.270, \ p<0.01)\). Based on coefficient of determination \((r^2=0.07)\), it was conceivable that total variation of 7% of problem solving skills of the children was caused by fathers’ authoritarian attitudes. The relationship between problem solving skills of the children and fathers’ overprotective attitudes was statistically insignificant \((p>0.05)\).
Table 5: Correlation Coefficient Test Results on the Scores Obtained by the Mothers and Fathers from the Subscales of the Parents Attitude Scale

<table>
<thead>
<tr>
<th>Mother’s Parental Attitudes</th>
<th>Father’s Parental Attitudes</th>
<th>Democratic</th>
<th>Permissive</th>
<th>Authoritarian</th>
<th>Overprotective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>0.692**</td>
<td>-0.045</td>
<td>-0.541**</td>
<td>0.237**</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.000</td>
<td>0.500</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
</tr>
<tr>
<td>Permissive</td>
<td>r</td>
<td>-0.068</td>
<td>0.495**</td>
<td>0.197**</td>
<td>-0.079</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.305</td>
<td>0.000</td>
<td>0.003</td>
<td>0.237</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
</tr>
<tr>
<td>Authoritarian</td>
<td>r</td>
<td>-0.507**</td>
<td>0.174**</td>
<td>0.681**</td>
<td>-0.112</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.000</td>
<td>0.009</td>
<td>0.000</td>
<td>0.093</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
</tr>
<tr>
<td>Overprotective</td>
<td>r</td>
<td>-0.046</td>
<td>-0.039</td>
<td>0.154*</td>
<td>0.478**</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.492</td>
<td>0.563</td>
<td>0.020</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
</tr>
</tbody>
</table>

**, p<0.01, *, p<0.05

In Table 5 it was determined that there was a positive and medium level relationship between mothers’ and fathers’ democratic attitudes (r=0.692, p<0.01). It was observed that there was a negative and low level relationship between mothers’ democratic attitudes and fathers’ authoritarian attitudes (r=-0.541, p<0.01). It was determined that there was a positive and low level relationship between mothers’ democratic attitudes and fathers’ overprotective attitudes (r=0.237, p<0.01). A positive and medium level relationship determined between mothers’ and fathers’ permissive attitudes (r=0.495, p<0.01). It was observed that there was a positive and low level relationship between mothers’ permissive attitudes and fathers’ authoritarian attitudes (r=0.197, p<0.01). It was concluded that there was a positive and medium level relationship between mothers’ permissive attitudes and fathers’ authoritarian attitudes (r=0.197, p<0.01); negative and medium level relationship between mothers’ authoritarian attitudes and fathers’ democratic attitudes (r=0.507, p<0.01); a positive and low level relationship between mothers’ authoritarian and fathers’ permissive attitudes (r=0.174, p<0.01). It was determined that there was a positive and medium level relationship between mothers’ and fathers’ overprotective attitudes (r=0.478, p<0.01); a positive and low level relationship between mothers’ overprotective attitudes and fathers’ authoritarian attitudes (r=0.154, p<0.05).

DISCUSSION AND CONCLUSIONS

Çelikkaleli & Gündüz (2010), Ay (2015) and Aydoğan (2004) found that boys had higher level problem solving skills than girls. In many studies gender found to have no effect on problem solving skills of the children (Terzi, 2003; Pehlivan & Konukman, 2004; Tavlı, 2007; Karabulut & Uluçan, 2011; Kiremitci, 2012; Oğuz & Köksal Akyol, 2014; Begde, 2015; Kesicioğlu, 2015). In a different study, girls found to have higher level problem solving skills than boys (Hamarta, 2007). The
differences that were determined from the studies may be caused by different scales that were used, sample group of the study and age group or the difficulties to define the problem solving skills at early ages. Also possible differences on parental attitudes that were used to raise girls and boys may have effect on their problem solving skills. Exposing to more protective attitudes when they grow up may cause girls to have lower level problem solving skills than boys.

Begde (2015), Demiriz & Öğretir (2007) detected that parents’; democratic, authoritarian and overprotective attitudes was not been affected by gender of the children. According to this data; it was determined that parental attitudes were not affected by gender of the children. The sensitivities of today’s parents may be the reasons behind this results that cause them behave equally to their children.

Özyürek (2015) and Querido et al. (2002) was determined that mothers’ democratic attitudes have positive effects on children’s social skills. Also, Arı & Seçer (2003) determined that when democratic attitude level increase and authoritarian attitude level decrease, children’s psychosocial based problem solving skills increase; also when overprotective attitudes increase, problem solving skills of the children decrease. Kesicioğlu (2015) determined that children whose parents have democratic attitudes have better interpersonal problem solving skills than the children whose parents have overprotective attitudes. Altay & Güre (2012) determined that the children whose parents have democratic attitudes have higher scores on positive social attitudes than the children whose parents have permissive attitudes. Cartıllı & Bedel (2015) observed that when mothers trained about problem solving skills, their problem solving skills and communications with their children effected positively. On the other hand, Begde (2015) and Korkut (2001) detected in their studies that there was no significant relationship between preschool children’s problem solving skills and parental attitudes.

Özyürek & Tezel Şahin (2005), Tezel Şahin & Özyürek (2008), Karabulut Demir & Şendil (2008) observed in their studies that mothers have higher scores than fathers in democratic attitudes. When the results of the researches were examined, it was seen that besides the studies revealing the relationship between mothers’ attitudes and fathers’ attitudes; there were also studies determine the absence of any relationship between mothers’ and fathers’ attitudes. In our study, it was concluded that there was medium and low level relationship between mothers’ and fathers’ attitudes. A positive relationship determined between mothers’ authoritarian attitudes and fathers’ permissive attitudes; mothers’ permissive attitudes and fathers’ authoritarian attitudes.

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Chapter 12

Examining Addition and Subtraction Skills of 61-72 Month Old Children Having Education with Different Programs

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INTRODUCTION

Learning is an active process that requires children's participation. Positive early learning experiences have an important position in the future success of children (Marbina et al., 2011). An important question in the early childhood education is how children develop their understanding concerning the facts in their environment and how learning can be improved. For this reason, the question of how children develop their understanding in mathematics in the first years is quite remarkable (Björklund, 2010).

Mathematics is an important part of our everyday life as well as a powerful tool to understand and analyse the world. Mathematical means of describing and representing numbers, processes, quantities, shapes, spaces and patterns are concepts that help people to organize their views and ideas about the world in a systematic way (Pound, 1999, NAEYC, 2002, Cross et al., 2009).

When examining the contents of mathematics that can be presented to preschool children, we can see that the confronted skills are including the adding and subtraction skills that is called as the operation skills (Kilpatrick et al., 2001; Ginsburg et al., 2008; Chen et al., 2012). Because children start to understand and do arithmetic operations long before school (Baroody, 2004).

The development of the operation concept is parallel to the acquisition of the counting skill (Aktaş-Ar纳斯, 2004; Avcı & Dere, 2002). Counting up to 10, sorting object groups from 1 to 10, associating numbers with number names up to 10, and number conservation are required before the addition and subtraction skills can be accomplished (Avcı & Dere, 2002). The children also need to learn how to classify by integration and separation according to their particular characteristics. Because addition is a gathering and subtraction is dividing a group into small groups (Aktaş, 2002).

Addition and subtraction are complementary operations (Baroody, 1999). The conceptual knowledge of addition and subtraction involves the understanding that addition increases the number of existing objects and that subtraction is the cause of the opposite effect (Canobi & Bethune, 2008; Kumtepe, 2011). It needs to be taught to children how to add, how to separate them, and how to integrate groups (Baydemir, 2010). Without gaining the property of reversibility, children cannot
comprehend the relationship between addition and subtraction in the preschool period. For example; it does not matter how the number five is separated (5+0, 3+2, 4+1) and how they are reconstructed from pieces and that the total set is larger than the subsets (Aktaş-Arnas, 2004). Before arithmetic concepts can be taught with symbols such as 3+2 = 5 or 2+3 = 5, children should be able to discover these operations by making them with real objects and learn them in a meaningful way (Kumtepe, 2011).

Because of subtraction is more complicated than addition, the addition should be taught before performing subtraction tasks. In order to understand the concept of subtraction, it is necessary to be able to understand whether one or more objects are removed or discarded from a set of objects (Kumtepe, 2011).

In order to develop mathematical skills that will be needed in future school years, the bases of mathematical concepts should be taught and appropriate educational experiences should be organized in the preschool period. It is important to consider developmental characteristics of children in all areas when planning mathematical activities. It is important to prepare educational environments that encourage children's individual abilities and respond to their interests and needs. It is also known that educators are required to take an active role in the learning of children by using observation, listening, inquiry, constructive feedback and open communication in the enrichment of children's learning experiences (Baran et al., 2011; NAEYC, 2002; Ginsburg et al., 2008; Gilmore & Spelke, 2008).

OECD's report publicized in 2004, indicated that participation in the modern world requires mathematical competence and early mathematics teaching was emphasized since the early mathematical skills of children were the basis for further learning and indicated that mathematics teaching practices should be supported by different models.

The period in which the rate of brain development and synaptic connections is most intense and rapid, and the brain is most vulnerable to environmental effects in human life is the preschool period. Brain development forms a strong basis for the child's cognitive, language, motor, social and emotional development. In this context, the environment deeply affects the child's development and the learning motivation. How much the child can discover, what she/he can learn and how quick she/he can learn is related to how much the child's environment is supportive and what kind of possibilities are offered to the child (MEB, 2013).

In this context, it is known that there are contemporary child-centred approaches developed and implemented in different philosophical directions in preschool education practices, these approaches are aimed at bringing the interests, needs and expectations of children to the forefront and offering them different activities and learning experiences so as to be aware of their interests (Ekici, 2015).

The Great Explorations in Mathematics and Science (GEMS) is a program enriched with integrated mathematics and science activities for pupils from preschool to grade eight (Pompea & Gek, 2002, GEMS, 2017). The aim of the GEMS program is to train individuals who learn independently, think critically, question the nature of the world, do researches, cooperate and have an understanding of the nature of science. Helping children understand the pioneering
concepts in science and mathematics and demonstrating the importance of basic science and mathematics skills at the same time contributes to the positive development of children towards science and mathematics (Thomas, 1997; GEMS, 2017; Tekbıyık & Yalçın, 2013).

Another approach that takes the child to the centre is the Reggio Emilia approach. This approach, which has the characteristics of the constructivist approach, has its own unique characteristics as well, forms the syllabus between children, teachers and the environment. Interactions with peers and adults in the production of knowledge are preliminary. In the comparative approach to problem-solving, creative thinking, hypothesis-building and testing with concrete experiences so that the child can learn to learn, children are encouraged to build their own personalities in cooperation with teachers and each other, and to determine the course of their own research and learning (New, 1993; OECD, 2004; Şahin, 2012).

Other child-centered program is Ministry of Education National Education Preschool Educational Program (MONE PE) has been developed with the aim of providing children with healthy growth through rich learning experiences, with the aim of ensuring that all development areas are supported and reached the highest level, to make them acquire self-care skills, to make them ready for basic education. The program has a "developmental", "spiral" and "eclectic" structure that takes into consideration the developmental characteristics, interests and needs of children and environmental conditions (MEB, 2013).

When the literature is examined there are a lot of researches on operation skills of preschool children, but studies, on which preschool educational program is more effective in the development of children's operation skills, have been found to be very limited. For this purpose, it was aimed to investigate the addition and subtraction skills of 61-72 month old children having education according to three different programs (Reggio Emilia approach, GEMS program and the MONE PE program).

**MATERIALS AND METHOD**

**Research Model**

In the study to determine the effect of the Reggio Emilia approach, the GEMS program and the MONE PE program on the addition and subtraction abilities of 61-72 months ages children, the instant scan model is used between individual scan models.

**Participants**

The purposive sampling method was used in determining the study group. It was noted that preschool children who constituted the working group in the study were 60, 61-72 months old children continued to a preschool educational institution providing education according to the Reggio Emilia approach, the GEMS program and the MONE PE program. 11 girls and nine boys at the age of 61-72 months, attending the preschool educational institution where the Reggio Emilia approach was applied. 12 boys and eight girls attending the preschool educational institution
where the GEMS program was applied. 11 boys and nine girls attending the preschool educational institution where the MONE PE program was applied.

**Measure**

The "Addition and Subtraction Skills Scale for Preschool Children" scale developed by Soydan (2014) was used in the study. The scale was applied only in a quiet environment where the researcher and the child were present, preventing the child from distracting his/her attention. All the items were presented to each child in the same order. First the problems of the addition process and then the problems of the subtraction process. The test took 20 minutes on average for each child. The factor loading values of the items in the scale were .72-.81 in the first factor; and changed from .54 to .83 in the second factor. The correlation coefficient between subscales of the scale is 0.84. For a reliability study of the scale, the Cronbach Alpha reliability coefficient was calculated as .97 and the Sperman-Brown formula was .91. In the scale developed by Soydan (2014), 20 items were prepared, 10 to measure the addition skill and 10 to measure the subtraction skill.

For the scale, a millipede toy made of magnetic beads, numbers and symbol cards were prepared. The toy named "Millipede Koki" was used for every scale problem asked to the children.

**Data Collection and Analysis**

During the collection of the study data, interviews were made with the schools and the purpose of the study was explained. The scale was applied individually to each child. The average score of “Addition and Subtraction Skills Scale for Preschool Children” of children in all groups were compared with the One Way Analysis of Variance (ANOVA) in order to test the impact of the Reggio Emilia approach, the GEMS program and the MONE PE program on the addition and subtraction skills of 61-72 months aged children, since the normality distribution and the assumptions of homogeneity of variances are fulfilled in the study. After the result of the ANOVA, the Tukey HSD Test was conducted to determine between which groups the difference is. In addition, a descriptive statistic was used in order to determine the success status of the addition-subtraction skills of the children having education with different programs.

**RESULTS**

<table>
<thead>
<tr>
<th>Programs</th>
<th>N</th>
<th>( \bar{x} )</th>
<th>Ss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- GEMS Program</td>
<td>20</td>
<td>34.80</td>
<td>3.56</td>
</tr>
<tr>
<td>2- Reggio Approach</td>
<td>20</td>
<td>31.70</td>
<td>5.35</td>
</tr>
<tr>
<td>3- MONE PE Program</td>
<td>20</td>
<td>31.90</td>
<td>3.93</td>
</tr>
</tbody>
</table>

One way ANOVA was performed to determine whether there was a meaningful difference between the scores of the groups and which differences there
are between the groups. The results are presented in table 2.

Table 2: ANOVA results on the scores of the groups addition-subtraction skills

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>S.d.</th>
<th>Average of Squares</th>
<th>F</th>
<th>P</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>120.400</td>
<td>2</td>
<td>60.200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Group</td>
<td>1079.200</td>
<td>57</td>
<td>18.933</td>
<td>3.18</td>
<td>0.049</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1199.600</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When table 2 is examined, there is a significant difference in addition and subtraction skills acquisition of 61-72 months aged children comparing of the Reggio Emilia approach, the GEMS program and MONE PE program (F (3.18); p <0.049). The Tukey HSD test was applied to the data to find out which preschool educational program this difference resulted from.
Table 3: Findings related to the level of success of the children in joining result unknown problems

<table>
<thead>
<tr>
<th>Category</th>
<th>Structure</th>
<th>Problem</th>
<th>Operation</th>
<th>Received Score</th>
<th>Number of Correct Answers</th>
<th>%</th>
<th>Number of Correct Answers</th>
<th>%</th>
<th>Number of Correct Answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>2+2=?</td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>5+5=?</td>
<td></td>
<td>2</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>1+5=?</td>
<td></td>
<td>2</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>4+2=?</td>
<td></td>
<td>2</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>2+3=?</td>
<td></td>
<td>2</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>3+2=?</td>
<td></td>
<td>2</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>5+2=?</td>
<td></td>
<td>2</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>3+4=?</td>
<td></td>
<td>2</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>6+3=?</td>
<td></td>
<td>2</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>3+6=?</td>
<td></td>
<td>2</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>
There was no significant difference between the groups according to the Tukey HSD test results (p > 0.05), although a significant difference was found between the averages of the scores because the One-Way ANOVA. In other words, the success of the children aged 61-72 months on addition and subtraction does not change significantly depending on the preschool educational program they are having.

When looking at the successes of the addition and subtraction operation in Table 3, all of the children in the study group were successful in addition for joining problems with unknown results.

**Table 4:** Findings related to the level of success of children in change unknown joining problems

<table>
<thead>
<tr>
<th>Structure</th>
<th>Problem</th>
<th>Operation</th>
<th>Received Score</th>
<th>Number of Correct Answers</th>
<th>%</th>
<th>Number of Correct Answers</th>
<th>%</th>
<th>Number of Correct Answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Unknown Joining</td>
<td>14</td>
<td>3+?=5</td>
<td>0</td>
<td>9</td>
<td>45</td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>6</td>
<td>30</td>
<td>14</td>
<td>70</td>
<td>3</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>5</td>
<td>25</td>
<td>5</td>
<td>15</td>
<td>7</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>6</td>
<td>30</td>
<td>12</td>
<td>60</td>
<td>6</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>30</td>
<td>5</td>
<td>14</td>
<td>14</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>3+?=8</td>
<td>0</td>
<td>9</td>
<td>45</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>4</td>
<td>20</td>
<td>11</td>
<td>55</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td>35</td>
<td>4</td>
<td>20</td>
<td>6</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In change unknown joining problems, it is determined that children having education according to the GEMS program were the most successful (an average of 85% in three problems). Followed by the children having education according to the Reggio Emilia approach (an average of 65% in three problems) and at least children who have education according to the MONE PE program (an average of 37% in three problems).

**Table 5:** Findings related to the level of success of children in separation results/change unknown problems

<table>
<thead>
<tr>
<th>Category</th>
<th>Structure</th>
<th>Problem</th>
<th>Operation</th>
<th>Received Score</th>
<th>Number of Correct Answers</th>
<th>%</th>
<th>Number of Correct Answers</th>
<th>%</th>
<th>Number of Correct Answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>11</td>
<td>5-2=?</td>
<td>1</td>
<td>2</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Separation</td>
<td>13</td>
<td>7-3=?</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>17</td>
<td>85</td>
<td>19</td>
<td>95</td>
<td>18</td>
<td>90</td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>15</td>
<td>5</td>
<td>18</td>
<td>90</td>
<td>16</td>
<td>80</td>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the subtraction, it was determined that the correct answer percentages of children attending the preschool educational institution providing education according to the GEMS program were higher in the result unknown and change unknown separation problems (97%). However, it was also determined that the vast majority of children attending the preschool educational institution providing education according to the Reggio Emilia approach (93%) and the MONE PE program (95%) were also successful.
<table>
<thead>
<tr>
<th>Category</th>
<th>Structure</th>
<th>Problem</th>
<th>Operation</th>
<th>Received Score</th>
<th>Number of Correct Answers</th>
<th>%</th>
<th>Number of Correct Answers</th>
<th>%</th>
<th>Number of Correct Answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>6-1=?</td>
<td></td>
<td>0</td>
<td>4</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td>14</td>
<td>70</td>
<td>18</td>
<td>90</td>
<td>18</td>
<td>90</td>
</tr>
<tr>
<td>Part-Whole</td>
<td></td>
<td>8-3=?</td>
<td></td>
<td>0</td>
<td>6</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td>14</td>
<td>70</td>
<td>18</td>
<td>90</td>
<td>18</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td>15</td>
<td>75</td>
<td>9</td>
<td>45</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td>Comparison</td>
<td></td>
<td>6-4=?</td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
<td>5</td>
<td>25</td>
<td>9</td>
<td>45</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td>15</td>
<td>75</td>
<td>9</td>
<td>45</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td></td>
<td>6-2=?</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
<td>25</td>
<td>9</td>
<td>45</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>
Part-whole problems success rate was high in all three programs as well as the success in the Reggio Emilia approach (75%) was lower than other two programs. In the comparison problems, the highest percentage of correct answers was for children having education according to the GEMS program (55%), followed by the Reggio Emilia approach (25%) and the children having education with MONE PE program was found to be the lowest (15%).

**DISCUSSION AND CONCLUSIONS**

In this study, the ability of addition and subtraction skills of 61-72 month aged children, who were having education according to three different programs (Reggio Emilia approach, GEMS program and MONE PE program) were examined. It has been confirmed that there is a significant difference between the Reggio Emilia Approach, the GEMS program and the MONE PE program in acquiring addition and subtraction skills, but there was no significant difference between the groups according to the Tukey HSD test results. In other words, the success of 61-72 months aged children on addition and subtraction does not change significantly depending on the preschool educational program they are attending. According to these results, it can be said that preschool children should be able to earn the addition and subtraction skills, which are essential mathematical skills, in early childhood period and different preschool approaches are effective in improving their process skills.

The GEMS program is based on the constructivist theory of learning. The GEMS program has many activities to improve skills by establishing interdisciplinary links and both to ensure acquisition of knowledge. Research and practice are the basis in GEMS activities. Activities including complementary topics support the linkage between specific disciplines of science (like mathematics and science, language, literature, art, music, history and theatre) and different fields of science. GEMS science and mathematics activities are based on the fact that there is no student information transfer, that students are able to conduct research and observation on their own and that students are learning on their own. In addition, GEMS conducts activities such as experiments, explorations, inventions, nature walks, various science research books, reviewing application sources, and producing projects related to science and mathematics (Barrett et al., 1998) With studies in GEMS activities, students have the opportunity to observe, ask problems, suggest, predict, share their thoughts with others, have different ideas by listening to their peers and establish cause and effect relation. GEMS program includes activities such as arousing curiosity, exploration, concept creation, practice and alternating thinking. The teacher's goal is to ensure that children use their metacognitive skills (Barber et al., 1998).

The Reggio Emilia approach encourages the creation of natural learning environments that encourages little children to explore, ask questions and seek answers. Instead of separating learning areas from each other, an integrated curriculum approach is used in this approach. The curriculum is not divided into separate areas such as mathematics, science, reading and social studies; instead, asking exploration problems are based on producing solutions (Stegelin,
Mathematical concepts are studied together with concepts such as science, language, movement and creative expression in a holistic perspective. The curriculum concept is based on project studies that develop children's learning by language, mathematical concepts, hypotheses, discovery of new relationships, life cycles and history. In long-term projects, the curriculum creates an integrated framework in which children form information (e.g. number concepts, language, historical perspectives, etc.) rather than being divided into separate content areas (Katz, 1994; Stegelin, 2003). For example, a project about "trees" might include scientific thinking, language arts, and integrated mathematical concepts throughout the course of the project.

As for in the MONE PE program, where activities such as Turkish, Art, Drama, Music, Movement, Play, Science, Mathematics, Reading and Writing Preparation and Field Tour are included, it is said that these activities can be planned and implemented individually and that more than one activity type can be brought together and integrated events can be prepared. For example, it is expected that an art or play activity and mathematical activity will be integrated and planned and implemented (MEB, 2013). In Turkey we can see studies where the effects of drama activities (Sezer, 2008; Erdoğan & Baran, 2009; Özsoy, 2003a; Özsoy, 2003b), play activities (Yılmaz Bolat & Dikici Şığırtmaç, 2006; Şirin, 2011; Türkmenoğlu, 2005), music events (Karşal, 2004), educational toys, preparations for reading and writing and educational toys with smart boards (Soydan, 2014) are researched relating the development of mathematical abilities of children. These studies show that mathematical concepts in the preschool program are tried to be integrated with other activities besides mathematics activities.

These three programs, which are discussed in the study, can be said to have a common point of view in mathematics education, since they deal mathematics education with other disciplines and types of activities in the light of the literature information above. It is thought that the reason that there is no meaningful difference between these three approaches investigated in the study is that they adopt a similar approach in mathematics education.

In addition, the children in the classrooms in which the Gems program was applied achieved a success rate of 100% for addition joining results unknown problems, 85 % for change unknown joining problems, 97% for separation results/change unknown problems, 100% for part-whole problems and 55% for comparison problems, children in classrooms where the Reggio Emilia approach was applied, achieved a success rate of 100% for addition joining results unknown problems, 65% for change unknown joining problems, 93% for separation results/change unknown problems, 75% for part-whole problems and 25% for comparison problems; children in classrooms where MONE PE program was applied, achieved a success rate of 100% for addition joining results unknown problems, 37% for change unknown joining problems, 95% for separation results/change unknown problems, 100% for part-whole problems 15% for comparison problems. According to these results, the highest level of success of children having education with the MONE PE program and the Reggio Emilia approach in subtraction problems is seen at result unknown separation process,
change unknown separation process and part-whole process; while the lowest level of success are seen in comparison problems. It was also noticed that the highest success was obtained in the Gems program in comparison problems (55%) and change unknown joining (81%).

It is seen that all the children involved in the study achieved 100% success in addition show that they can count, know the relation between numbers and are aware of number conservation. It is a pleasing result to show that basic mathematical concepts related to numbers and additions are gained through preschool education.

In addition, the results of preschool children's achievements according to the separation and part-whole problems are pleasing. It is believed that the reason for all children participating in our study to achieve a high level of success in addition, separation and part-whole questions is that their preschool teachers frequently include these verbal problems in the educational activities. The studies revealed that verbal problems related to joining, separation, part-whole, comparison should be presented to children in order to be successful in verbal problem solving (Nunes & Bryant, 2008; Sperry Smith, 2016). There are also researches that show that the most common types of problems presented to children are joining, separation and part-whole problems (Despina & Harikleia, 2014; Saribaş & Aktaş-Arnas, 2017). These study findings support thoughts about the results obtained in this study.

It has been found that there is a success rate of 85% in the Gems program, 65% in the Reggio Emilia approach and 37% in the MONE PE program for change unknown joining problems. Researchers have determined that children use the addition process to be able to respond to equation problems, but they still accept equation problems as subtraction (Gibb, 1956; Carpenter & Moser, 1982). From the child's point of view, equation problems are adding problems or a problem of adding the missing ones. However, it is necessary for children to interpret that the 2 + - = 5 problem logically 5 - 2 = is (Nair & Pool, 1991).

In comparison problems, it was determined that the GEMS program achieved a 55% success, the Reggio Emilia approach 25% and the MONE PE program 15%. For all the children participating in the survey, the lowest achievements are in comparison problems.

According to the results of studies, Kamii and Housman, (2000) found that the simplest of separation, comparison and equation problems are separation problems, while the most difficult problem is comparison and that equation problems are easier than comparison problems. In addition, it has been determined that the least preferred verbal problem types in mathematics activities by teachers are the change unknown joining and the comparison problems (Nunes & Bryant, 2008; Saribaş & Aktaş Arnas, 2017; Sperry Smith, 2016). In the light of these study findings, it is considered that the reasons for the low level of success in change unknown joining and comparison problems of children included in this study, are the difficulty of the problem types and the low place in class activities.

Children in classrooms where the GEMS program is implemented, have the most success rate for change unknown joining and comparison problems where children normally have the most problems for. For change unknown joining
problems, children must acquire the necessary skills to be able to do mathematical interpretation and to be able to compare the sizes of two clusters in comparison problems. It is confirmed that besides the progress of learning the mathematical concepts of children who are attending the GEMS program, there is an increase in the inquiry-based abilities such as observing and comparing, understanding the action-reaction relation, applying knowledge of science and mathematics to new situations significantly (Barrett et al., 1999). This research finding reveals that development of science and mathematics by embracing them together in the GEMS program makes that children will gain the skills of comparison and the skills of interpreting the obtained information and make them adapt to new situations. Supporting the skills of comparing and interpreting of children involved in the GEMS program is believed to support their success in these types of problems.

REFERENCES


Chapter 13

Parents' Awareness towards Media Use of Preschool Children

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INTRODUCTION

Family is the most important component for early learning. Also; home environment where media tools are manifold. Technology has become a part of children's lives and their present learning. Children’s informal learning at home environment until their eight ages, the used of media by family members, and the role of children in the using of the media are very important in the children’s lives. Pre-school children are not just affected about their parents' behaviors and words; at the same time, they are heavily influenced by repeated pictures, sounds, shapes, music, stories, feelings and behaviors what they see on the screen. The media is shaping children as much as their parents can not imagine. While quality pre-school education institutions are not everywhere equally, access to media tools is everywhere (Edgar & Edgar, ND).

Since digital technology took part in the daily life, people’s communication with others, learning, working, evaluating their free time, and etc. needs and habits have also changed. This situation, on the one hand, has made human life easier and on the other hand has led to a more complicated human life. The effectiveness of media tools in our lives is increasing. As a natural result of this situation, children’s attention was drawn such as television, internet, computer games and such media tools (Gündüz- Kalan, 2010; Ulusoy & Bostancı, 2014). According to Edgar (2008) in the present television, video, computer games are used like a baby sitter by parents because working parents are having less time for parenting their children (Edgar &Edgar, ND).

As in all developmental areas, also children's psycho-social development is under a huge influence of the media. That’s why children were exposed to television, radio, music, video games, internet and etc. media tools with a guidance by arguing with their parents, is very important. The media can have both beneficial and harmful effects on children's mental and physical health. Identifying these effects, making suggestions to parents and teachers; what can be effective in promoting healthy use of media in the communities (Nieman, 2003).

Protecting from adverse effects of media and media use consciously have led to generate the concept of media literacy (Gündüz- Kalan, 2010). According to Treske (2007), media literacy is the education process for the use of conscious media that enables people to use media tools effectively. Media literacy; ensures
that the communication and interaction between the mass media and the audience in a conscious and healthy manner. According to Taşkıran (2007), media literacy is the people defined as "media competence" who can understand and comment on what is to be given in media after a certain education (Gündüz-Kalan, 2010).

Children need to support and education in the use of the media. Managing children's relationships with the media is an important situation for parents and parents have great responsibilities in this situation. According to Donald and his friends (2003), while some parents put a limit for using media for their children, others do not care about their children. However, the importance of parents' attitudes and the influence of the media controlled by parents has proven that children make a difference in their lives (Ulusoy & Bostancı, 2014). Parental intervention on television is described as "active", "restrictive", and "watching together". Active intervention is used to talk about the content of television with children and to make critical comments on programs on television. Restrictive intervention involves parents setting up rules about when and how long television programs can be watched for their children. Watching together is; parents watch television with their children. However, this situation; does not mean that any communication between parents and children has become (Bilgin-Ülgen, 2009).

Today, television is widespread and it is both a visual and auditory media tool, so it is used by children and adults and has a lot of influence on them. Considering that too many children's programs have been published the parents need to be media literacy for protecting their children from the negative effects of television. Preschool children are more affected by adverse effects of television than adults. For this reason, children should watch television under the supervision of their parents for the healthy development of them. In this case, parents can be protective in order to protect children from harmful content and to prevent children from being exposed to the media for a long time. However, parents can help their children’s ability to criticize and interpret to becoming media literacy by directing, informing, and supporting them (Gündüz-Kalan, 2010). Teachers and parents can arrange and control how much time is spent with the media by guiding children. It is not an effective method to ban the media, because children need to know how to use the media. According to Penman and Turnbull (2007), children are not passive users, they are active users who research media technology and express themselves in new ways. In this case, the main purpose is to help them about how they can use the media, how long they can use it, and how much they can trust (Edgar & Edgar, ND).

As in every case, parents have great responsibilities in the media. At this point, parents' awareness, consciousness levels; shortly, media literacy is extremely important. When the literature reviews, there are rarely studies about preschool children’s parents’ awareness of the use of media and media literacy (Bulut-Özek, 2016; Gündüz-Kalan, 2010). It is important to carry out this study in order to eliminate this deficiency and determine the parents' awareness of the media use of children. It is thought that this study will contribute to the literature by supporting new studies that sets out the opinions of parents about media literacy. From this point of view, the aim of this research is to determine the awareness of the parents
of preschool children towards media use.

**MATERIALS AND METHODS**

**Research Model:** In the research, case study was used from qualitative research methods. Case study is a qualitative approach in which researcher searches the current situation of real life with observation, interview, etc. within a certain period of time thoroughly and in-depth (Creswell, 2013).

**Study Group:** In the research; convenience sampling was used from purposive sampling. Convenience sampling method provides speed and practicality to the research (Yıldırım & Şimşek, 2013). The study group of study is composed of 27 parents who have children in preschool period in Ankara. Demographic characteristics of parents and children are given in Table 1.

**Table 1: Demographic Characteristics of Parents and Children**

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age of Children</strong></td>
<td></td>
</tr>
<tr>
<td>4 age</td>
<td>14</td>
</tr>
<tr>
<td>5 age</td>
<td>7</td>
</tr>
<tr>
<td>6 age</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
</tr>
<tr>
<td><strong>Gender of Children</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
</tr>
<tr>
<td>Male</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
</tr>
<tr>
<td><strong>State of Education of Mothers</strong></td>
<td></td>
</tr>
<tr>
<td>Primary School</td>
<td>1</td>
</tr>
<tr>
<td>High School</td>
<td>6</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>3</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>12</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
</tr>
<tr>
<td><strong>State of Education of Fathers</strong></td>
<td></td>
</tr>
<tr>
<td>Primary School</td>
<td>1</td>
</tr>
<tr>
<td>Secondary School</td>
<td>1</td>
</tr>
<tr>
<td>High School</td>
<td>7</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>1</td>
</tr>
<tr>
<td>Bachelor’s (undergraduate) Degree</td>
<td>12</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
</tr>
</tbody>
</table>

The children’s ages of the participating parents to the research; 14 are 4 years old, 7 are 5 years old, 6 are 4 years old. From the participating children in the research; 11 of children are females and 16 of children are males. 1 of mothers graduated from primary school, 6 of mothers graduated from high school, 3 of mothers graduated from associate degree, 12 of mothers graduated from bachelor’s degree and 5 of mothers graduated from master degree. Also; 1 of fathers graduated from primary school, 1 of the fathers graduated from secondary school, 7 of the fathers graduated from high school, 1 of the fathers graduated from associate degree, 12 of the fathers graduated from bachelor’s degree and 5 of the fathers graduated from master degree.
**Data Collection Tool:** The data of the study were acquired by a semi-structured interview form developed to determine the awareness of the parents of preschool children on media using. For this purpose, interview questions were first prepared by the researcher up to the purpose of the research. Prepared questions have been consulted subject matter expert. In the direction of the expert opinion, the form items were reviewed and the final shape was given to the form. Besides the demographic questions in the interview form; there are some open-ended questions such as “Do you think that your child using the media effectively? If your answer is ‘yes’, how do you provide effective media use of your child? etc.” to determine what media tools are, whether the media is beneficial or harmful for the child, and to determine the views of parents about the effective use of the media.

**Data Collection:** Data collection was carried out in independent preschools in Ankara. Initially in the study, the purpose of study was explained to the parents and their participation was provided on the basis of volunteerism. The data of the study were obtained with 15-20 minutes long of interviews with the parents. Seven questions were asked to the parents to determine their child's awareness of media using. The responses given during the interview were recorded by taking notes.

**Data Analysis:** In the analysis of the data, content analysis technique was used. In the content analysis technique, the concepts and correlations are reached that can explain the collected data. These data are collected and interpreted in the form of specific themes. In content analysis, there are four stages: they are coding the data respectively, creating the themes, arranging the codes and themes, and interpreting the findings (Şimşek & Yıldırım, 2011). In this research, coding was done first and various themes were reached. Then the data were grouped according to themes and arranged numerically. In the end, the findings were interpreted. The obtained data were coded and analyzed by another investigation to ensure the reliability of the study. As a result of these analyzes, a shared decision has been made.

**RESULTS**

In this section, opinions about parents’ awareness towards media use of preschool children were presented.

**Opinions about Media Tools**

In the scope of the research, firstly, parents were asked what the media tools are and the distribution of the answers is presented in Table 2.

**Table 2:** Parents' opinions on what media tools are

<table>
<thead>
<tr>
<th>Media Tools</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both Visual and Audio Tools</td>
<td>73</td>
</tr>
<tr>
<td>TV</td>
<td>26</td>
</tr>
<tr>
<td>Computer</td>
<td>15</td>
</tr>
<tr>
<td>Mobile Phone</td>
<td>14</td>
</tr>
<tr>
<td>Internet</td>
<td>12</td>
</tr>
<tr>
<td>Tablet</td>
<td>6</td>
</tr>
</tbody>
</table>
When the answers given by the parents to the first question are grouped; 73 of them answered both visual and audial (TV, computer, mobile phone, internet, tablet), 26 of them answered visual tools (journal, newspaper, letter, telegraph) and 11 of them answered audial (radio) were determined. It was determined that parents use the most TVs, at least tablets, from both visual and audial media; most of them use journals and at least use newspapers and telegraph from visual media tools and most of them use radio from audio media tools with their children. Parents also responded to this question by saying they knew more than one media tool.

**Opinions about the Most Used Media Tools with Children**

Parents were asked which media tools they used together with their children and the distribution of the answers is presented in Table 3.

**Table 3:** Opinions about parents about the question of which media tools they use most with their children

<table>
<thead>
<tr>
<th>The most commonly used media tools</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both Visual and Audio Tools</td>
<td>53</td>
</tr>
<tr>
<td>TV</td>
<td>25</td>
</tr>
<tr>
<td>Computer</td>
<td>11</td>
</tr>
<tr>
<td>Internet</td>
<td>8</td>
</tr>
<tr>
<td>Mobile Phone</td>
<td>7</td>
</tr>
<tr>
<td>Tablet</td>
<td>2</td>
</tr>
<tr>
<td>Audio Tools</td>
<td>4</td>
</tr>
<tr>
<td>Radio</td>
<td>4</td>
</tr>
<tr>
<td>Visual Tools</td>
<td>3</td>
</tr>
<tr>
<td>Journal</td>
<td>2</td>
</tr>
<tr>
<td>Newspaper</td>
<td>1</td>
</tr>
</tbody>
</table>

When answers grouped to ask parents what media tools they use most with their children; 53 of them answered both visual and audial (TV, computer, internet, mobile phone, tablet), 4 of them answered audial (radio), 3 of them answered visual tools (journal, newspaper), were determined. It was determined that parents use the most TVs, at least tablets, from both visual and audial media; most of them use journals and at least use newspapers from visual media tools and most of them use radio from audio media tools with their children. Parents also responded to this question by saying more than one to the media tools they used with their children.
Opinions about the duration of using of media tools

Parents were asked how many hours per day their children were using media tools, and the distribution of responses was presented in Table 4.

Table 4: Parents' views on how many hours in a day their children spend using media tools

<table>
<thead>
<tr>
<th>Exposure Time</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 min.</td>
<td>2</td>
</tr>
<tr>
<td>1-2 hour(s)</td>
<td>12</td>
</tr>
<tr>
<td>2-3 hours</td>
<td>9</td>
</tr>
<tr>
<td>3 hours and above 3 hours</td>
<td>4</td>
</tr>
</tbody>
</table>

Parents were asked how many hours their children used the media tools on average per day and the given answers were analyzed; 12 of the parents said that 1-2 hours, 9 of the parents said that 2-3 hours, 4 of them said that 3 hours and above 3 hours. Most parents stated that their children use media tools for 1-2 hours per day on average. It is the reason of turned out to appear this finding can be shown as by taking into account the time of their arrival from school.

Influential factors turned to the media

Parents were asked which the factors that allowed their children to turn to the media, and the distribution of answers given in Table 5.

Table 5: Parents' views on which are the factors that help children to turn to the media

<table>
<thead>
<tr>
<th>Factors influencing the direction of the media</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interests and desires of the child</td>
<td>15</td>
</tr>
<tr>
<td>Entertainment</td>
<td>4</td>
</tr>
<tr>
<td>Interest</td>
<td>4</td>
</tr>
<tr>
<td>Curiosity</td>
<td>3</td>
</tr>
<tr>
<td>Boredom</td>
<td>2</td>
</tr>
<tr>
<td>Learning</td>
<td>2</td>
</tr>
<tr>
<td>Visual Stimulus</td>
<td>10</td>
</tr>
<tr>
<td>Cartoon</td>
<td>6</td>
</tr>
<tr>
<td>Advertisement</td>
<td>2</td>
</tr>
<tr>
<td>Music</td>
<td>2</td>
</tr>
<tr>
<td>Social Environment</td>
<td>8</td>
</tr>
<tr>
<td>Family</td>
<td>3</td>
</tr>
<tr>
<td>Environment</td>
<td>3</td>
</tr>
<tr>
<td>Friend</td>
<td>2</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
</tr>
<tr>
<td>Free time</td>
<td>2</td>
</tr>
<tr>
<td>Intelligence</td>
<td>1</td>
</tr>
<tr>
<td>Vivid colors</td>
<td>1</td>
</tr>
</tbody>
</table>
Fast changing of the frames 1
Not having a friend 1

**Development of Technology** 5
Today’s Period 2
Facebook 1
Smart Phones 1
Increasing of the technology 1

When the answers of the parents under the table 4 to the question of what are the components that direct children to media are grouped; 15 of the parents stated that the desires and the interests of the child (entertainment, interest, curiosity, boredom, learning) and 10 of them express that the visual stimulus (cartoon, advertisement, music). Moreover, 8% of the parents said that the social environment (family, environment, friend), 6 of them stated that other components (free time, intelligence, vivid colours, the changing frames, not having friends) and 5 of the parents uttered that the development of the technology (today’s period, facebook, smart phones, increasing of the technology) is effective in this process. The parents answered this question by giving more than one response.

A participant who thinks that it stems from the interests and desires of the children expresses his opinion as;

**P7:** “Children's curiosity and learning desire during these periods”

A participant who commented that it was caused by the influence of visual stimuli;

**P17:** “Visually appealing cartoons, children's ads, and children’s music.”

A participant who commented that it was caused by other reasons as follows;

**P19:** "Having the equipment to allow the child to have fun, combining vivid colors, changing frames too quickly"

**Opinions on whether the media is beneficial or harmful**

Parents were asked whether spending time of their children with any media tool was beneficial or harmful, and the distribution of responses was presented in Table 6.

**Table6:** Parents’ opinions on whether spending time of their children with any media tools beneficial or harmful

<table>
<thead>
<tr>
<th>Being beneficial or harmful of media</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both beneficial and harmful</td>
<td>10</td>
</tr>
<tr>
<td>Beneficial if it is certain</td>
<td>9</td>
</tr>
<tr>
<td>If it is excessive, it is harmful</td>
<td>3</td>
</tr>
<tr>
<td>Harmful</td>
<td>3</td>
</tr>
<tr>
<td>Beneficial</td>
<td>2</td>
</tr>
</tbody>
</table>

Parents were asked whether their children spent time with any media tool is beneficial or not and when the given answers were analyzed 10 of the parents answered that “both beneficial and harmful”, 9 of the parents answered that “beneficial if it is certain”, 3 of the parents answered that “harmful”, and 2 of the
parents answered that “beneficial”. When we look at the findings, it is observed that parents emphasize the positive and negative effects of the media temporally. In this context, this assessment has been made an evaluation about the length of spending time on media.

The question is asked to the parents that” If they think that using media tools of the children is beneficial for your children’s and what are the benefits of them?”, and distribution of the given answers is presented in Table 7.

Table 7: Parents’ opinions about the question “If you think that children’s spending time with any media tools is beneficial, what are the benefits?”

<table>
<thead>
<tr>
<th>Benefits of Media</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution to development areas</td>
<td></td>
</tr>
<tr>
<td>Cognitive Development</td>
<td>18</td>
</tr>
<tr>
<td>Social Progress</td>
<td>2</td>
</tr>
<tr>
<td>Language Development</td>
<td>1</td>
</tr>
<tr>
<td>Personality Development</td>
<td>1</td>
</tr>
<tr>
<td>Providing the child's interests and needs</td>
<td></td>
</tr>
<tr>
<td>Satisfying one’s curiosity</td>
<td>2</td>
</tr>
<tr>
<td>Imagination</td>
<td>2</td>
</tr>
<tr>
<td>Entertainment</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Increasing general knowledge</td>
<td>1</td>
</tr>
<tr>
<td>Visuality kept in mind</td>
<td>1</td>
</tr>
<tr>
<td>Developing talent</td>
<td>1</td>
</tr>
</tbody>
</table>

When the answers were grouped into the given answers about the question “If you think that it is beneficial for your children to spend time with any media tool, and what are the benefits of them?”, 22 of the parents expressed that have contributed to children’s developmental areas (cognitive, social, language, personality), 5 of the parents expressed that they are provided the child’s interests and needs (satisfying child’s curiosity, imagination, entertainment), 3 of the parents expressed that there are benefits of media tools (increasing general knowledge, visually keep in mind, developing talent). Parents answered which is a question “What are the benefits of children spending time with the media?” by giving more than one answer.

One of the participant commented that it contributed to the socialization and socialization of children as follows:

**P4:** “Tools can be beneficial for developing social orientation and helping cognition that used by their peers.”

A participant who commented that he/she contributed to foreign language learning expressed his/her opinion as follows:

**P10:** "English song - learns words."

A participant commented that they are having the feature of being a tutorial:

**P13:** “Particularly through educational-instructional programs, the speed of learning is increasing, and the general culture is increasing.”

Contributing to media to learning experiences is the most emphasized title by
parents. This also serves the child's cognitive, social, emotional, physical support, considering the child's developmental characteristics.

It is asked what kind of harm their children have when they spend a lot of time with any media tools and the distribution of answers given in Table 8.

**Table 8:** The parents' opinions about if spending too much time with any media tools of their children is harmful, what are the harms

<table>
<thead>
<tr>
<th>Harms of Media</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Problems</strong></td>
<td></td>
</tr>
<tr>
<td>Distractibility</td>
<td>5</td>
</tr>
<tr>
<td>Visual impairment</td>
<td>3</td>
</tr>
<tr>
<td>Psychological disorders</td>
<td>3</td>
</tr>
<tr>
<td>Getting bone tired</td>
<td>2</td>
</tr>
<tr>
<td>Somnipathy</td>
<td>1</td>
</tr>
<tr>
<td>Learning disability</td>
<td>1</td>
</tr>
<tr>
<td><strong>Decreasing of social interaction</strong></td>
<td>9</td>
</tr>
<tr>
<td>Becoming media addicted</td>
<td>2</td>
</tr>
<tr>
<td>Having any time for activities (game, sports)</td>
<td>2</td>
</tr>
<tr>
<td>Misleading</td>
<td>1</td>
</tr>
<tr>
<td>Giving subliminal messages</td>
<td>1</td>
</tr>
<tr>
<td><strong>Behavioral Problems (aggression, violence etc.)</strong></td>
<td>5</td>
</tr>
</tbody>
</table>

It has been asked to the parents “if you think spending of their children with any media tool is harmful, what are the harms and 15 of the parents expressed that can be caused of some health problems (distractibility, visual impairment, psychological disorders, getting bone tired, somnipathy, learning disability), 9 of the parents expressed that can be caused decreasing of social interaction. 6 of the parents expressed other effects (being media addicted, having any time activities, misleading, giving subliminal messages), 5 of them expressed that can be seen on the the children some behavioral problems (aggression, violence).

A participant who commented that it would cause health problems as follows:

**P1:** "It can deteriorate eyesight, it can be caused to get tired, it can be harmful to the health, if it can not be controlled it can lead to personal disorder, also it can be caused having less time for social activities and sport.

A participant who commented that it would be caused some behaviors such as anger and aggression as follows:

**P5:** "If it isn’t checked, there may be a fight and disorientation."

A participant who commenting on the idea that unreal ideas might develop:

**P17:** "By publishing imaginative films, children can perceive it as real, even if they think of what they can do and are in harm's way”

When the negative effects are assessed, it is seen that they point out that distractibility and social interaction decreasing. This has an adverse effect on both the academic and the social domain.
Opinions on whether information / course / seminar has been taken on how media tools should be used

Parents were asked if they get any information / lessons / seminars on how their children should use media tools and the distribution of the answers given is presented in Table 9.

Table 9: Comments on the question whether parents have got any information / lessons / seminars on how to use media tools for their children

<table>
<thead>
<tr>
<th>Whether to get information / lessons / seminars on media tools</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
</tr>
<tr>
<td>Other (I research from internet and books.)</td>
<td>1</td>
</tr>
</tbody>
</table>

Parents were asked if they get any information / lessons / seminars on how their children should use media tools and when the given answers were analyzed 25 of the parents answered that question “no” one of the parents answered “yes”, and one of the parents answered the question like “I research the information from internet and books on my own. This finding can be interpreted that the parents don’t care about how they should be used media to their children.

Opinions about effective using of media

Parents were asked if their children use the media effectively and when the answers were analyzed 10 of the parents answered no, 7 answered yes, 6 did not answer and 4 answered neither yes nor no.

Parents who stated that they used the media efficiently were asked how they used the effective media and the distribution of the answers given is presented in Table 10.

Table 10: Parents’ views on how their children use the media effectively

<table>
<thead>
<tr>
<th>How to provide effective media usage</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time limitation</td>
<td>4</td>
</tr>
<tr>
<td>Choosing of suitable programs for the children</td>
<td>2</td>
</tr>
<tr>
<td>Not being left alone of the child</td>
<td>2</td>
</tr>
<tr>
<td>Parental choice of computer applications</td>
<td>1</td>
</tr>
<tr>
<td>Controlled internet</td>
<td>1</td>
</tr>
<tr>
<td>Not using mobile phones or tablet</td>
<td>1</td>
</tr>
<tr>
<td>By transferring their knowledge and experience</td>
<td>1</td>
</tr>
</tbody>
</table>

Parents were asked how they used active media if they thought, their children were using the media effectively. When the given answers were analyzed that parents expressed that their manners about using media effectively; 4 of the parents expressed that they using time limitation manner, 2 of the parents expressed that they choose the suitable programs and 2 of the parents expressed that they don’t leave alone of their children.

A participant commented that they were paying attention to the program selection as follows:

*P2*: “So I can not say “yes” exactly. We have to choose programs in order to
be effective."
A participant commenting on the prohibitions put forward expressed the following:

**P19:** "I try to use it effectively as a parent. But I do not think it's enough. I never leave my children alone in front of TV. I do not watch anything that I do not follow myself as children. When I see something wrong in the vehicle we watch, I immediately state the reason for this and I am wrong. I never use my mobile phone and tablet as a time-saving and gaming tool."

A participant commented that they had put a time limit and said as follows:

**P22:** "I give permission watching TV and internet (YouTube) in a limited time."

When the findings analyzed; parents expressed that they use mostly both visual and audial media tools, they expressed that their children use the media tools average in a day 1-2 hours, parents expressed that they tend toward to media because of their children interests and needs they expressed also there are both harms and benefits of the media, they do not get any lesson/seminar/information, and most of the them do not use the media effectively ,the parents expressed that who are using the media effectively by using it for their children with a time limitation.

**DISCUSSION AND CONCLUSIONS**

As a result of the research, it was found that parents use both visual and audial media tools together with their children and their children use media tools for 1-2 hours on average per day. In the result of the study of Gündüz-Kalan (2010) on media literacy awareness of the parents; parents expressed that their children were exposed to the media for an average of 2 to 4 hours a day and that their children's television watching times were not under control. Leggett (2013) stated that as a result of the researches, children spend more time media use more than 6 hours a day. Gündüz-Kalan (2010) and Leggett (2013) stating that children spend more time with the media, and they stated with an overlapping finding with this study. This can be interpreted as parents spending more time with their children and not seeing the media as a caretaker.

General of the parents expressed that media are both beneficial and harmful for their children and they expressed that the elements that enable their children to be directed to the media are mostly based on the interests and desires of the child. Most of the parents stated that the media contributes to the child's learning however; it is harmful in terms of health problems (distractibility, visual impairment, psychological distress, fatigue, sleep disturbance, learning disability). Çakır (2003) stated that primary school students' opinions about computer games and their attempts to determine the effects on students indicated that the computer games affected the child's success negatively. This result is also consistent with the fact that revealed in the study in which it was concluded that the media is harmful as for the learning difficulty. It is emphasized that television, which is a media tool, affects children's academic skills and mental development positively when the literature is scanned (Erdoğan, 2010; Göksu, 2004). On the other hand, it is observed
that television causes problems for children in sleeping, problems in ensuring social adaptation of children, problems in language, cognitive, social and motor development (Aral et al, 2011; Gündüz- Kalan, 2010). Watching television too much is affecting children's future school achievements, emotional intelligence developments and focusing in a negative way (İnanlı, 2009). Also, it has been concluded that there is a significant relationship between violent TV programs and children's aggressive behaviors (İnanlı, 2009; Ülken, 2011). In this case, both useful and harmful aspects of the media for children are supported by literature that is consistent with the findings of the study.

Almost all of the parents did not get any lessons / seminars / information about the media and most of the parents said they did not use the media effectively. Parents who said that they used the media effectively also stated that they were using active media by putting a time limitation on the child using of the media tools. In parallel with this result of the research, Stasova (2015) stated that the parents are following the media using of their children. Tercan, Sakarya and Çoklar (2012) have supported this result in their study by showing that families are taking measures such as filter programs, time constraints and site bans. Gündüz- Kalan (2010) shows that children's TV watching times are not under control, and it is completely inconsistent with the results of this study. However, Gündüz -Kalan (2010) stated that families are trying to be conscious about the choice of programs for their children and they think that they protect their children from the negative contents of other TV channels. In parallel with this result, Çakır (2013) stated that the parents put some rules in order to protect their children from the harmful effects of computer games. Kiran (2011) stated that in his study in which it was researched that the effects of violence-based computer games on secondary school children, he stated that children should intervene in computer usage, control which programs are installed on their computers, and that the computer should be easily visible at home. Ünal and Durualp (2012) conducted a study to determine the effect of television on pre-school children and found that children should be accompanied by their parents while watching television, parents should ask children various questions, they should watch TV with their children, they should be careful about the time limitation of watching TV of their children and they should choose the suitable programs for their children which are suitable for their ages. The research has also revealed that the conclusion that watching TV of the children under the supervision of the parents is positive for the children (İnan, 2014; Kaya & Tuna, 2008; Kirik, 2013; Kirkorian et al, 2008; Warren, 2003). In their studies of Ciboçi, Kanižaj & Labaš (2014) stated that majority of the parents as 63.4% of them always and 29.5% of the parents frequently use media to prevent and protect their children from being exposed to inappropriate (especially violent and sexual content) media content by controlling them.

IMPLICATIONS

When the findings obtained from the research are examined; many of the parents stated that they only implemented the using of the media effectively by time limitation. Seminars can be organized for parents on the using of media and media.
As a result, parents can be informed about what can they do about using the media actively and effectively. It can be through these seminars and the parents can realize that there may be other ways to use media actively.

The study was conducted with parents who have children in preschool period in Ankara. Parents who have older children may also be aware of their awareness of media using can be searched. In addition, similar research can be done in different cities.

REFERENCES


Chapter 14

Research on the Relation between Spare Time Activity Duration and Negative Social Behavior of Preschoolers

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INTRODUCTION

Adaptation to life is one of the most important indicator of social and emotional development of preschoolers. Social skills take an important role in social-emotional development of the children. Social skills are abilities which allow children to communicate, solve problems, make decisions, make use of spare time, and initiate and maintain positive social relations with people around them. Development of social skills should create opportunities for children to learn social relations and spend time with other children (Şahin, 2010). Social skills consist of the environment in which the child is living and the effects of that environment on the child. Factors such as socio-cultural environment, socioeconomic level, parent-child interaction, parent educational status, gender, family type, sibling relations, peer relations, school-teacher relations and mass medium are effective on improving social skills (Koçak, 2012). In the absence of social skills, negative behaviors such as aggression are developed (Acun Kapkiran et al., 2006).

For children who have emotional and behavioral disorder, socials skills mean a set of behaviors which are important for and effective on the life of the individual. These behaviors are social competence, negative social behaviors and social adaptation. Negative social behaviors are the ones that prevent the child from socializing and let the child stay away from other individuals (Merrell, 1993). Emergence of negative social behaviors can be attributed to the fact that children are away from peer interaction (Kara & Çam, 2007) and that they can not socialize with the individual in their environment (Özcan, 2016). It is possible for an individual to exhibit positive social behavior and eliminate negative social behaviors with an environment designed according to development of her/him.

Preschool period is a critical term in which the children try to adopt their environment, make effort to be able to interact with the society they live in and start to improve basic skills and social behaviors. The child understands the world better and adopts the society easily and effectively with these skills and behaviors. Social, emotional, linguistic, cognitive and motor development and self-care ability improve depending on the interaction with adults and peers around (Arslan, 2007). In this period, if the child spends the time with computer and television rather than the peers and family, it would impact her/his development negatively. Today, especially children living in metropolises have difficulty in communicating with their peers except the family. It is known that the children growing up in an
environment that they don't interact with their peers, have deficiencies in social and emotional development. When it is considered that communication and interaction with the relatives and neighbors are not sufficient in metropolises, there is limited number of individuals that the children can interact with. Except these, children have to spend their time in home because of physical insufficiency of parks and playground and safety deficiency in neighborhood and streets. This lead to especially preschoolers become isolated and interest in computer/television games. So that, the children who are able to interact with their peers in open air, become passive players with computer/television games (Özcan, 2016). This situation is also reflected in the social behavior of children.

The way in which leisure time is spend in the preschool period is an important measure for the development and learning of the child, as well as for the positive contribution to the development of the child's social skills (Gilligan, 2000) and affect the adult life of the child (Lager, 2016). Preschool children spend a part of their day in educational institutions. The remaining period is the time they spend as leisure activities (Lupu et al., 2013).

The most common activities in which children spend their leisure time are watching television, playing computer games, and spending time in the open air (Lupu et al., 2013). It is stated that children spend most of their time at home and on their own (Cherney & London, 2006), mainly because of the conditions of our era, while the children have spent their spare time with their parents and outdoor before the 21st century (Ying, 2003).

There is a lack of information and research on the long-term effects of exposure to media, technology and television screens (Sharkins et al., 2016). Studies conducted with pre-school children show that children spend most of their time sitting in pre-school institutions (Hinkley & Brown, 2014), while 5-year-old children spend their spare time watching TV at home (Xu et al., 2016). It has been stated that exposure to the screen has a negative effect on the parent-child interaction and disrupts the child's social-emotional development (Radesky & Christakis, 2016). With this study, it is possible to provide positive social behaviors for pre-school children by organizing activities that will enable children to obtain their rich experiences by determining activity periods of their leisure time.

From this point of view, it has been thought that examining the activity periods and negative social behaviors of pre-school children's leisure time will contribute to the development of social skills of the children in this period.

Considering all these factors, the aim of the research is to investigate the relation between the activity periods and the negative social behaviors of the preschool children's leisure time. In line with this general objective, the following questions were tried to be answered:

What is the average daily amount of time children spend on computers, in the open air and on television?

Do negative social behaviors of children differ significantly depending on their genders?

Do negative social behaviors of children differ significantly depending on their ages?
Do negative social behaviors of children differ significantly depending on their daily average time spent on computer?
Do negative social behaviors of children differ significantly depending on their daily average time spent in open air?
Do negative social behaviors of children differ significantly depending on their daily average time spent on watching television?

METHOD

Model of the research
In this study, it is aimed to determine the relationship between the duration of activities and the negative social behaviors of 48-72 months pre-school children's leisure time. For this purpose, relational screening model is used in the research as quantitative research methods. The relational screening model does not provide a true cause-and-effect relationship, but allows the prediction of the other when an alternative state is known.

Study group
The study group of the study was comprised of 214 children as 92 girls (48%) and 122 boys (57%), 48-72 months old, who attended pre-primary education institutions located in the provinces of Kağıthane and Bayrampaşa on the European side and from Kadıköy and Üsküdar on the Anatolian side of Istanbul in 2016-2017 academic year. Of the children, 42 (19.6%) were 4 years old, 87 (40.7%) were 5 years old and 85 (39%) were 6 years old.

Data collection tools

Information form
In the "Information Form" created by the researchers, includes the demographic characteristics of the children (gender, age, time spent by the child for TV / computer / outdoor).

Negative Social Behavior Scale
School Social Behavior Scales was developed by Kenneth W. Merrell in 1993 in accordance with the five-point Likert model, allowing classroom teachers or other teachers in the school to assess students in the pre-primary and primary school years. The scales are composed of sixty five items totally. Scale is comprised of two forms as Form A: Social Competence and Form B: Negative Social Behaviors. There are thirty-two items on three subscales in "Social Competence Scale", as "Relationship between Individuals" (fourteen items), "Self-Control Ability" (ten items) and "Academic Skills" (eight items). In the "Negative Social Behavior Scale" there are thirty-three items collected on three subscales: "Aggressor-Nervous" (fourteen items), "Antisocial-Aggressive" (ten items) and "Destructive-Demanding" (nine items). The scale was adopted to Turkish by Yukay-Yüksel (2009). In the adaptation study, the data obtained from the student and the teacher were obtained from the analysis of linguistic equivalence, item total, item residual analysis, confirmatory factor analysis and criterion validity of the "School Social Behavior Scales" (SSBS). Within the scope of this study, "Negative Social Behavior Scale"
which is the subscale of "School Social Behavior Scale" was used.

Two scales in the original form of SSBS and Cronbach α fold for each subscale were calculated. The Cronbach α reliability coefficients obtained from the subscales ranged from .94 to .98. Reliability values between .91 and .98 were obtained from Cronbach α, Spearman Brown and Guttman Split-Half techniques. Reliability values between .91 and .98 were obtained from Cronbach α, Spearman Brown and Guttman Split-Half techniques. The Cronbach's alpha coefficient for the subscale of the "Social Social Behavior Scale" of the School Social Behavior Scale used in this study was calculated as .97.

**Data collection and analysis**

In the process of data collection, permission was first obtained from Istanbul Provincial Directorate of National Education, then to pre-school institutions selected in accordance with easy accessibility principle, and after the necessary permission was obtained from school principals, it started to be applied. The "Information Form" used in the scope of the study was delivered to the parents through the teachers. The "Negative Social Behavior Scale" for the same child was filled in by the teacher after the forms filled in by the parents who participated in the study on a volunteer basis.

The data of the study were analyzed by SPSS 20.0 program. Before going into the analysis of the research data, deficiencies and mistakes in the dataset were determined and necessary corrections were made.

**RESULTS**

<table>
<thead>
<tr>
<th>Average time per day</th>
<th>Computer</th>
<th>Outdoor</th>
<th>TV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>0-1 Hour</td>
<td>101</td>
<td>56.4</td>
<td>88</td>
</tr>
<tr>
<td>1-2 Hour</td>
<td>49</td>
<td>27.4</td>
<td>82</td>
</tr>
<tr>
<td>2-3 Hour</td>
<td>19</td>
<td>10.6</td>
<td>26</td>
</tr>
<tr>
<td>3 Hours and over</td>
<td>10</td>
<td>5.6</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>179</td>
<td>100</td>
<td>206</td>
</tr>
</tbody>
</table>

According to Table 1, 56.4% of the 179 children who are PCs from pre-school children participated in the research were 0-1 hours per day, 27.4% 1-2 hours, 10.6% 2-3 hours and 5.6% spend 3 hours and more on computer during leisure time.

Of the 206 children who were found to spend their free time in the open air, 42.7% had a daily average of 0-1 hours, 39.8% 1-2 hours, 12.6% 2-3 hours and 4.9% 3 hours and over.

Of the 200 children who spend their free time watching television, 19% are watching 0-1 hours a day, 44% 1-2 hours, 27% 2-3 hours and 10% 3 hours a day.
Table 2: T-Test Results According to Gender Variable of Total Scores Received by Children on the Negative Social Behavior Scale

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Avr</th>
<th>S.S.</th>
<th>S.D.</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girl</td>
<td>92</td>
<td>48.6</td>
<td>19.854</td>
<td>212</td>
<td>-2.823</td>
<td>.005*</td>
</tr>
<tr>
<td>Boy</td>
<td>122</td>
<td>57.5</td>
<td>24.654</td>
<td>212</td>
<td>2.823</td>
<td>.005*</td>
</tr>
</tbody>
</table>

*p<.05

When Table 2 is examined, it is seen that the scores obtained from the Negative Social Behavior Scale differ significantly from the gender variable and the scores of boys are higher than girls.

Table 3: Anova Results According to Age Variable of Total Scores Received by Children on the Negative Social Behavior Scale

<table>
<thead>
<tr>
<th>Age Level</th>
<th>N</th>
<th>X</th>
<th>Sd</th>
<th>Source of Variance</th>
<th>Sum of squares</th>
<th>Sd</th>
<th>Squares Average</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years-old</td>
<td>42</td>
<td>62.1</td>
<td>25.3</td>
<td>Inter-groups</td>
<td>5030.048</td>
<td>2</td>
<td>2515.024</td>
<td>4.891</td>
<td>.008*</td>
</tr>
<tr>
<td>5 years-old</td>
<td>87</td>
<td>54.3</td>
<td>25.5</td>
<td>Intra-groups</td>
<td>108506.812</td>
<td>211</td>
<td>514.250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 years-old</td>
<td>85</td>
<td>53.7</td>
<td>17.6</td>
<td>Total</td>
<td>113536.860</td>
<td>213</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total 214 53.7 23.0

*p<.05

When Table 3 is examined, it is seen that children's scores from the negative Social Behavior Scale differ significantly by age (p <.05). The groups were compared with each other to determine which group they were in. Tukey Test was performed by determining that the data were homogeneously distributed. The result is presented in Table 3.1.

Table 3.1: Tukey Test Results According to Age Variable of Total Scores Received by Children on the Negative Social Behavior Scale

<table>
<thead>
<tr>
<th>(I) Age</th>
<th>(J) Age</th>
<th>Average Difference (I-J)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years-old</td>
<td>5 years-old</td>
<td>7.72824</td>
<td>.168</td>
</tr>
<tr>
<td></td>
<td>6 years-old</td>
<td>13.28375*</td>
<td>.006</td>
</tr>
<tr>
<td>5 years-old</td>
<td>4 years-old</td>
<td>-7.72824</td>
<td>.168</td>
</tr>
<tr>
<td></td>
<td>6 years-old</td>
<td>5.55551</td>
<td>.245</td>
</tr>
<tr>
<td>6 years-old</td>
<td>4 years-old</td>
<td>-13.28375*</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>5 years-old</td>
<td>-5.55551</td>
<td>.245</td>
</tr>
</tbody>
</table>

*p<.05

When Table 3.1 is examined, it is seen that the scores obtained from the Negative Social Behavior Scale differ as.05 between 4 and 6 years old children. According to this, it was determined that the children in the 4-year-old group had
higher scores than the children in the 6-year-old group.

**Table 4**: Anova Results Based on Daily Average Computer Usage Time Variance of Total Points Scored by Children on the Negative Social Behavior Scale

<table>
<thead>
<tr>
<th>Age Level</th>
<th>N</th>
<th>X</th>
<th>Sd</th>
<th>Source of Variance</th>
<th>Sum of squares</th>
<th>Sd</th>
<th>Squares Average</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 Hour</td>
<td>101</td>
<td>50.5</td>
<td>21.2</td>
<td>Inter-groups</td>
<td>4934.370</td>
<td>3</td>
<td>1644.790</td>
<td>3.119</td>
<td>.027*</td>
</tr>
<tr>
<td>1-2 Hour</td>
<td>49</td>
<td>51.4</td>
<td>22.0</td>
<td>Intra-groups</td>
<td>92282.457</td>
<td>175</td>
<td>527.328</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3 Hour</td>
<td>19</td>
<td>67.3</td>
<td>34.8</td>
<td>Total</td>
<td>97216.827</td>
<td>178</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Hours and over</td>
<td>10</td>
<td>46.9</td>
<td>15.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>179</td>
<td>52.3</td>
<td>23.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

According to the table, the scores of 179 children using computer from 214 children were significantly different according to the variables of negative Social Behavior Scale (p <.05). The groups were compared with each other to determine which group they were in. Tukey Test was performed by determining that the data were homogeneously distributed. The result is presented in Table 4.1.

**Table 4.1**: Tukey Test Results Based on Daily Average Computer Usage Time Variance of Total Points Scored by Children on the Negative Social Behavior Scale

<table>
<thead>
<tr>
<th>(I) Duration</th>
<th>(J) Duration</th>
<th>Average Difference (I-J)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 Hour</td>
<td>1-2 Hour</td>
<td>-.96444</td>
<td>.995</td>
</tr>
<tr>
<td>0-1 Hour</td>
<td>2-3 Hour</td>
<td>-16.81084*</td>
<td>.020</td>
</tr>
<tr>
<td>0-1 Hour</td>
<td>3 Hours and over</td>
<td>.96444</td>
<td>.995</td>
</tr>
<tr>
<td>1-2 Hour</td>
<td>2-3 Hour</td>
<td>-15.84640</td>
<td>.055</td>
</tr>
<tr>
<td>1-2 Hour</td>
<td>3 Hours and over</td>
<td>4.56939</td>
<td>.940</td>
</tr>
<tr>
<td>2-3 Hour</td>
<td>0-1 Hour</td>
<td>16.81084*</td>
<td>.020</td>
</tr>
<tr>
<td>2-3 Hour</td>
<td>1-2 Hour</td>
<td>15.84640</td>
<td>.055</td>
</tr>
<tr>
<td>2-3 Hour</td>
<td>3 Hours and over</td>
<td>20.41579</td>
<td>.108</td>
</tr>
<tr>
<td>3 Hours and over</td>
<td>0-1 Hour</td>
<td>-3.60495</td>
<td>.965</td>
</tr>
<tr>
<td>3 Hours and over</td>
<td>1-2 Hour</td>
<td>-4.56939</td>
<td>.940</td>
</tr>
<tr>
<td>3 Hours and over</td>
<td>2-3 Hour</td>
<td>-20.41579</td>
<td>.108</td>
</tr>
</tbody>
</table>

*p<.05

When Table 4.1 is examined, there is a difference of .05 between 0-1 hours and 2-3 hours of computer time on the scores of Negative Social Behavior Scale. According to this, it was determined that children who use computers on average 2-3 hours a day have higher scores than children who use 0-1 hours.
Table 5: Anova Results According to the Daily Average Time Variance Spent on the Outdoor Scores of Children's Negative Social Behavior Scores

<table>
<thead>
<tr>
<th>Age Level</th>
<th>N</th>
<th>X</th>
<th>Sd</th>
<th>Source of Variance</th>
<th>Sum of squares</th>
<th>Sd</th>
<th>Squares Average</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 Hour</td>
<td>88</td>
<td>50.3</td>
<td>20.3</td>
<td>Inter-groups</td>
<td>5385.021</td>
<td>3</td>
<td>1795.007</td>
<td>3.923</td>
<td>.009*</td>
</tr>
<tr>
<td>1-2 Hour</td>
<td>82</td>
<td>52.3</td>
<td>19.7</td>
<td>Intra-groups</td>
<td>92429.935</td>
<td>202</td>
<td>457.574</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3 Hour</td>
<td>26</td>
<td>55.5</td>
<td>22.4</td>
<td>Total</td>
<td>97814.956</td>
<td>205</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Hours and over</td>
<td>10</td>
<td>74.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td>52.9</td>
<td>21.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

According to the table, 206 children who spent time outdoors out of 214 children were significantly different according to the variables of negative social behavior scale scores compared to the mean time spent outdoors (p <.05). The groups were compared with each other to determine which group they were in. A homogeneous distribution of the data was determined and a Tukey Test was conducted. The result is presented in Table 5.1.

Table 5.1: Tukey Anova Results According to the Daily Average Time Variance Spent on the Outdoor Scores of Children's Negative Social Behavior Scores

<table>
<thead>
<tr>
<th>(I) Duration</th>
<th>(J) Duration</th>
<th>Average Difference (I-J)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 Hour</td>
<td>1-2 Hour</td>
<td>-1.93154</td>
<td>.936</td>
</tr>
<tr>
<td>0-1 Hour</td>
<td>2-3 Hour</td>
<td>-5.17920</td>
<td>.699</td>
</tr>
<tr>
<td>0-1 Hour</td>
<td>3 Hours and over</td>
<td>-24.00227*</td>
<td>.005</td>
</tr>
<tr>
<td>1-2 Hour</td>
<td>0-1 Hour</td>
<td>1.93154</td>
<td>.936</td>
</tr>
<tr>
<td>1-2 Hour</td>
<td>2-3 Hour</td>
<td>-3.24765</td>
<td>.907</td>
</tr>
<tr>
<td>1-2 Hour</td>
<td>3 Hours and over</td>
<td>-22.07073*</td>
<td>.013</td>
</tr>
<tr>
<td>2-3 Hour</td>
<td>0-1 Hour</td>
<td>5.17920</td>
<td>.699</td>
</tr>
<tr>
<td>2-3 Hour</td>
<td>1-2 Hour</td>
<td>3.24765</td>
<td>.907</td>
</tr>
<tr>
<td>2-3 Hour</td>
<td>3 Hours and over</td>
<td>-18.82308</td>
<td>.087</td>
</tr>
<tr>
<td>3 Hours and over</td>
<td>0-1 Hour</td>
<td>24.00227*</td>
<td>.005</td>
</tr>
<tr>
<td>3 Hours and over</td>
<td>1-2 Hour</td>
<td>22.07073*</td>
<td>.013</td>
</tr>
<tr>
<td>3 Hours and over</td>
<td>2-3 Hour</td>
<td>18.82308</td>
<td>.087</td>
</tr>
</tbody>
</table>

*p<.05

When Table 5.1 is examined, there is a difference of .05 between 0-1 hours and 2-3 hours of computer time on the scores of Negative Social Behavior Scale. According to this, it was determined that children who use computers on average 2-
3 hours a day have higher scores than children who use 0-1 hours.

**Table 6:** Anova Results Based on Daily Average Watching Television Time Variance of Total Points Scored by Children on the Negative Social Behavior Scale

<table>
<thead>
<tr>
<th>Age Level</th>
<th>N</th>
<th>X</th>
<th>Sd</th>
<th>Source of Variance</th>
<th>Sum of squares</th>
<th>Sd</th>
<th>Squares Average</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 Hour</td>
<td>38</td>
<td>57.3</td>
<td>20.7</td>
<td>Inter-groups</td>
<td>794.076</td>
<td>3</td>
<td>264.692</td>
<td>476</td>
<td>.699</td>
</tr>
<tr>
<td>1-2 Hour</td>
<td>88</td>
<td>53.7</td>
<td>24.4</td>
<td>Intra-groups</td>
<td>108988.879</td>
<td>196</td>
<td>556.066</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3 Hour</td>
<td>54</td>
<td>51.4</td>
<td>25.9</td>
<td>Total</td>
<td>109782.955</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Hours and over</td>
<td>20</td>
<td>53.7</td>
<td>17.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>53.7</td>
<td>23.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

In Table 6, it is seen that the scores of the 200 children who were found to watch TV during their leisure time among the 214 children in the study group did not differ significantly from the negative average scores of the Social Behavior Scale compared to the daily average TV watching time variable.

**CONCLUSION AND DISCUSSION**

Findings obtained from the study are discussed in various studies and related literature and the results of the study are discussed.

According to the results of the research, 56.4% of the 179 children who participated in the research in pre-school children spend 0-1 hours per day on the computer. Akçay & Öztebe (2012) found that children play computer games on average of 0.53 ± 0.53 hours on weekdays and 1.62 ± 1.56 hours on weekends as a result of their work with 4-6 year old children. Veldhuis et al. (2014) found that children in the 5-year-old group with 3067 children attained the results of more than 30 minutes of computer day-to-day work.

Of the 206 children who were determined to spend their free time in the open air, 42.7% spend 0-1 hours outdoor time per day. Cleland et al. (2010) found that as the years after the longitudinal study of 421 children in the age group of 5 to 5 years, children spend less time in the open air. Henderson et al. (2015) found that 14% of the time they were awake when they were working with 389 children aged 3-5 years outdoors. Hinkley et al. (2017) found that children spend an average of 120 minutes outdoors per day in their work with pre-school children.

Of the 200 children who spent their free time watching television, 44% watched television an average of 1-2 hours a day. Cox et al. (2012) conducted a study with 135 pre-school children aged 2-6 years, and found that children spent an average of 90 minutes on television each day. In the survey conducted by Altunkılıç (2014), it was revealed that most of the children between the ages of 1-6 watched television for two hours or more. In the study conducted by Turan (2016), the
weekly and weekend television viewing averages of pre-school children between 36-72 months were found to be 3 hours.

As a result of the study, negative Social Behavior Scale scores were found to be significantly different according to gender, and boys' scores were higher than girls. There are studies showing that girls have higher social skills than boys of the same age (Leanne Findlay & Anton Miller, 2014). There are also studies that show that boys have more aggressive behaviors including negative social behaviors than girls (Karaca et al., 2011; Uysal & Dinçer, 2013). With this information, it can be said that the result obtained in the study supports each other.

As a result of the study, negative Social Behavior Scale scores differ as .05 between 4 and 6 years old children. According to this, it was determined that the children in the 4-year-old group had higher scores than the children in the 6-year-old group. When the literature is examined, it is seen that the children in the 4-year-old group should not be separated from their benevolent behavior and as the age progresses, social cohesion increases (Corsaro, 2011, Yörükoğlu, 2004). With this information, it can be said that the result obtained in the study supports each other.

Among the children who participated in the study and who played computer during the day, there was a difference of 0.05 between 0-1 hours and 2-3 hours of computer time on the scores obtained from the negative Social Behavior Scale. According to this, it was determined that children who use computers on average 2-3 hours a day have higher scores than children who use 0-1 hours. Karuppiah (2015) worked with 235 pre-school children to investigate whether their children in this age group had an effect on the behavior of computer games. As a result of the study, it was found that computer games positively posed a risk to children in terms of their physical and social development, they had an effect on negative behaviors and habits and adversely affected their academic development. In a survey of 179 children aged 5 years in South Korea (Seo et al., 2011), the relationship between computer addiction and social emotional development of children was examined and the level of social emotional development of children with high levels of computer addiction was low. In addition, Clements & Sarama (2003) point out that computer and technological tools create a social environment that is more active than traditional games and gaming environments, thus providing positive support for children's social development. Pre-school children may not be careful about the contents of games while they spend time on computer, preferring to play with fear/violence (Akçay & Özcebe, 2012).

As a result of the study, there is a difference of .05 between 0-1 hours and 2-3 hours of outdoor activity on the scores of Negative Social Behavior Scale. According to this, it was determined that the children who spent 2-3 hours a day in outdoor time had higher scores than the children who spent 0-1 hours. Despite the presence of a study (Teychenne et al., 2008) that suggests that the probability of entering depression increases as the time spent outdoors increases, the extreme increase in out-of-season outcome can lead to some negative behaviors. Gülay (2009) studied 400 children from 4-5 age group within the scope of study which aims to examine various variables affecting social positions of 5-6 year old children.
and their relations with each other. Among the results of the study, as the level of extreme mobility of the children in the sample group increased, the levels of aggression, fear-anxiety, exclusion and non-social behavior increased and social behavior levels aimed at helping others decreased. In addition, there are studies that have found that physical activities in the pre-school period outdoors do not significantly affect children's social emotional competence (Griffiths et al., 2010; Hinkley et al., 2017).

As a result of the study, there was no statistically significant difference between the average daily TV watching times of the children and the scores they got from the scale. Similar to this conclusion, Mistry et al. (2007) conducted a survey of 5565 children from birth to 5.5 years of age. According to reports the parents reported that children started to watch television from 30 months of age and they watched television on average 2 hours per day during this period. When they reached 5.5 years of age, 41% of them found that they had television in the bedrooms and that they watched television for about 2 hours per day. With these findings, it is concluded that there is no meaningful difference between children's television watching time and behavioral and social skills. Kılıç (2012) did not find any significant difference in antisocial behaviors of children compared to the duration of television watching in the study conducted on preschool children between 60-72 months. Huang & Lee (2009) investigated the effects of television watching time of 6-7 years old children aged 8-9 years and negative social behavior of the same children aged 8-9 years in a longitudinal study conducted by 2770 children. According to the findings of the study, there was no significant difference between the television viewing times and negative social behaviors. In another study (Akçay & Özcebe, 2012), as a result of increasing weekday television watching time of pre-school children between 36-72 months, the positive social behavior of the children decreased and the physical and relational aggression behaviors increased. Taking all these results into account, it is thought that the types of programs they watch outside the period of television watching may be effective in increasing negative social behaviors in children.

**RECOMMENDATIONS**

According to the result of the research, there is a relation between the ways of evaluating the leisure time of pre-school children and the negative social behaviors. From this point of view, opportunities should be established to reduce the negative social behaviors of pre-school children and to enable them to spend their spare time social interaction with their peers.

In the study, pre-school period children's leisure time was mostly reached on the computer, across the TV screen, or outdoors. It is suggested that children should be supported in different activities, parents and teachers should be guiding children in this regard.

In the study, it was revealed that the pre-school period children had an increase in the number of hours they spent in computer and also increased their negative social behavior. Particularly, it is recommended to select activities with content appropriate for the age and development that will enable the child to be active,
interact with family members or peers at the computer.

As a result of the research, the score obtained from the Negative Social Behavior Scale was found to be 3 hours in the open air and higher in the children who spend time outdoors. Family and teachers need support to ensure that the children they spend in the open air are of a quality that will positively influence their social development.

This research, which examines the relationship between the forms of evaluating leisure time of pre-school children and their negative social behavior, can be conducted in different cities with different study groups and the results can be compared with each other.

Survey data were obtained using quantitative research methods. It would also be beneficial to conduct a variety of research using qualitative research methods.

Programs may be prepared to ensure that pre-school children have more time for their leisure time.

The habits of evaluating the leisure time of pre-school children can be determined using different measurement tools.

REFERENCES


Cox, R., Skouteris, H., Rutherford, L., Fuller-Tyszkiewicz, M., Dell'Aquila, D., & Hardy, L. L. (2012). Television viewing, television content, food intake,


of North America, 63(5), 827-839.
Chapter 15

The Effect of Perceptual, Emotional, and Cognitive-Based Creative Drama Education on Children’s Perspective-Taking Skills

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²Res. Assist.; Gazi University, Early Childhood Education Department, Ankara, Turkey

INTRODUCTION

Education taken by children in this period has increased development of their feelings, giving perspective, the power of perception and helped to develop these skills (Kupersmidt & Dodge, 2004). Drama provides to improve children’s limits in the learning. It creates an interactive environment since children can express their feelings and opinions. In drama, children change and increase their daily experiences by creating alternatives to themselves, their lives and worlds. When children deal with problems and decisions in drama, they obtain new information on the basis of previous information and experiences. In this way, it is possible to be permanent of information learned by children. And they can associate to daily life them. It is seen that creative drama education is one of the most efficient methods serving this purpose (Can Yaşar, 2015; Hendy & Toon, 2001; Köksal Akyol, 2003; McCaslin, 2006).

On the one hand children learn to use their five senses; on the other hand they learn to comprehend with a realistic point of view themselves and their environment by developing the capacity of observation. Besides they learn to be able to show empathy with different roles (Bozdoğan, 2003; Morgül, 2003). It is stated that children conceptualised on three fields taking perspective of others in the development psychology. The first of these is perceptual perspective taking skill. It has pointed out comprehension skill how other individuals see the world. The second one is cognitive perspective taking skill and expresses comprehension skill thoughts of other individuals. The last one is emotional perspective taking skill. It is related to comprehension skill having how other individuals feel and what kind of emotional experiences Kurdek & Rodgon, 1975; Moore, 1990; Şener, 1996). Individuals who have inference skill about psychological experiences and situations of other persons represent others. That is, thinking and feeling process like him/her putting oneself in someone else’s place is at the bottom of taking perspective. According to Kurdek and Rodgon (1975), individual not taking perspective of people in terms of perceptual, cognitive and emotional has not showed empathy and has been self-centered (Dökmen, 2009). Opinions and behaviours of children have also under the influence of self-centered (egocentric) thought in early childhood. They may not evaluate things according to perspective
of the others. When children are growing, their capacities develop by looking from his/her perspective and are aware of other individual’s feelings (Martin & Fabes, 2006).

As drama activities enable children to act out as somebody else or to switch the roles they take on, they create an opportunity to develop a more mature skill that is based on understanding others’ perspectives instead of a self-centered attitude (Bodrova & Leong, 2010; Fink, 1976; Önder, 2006). Therefore, perspective-taking skills are believed to be associated with drama, which is regarded as one of the most effective methods that individuals can use to express themselves as well as understanding others. While living as a community, individuals can benefit from drama activities to acquire perspective-taking skills which help them build positive social relationships with others. The aim of the present study was to investigate the effect of perceptual, emotional, and cognitive-based creative drama education programme on perspective taking skills of 5 year-old preschool children.

**METHOD**

**Research Design**
The study was carried out by using a pretest-posttest experimental design (Büyüköztürk et al., 2013).

**Research Sample**
The study group was composed of 28 preschool children (14 in the experimental group, 14 in the control group). Of all children in experimental and control groups, 53.6% were girls and 46.4% were boys and the mean age was 61 months (n=28). Convenience sampling method was utilized to create the study group (Johnson & Christensen, 2014). Determining the study group, it has been based on continuing preschool institution, participating as volunteer to the study and showing normal development characters of children.

**Table 1:** Average and Standard Deviation Values of Perspective-Taking Skill Scores of Experimental and Control Groups

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>X Avg</td>
</tr>
<tr>
<td>14</td>
<td>7.35</td>
</tr>
</tbody>
</table>

Table 1 show that the average of perspective-taking skill scores of experimental and control groups is close. On the purpose of determining whether both groups are similar in addition this finding has been compared pretest scores making Mann Whitney U test.

**Table 2, The Results of Mann Witney U Test on the Comparison of Pretest Scores of Children in Experimental and Control Groups**

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Rank Average</th>
<th>Rank Total</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>14</td>
<td>15.46</td>
<td>216.50</td>
<td>84.50</td>
<td>0.523</td>
</tr>
<tr>
<td>Control</td>
<td>14</td>
<td>13.54</td>
<td>189.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2 indicates that children’s pretest perspective-taking scores do not differ significantly by experimental and control groups. It is determined that experimental and control groups are similar to their perspective taking skills before the experiment when the results in Table 1 and Table 2 evaluate.

**Education Programme**

Before creating the “Perceptual Emotional and Cognitive-Based Creative Drama Education Programme”, related resources, statistics and indicators of the 2013 Preschool Education Programme of the Ministry of National Education regarding social-emotional and cognitive development were investigated. Creative drama activities were developed after establishing related statistics and indicators by considering children’s individual differences and developmental characteristics. Each session involved warm-up, impersonation, and assessment stages. This programme also included activities that applied the techniques such as movement game, pantomime, role-play, improvisation and creating games from stories. Relevant materials (pictures, picture cards, photographs, musical instruments, shapes made with boards, emotion cards, puppets, etc.) were prepared either beforehand or prepared with children during the activity (fig.1). It was included open-ended questions in order to share children’s’ feelings and opinions in evaluation phase of each session. In the later activity, products found out by children were kept in accordance with children’s allowances by writing the name and date of activity. Activities were planned for study group the way that they can use in routine education programme. And education programme which was implemented by teacher was taken in consideration. Each session was formed as maximum 60 minutes. After being prepared, the programme was sent to two educators specialized in creative drama. The “Perceptual, Emotional, and Cognitive-Based Creative Drama Education Programme” took its final form after necessary adjustments being made according to feedback received from the educators. The pictures related to the program materials are presented below.

![Program Material Pictures](image1.png)

**Figure 1: Program Material Pictures**

**Materials**

**Perspective-Taking Test.** In this study, children’s perspective-taking skills were determined by the “Perspective-Taking Test” developed by Kurdek and Rodgon (1975), and adapted to Turkish by Şener (1996). Test consists of three sub-tests. These are; “Perceptual Perspective Taking Test”, “Cognitive Perspective Taking Test” and “Emotional Perspective Taking Test”. It has been also done validity and reliability of the test by Akın (2002). In the validity and reliability
study, Akın (2002) found as r=.7749 internal consistency of Perceptual Perspective Taking test. It is determined that test-retest consistency is r=.60. It is determined that Cognitive Perspective Taking Test internal consistency is r=.8457, test-retest consistency isr=.45. It is found that reliability of scale for Emotional Perspective Taking Test is r=.7673 and test-retest consistency is r=.60. Finally, it is specified that test is conformed to measure 4-5 years children’s perceptual, cognitive and emotional perspectives. Tests have been carried out individually to children by the researcher and practice for each child has lasted 15-20 minutes.

**Personal Information Form.** This form, created to determine the children’s demographic characteristics, is composed of questions on the children’s age, gender, and their mothers’ education level.

**Procedure:**

The Perceptual, Emotional, and Cognitive-Based Creative Drama Education Programme was carried out in 2016-2017 education year spring semester in two groups of a preschool in Ankara, which was affiliated with the Ministry of National Education.

One group was taken as experimental group and the other group was taken as control group. For pretest implementing, children’s school in the study group was visited and gotten permission in written. Before perceptual, emotional and cognitive-based creative education programme was implemented, children, their teachers and families were informed about the study. These two groups were assigned as experimental group and control group and in the second week of February 2017, the Perspective-Taking Test was performed in children as a pretest. The application began in the February 2017 and ended in the April 2017. The perceptual, emotional, and cognitive-based creative drama education programme was applied to the experimental group two times a week for a period of eight weeks. Meanwhile, the teacher of the control group continued the activities within his/her plan. At the end of the application, children in experimental and control groups undertook the final tests in the fourth week of April 2017. Some pictures of the application process of the “Perceptual, Emotional, and Cognitive-Based Creative Drama Education Programme” are presented below (fig.2).
Figure 2: Program Process Pictures

Data Analysis
In this study, the collected data were analyzed through the SPSS 20.0 package program. Since the number of children was less than 30, Wilcoxon signed-rank test was used for within-group comparison, and Mann-Whitney U test was performed for between-group comparison, and the level of significance was determined as 0.05.

RESULTS
In this chapter, it has been situated findings obtained experimental and control groups’ pretest and posttest scores.

Figure 3: Experimental and Control Groups’ Average Pretest and Posttest Scores of Perspective-Taking Skills

It is seen that the perceptual, emotional, and cognitive-based creative drama education programme led to an increase in children’s perspective-taking skills ((x_{avg} perspective-taking skill (post-pre)= 2).

Table 3: Wilcoxon Signed-Rank Test Results of the experimental group’s pretest and posttest scores of the perspective-taking skill test

<table>
<thead>
<tr>
<th>Pretest-Posttest</th>
<th>n</th>
<th>Rank Average</th>
<th>Rank Total</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Ranks</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>3.22*</td>
<td>0.001**</td>
</tr>
<tr>
<td>Positive Ranks</td>
<td>13</td>
<td>7.00</td>
<td>91.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ties</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Based on negative ranks, **p<0.05
A significant difference was found in the experimental group’s perspective-taking skill test scores obtained before and after the experiment (z=3.22**, p<0.05).

Table 4: Wilcoxon Signed-Rank Test Results of the control group’s pretest and posttest scores of the perspective-taking skill test

<table>
<thead>
<tr>
<th>Pretest-Posttest</th>
<th>n</th>
<th>Rank Average</th>
<th>Rank Total</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative Ranks</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>3.002*</td>
<td>0.003**</td>
</tr>
<tr>
<td>Positive Ranks</td>
<td>11</td>
<td>6.00</td>
<td>66.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ties</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Based on negative ranks, **p<0.05

Table 4 shows that there is a significant difference between the control group’s perspective-taking skill test scores obtained before and after the experiment (z=3.002**, p<0.05).

Table 5. Mann-Whitney U Test Results of the Experimental and Control Groups’ Posttest Scores of the Perspective-Taking Skill Test

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Rank Average</th>
<th>Rank Total</th>
<th>U</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>14</td>
<td>19.00</td>
<td>266.00</td>
<td>35.00</td>
<td>0.002*</td>
</tr>
<tr>
<td>Control</td>
<td>14</td>
<td>10.00</td>
<td>140.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A significant difference was detected between perspective-taking skills of children participated in the education programme and those who did not (u=35.00; p<0.05).

Table 6. Mann-Whitney U Test Results of the Experimental and Control Groups’ Pretest and Posttest Difference Scores of the Perspective-Taking Skill Test

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Rank Average</th>
<th>Rank Total</th>
<th>U</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>14</td>
<td>17.64</td>
<td>247.00</td>
<td>54.00</td>
<td>0.035*</td>
</tr>
<tr>
<td>Control</td>
<td>14</td>
<td>11.36</td>
<td>159.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is seen that the rank average of difference scores of the experimental group is significantly higher than those of the control group (*p<0.05).

A significant difference was found in the experimental group’s perspective-taking skill test scores obtained before and after the experiment (z=3.22**, p<0.05).

DISCUSSION AND CONCLUSION

This study has consisted of 16 sessions and 86 activities. And in this study, effect of children’s perspective taking skills of perceptual, emotional and cognitive-based creative drama education programme given children at the age of 5 was investigated. And results are:

When children’s Perspective Taking Test pretest and posttest scores in experimental group have been analysed, it is determined that children’s scores are different in before and after education programme implemented (z=3.22**, p<0.05). In addition this finding, children’s Perspective Taking Test pretest and posttest scores in control group have been analysed, it is seen that the scores are different in before and after of experiment (z=3.002**, p<0.05). However, there is difference between children participating perceptual, emotional and cognitive-based creative drama education programme and children not participating it (p<0.05).
Besides, Mann-Whitney U Test has been done as to whether there is difference among Perspective Taking Test pre-test and post-test scores of children in experimental and control group. When analyzed results, rank average of difference scores of experimental group is significantly higher than those of the control group (*p<0.05). It is thought that Perceptual, Emotional and Cognitive-based Creative Drama Education Programme has an effect on highs of scores of experimental group. Şener (1996) found similar results with findings of this study in his study about effect of dramatic play and construction play to perspective taking skill at the age of 4-5 years. At the result of research, it was seen that developments were on perspective taking skills of children playing dramatic play and construction play. In other similar study, Akin (2002) examined whether perspective taking skill of children at the age of 6 years continuing to preschool was acquired by educational drama and was effective of family attitudes on skill acquisition. At the result of research, it was seen that educational drama activities had positive impact on perspective taking skills of children. It was also determined that scores of the control group have significantly increasing. This result that is, increasing on scores of control group has not been corresponded to expectations regarding this research. But, it is considered that this increasing can be reacted normally whereas Ministry of National Education suggesting perspective skill supporting activities for children in control group has implemented Preschool Education Programme (Meb, 2013).

In related researches (Fernandez, 2013; Pelletier & Astington, 2004), it has been indicated that children’s comprehension skill perspectives of others reflects children’s explaining skills. Children who developed perspective taking skills are more successful in telling characters in their narrations. Besides, story listening, telling and discussing activities have contributed to develop children’s comprehension skill of the others’ feelings and opinions (Nicolopoulou & Richner, 2007; Ratner & Olver, 1998). In this study, activities based making play with stories and self-expression skills have been included in perceptual, emotional and cognitive-based creative drama programme. In his study, Ünüvar (2006) found that Turkish Language Activities implementing children in experimental group have significantly increased children’s perspective-taking skills by analyzing effect to perspective-taking skill and expressive language levels of children continuing preschool education institutions of enriched Turkish Language activities.

In body of literature, it is reviewed with ‘false belief’ tests that children’s perspective-taking skills are different from oldest children and adults. And finally it has been proved to be different. A three years old child thinks that the other people have the same world information with him/her. At the age of 4-5 years, they start to consider someone’s information and understand to have different perspectives. These changes have been clarified with developments on children’s social interaction and communication with their adults and peers (Dunn & Brophy, 2005). Acting of children helps on acquiring a different perspective and afterwards returning their own perspective. Creative drama activities have ensured that children look someone’s perspective (Bredekamp, 2014). In this regard, information related to perspective-taking skills and creative drama education has parallels with
the finding of research.

At the end of the present research, it is believed that the Perceptual, Emotional, and Cognitive-Based Creative Drama Education Programme has an effect on the experimental group’s achieving higher scores. So, this reveals that the education programme has a positive impact on the development of children’s perspective-taking skills. To conclude, experiences provided for preschool children have an effect upon the development of perspective-taking skills. In this regard, drama activities can be used for acquiring perspective-taking skills to enable children to build positive relationships with others. As drama activities enable children to act out as somebody else and to switch the roles they take on, they provide an opportunity to develop a more mature skill that is based on understanding others’ perspectives rather than a self-centered attitude. In addition, preschool teachers can benefit from creative drama supported activities by including them in weekly plans. Also, future perceptual, emotional, and cognitive-based creative drama education programmes can be made more comprehensively by including family participation studies. So the impact of these practices can be enhanced by active participation of families.

REFERENCES
Chapter 16

How do Preschool Teachers Perceive the Emotional Intelligence? Teaching Practices and Emotional Intelligence in Early Childhood

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INTRODUCTION

Preschool settings are laboratories of life that allow children to develop social-emotional skills such as forming effective relationships with emotions, managing emotional experiences and responding pro-socially in the face of adversity (Bailey et al., 2013, p. 132). Development of Emotional Intelligence in children includes understanding, distinguishing and regulating emotions. Emotional Intelligence (EI) is defined by Mayer and Salovey (1997) as “perception of emotions, using emotions to facilitate thinking, understanding emotions and emotional information and regulating/managing emotions for emotional and cognitive development”.

EI is a competency composed of skills such as self-awareness (knowing oneself), adapting emotions to different circumstances and conditions, struggling in the face of adversity and adapting to change. The individuals that children identify themselves with and take as role models in using and developing EI are crucial for healthy adaptation to social life. While children identify themselves with their families at early ages, family is replaced by teachers as school life starts. Children observe and model preschool teachers’ behaviors and responses in making sense of and expressing emotions and providing emotional reactions at different circumstances (Ashiabi, 2000; Denham, Bassett & Zinsser, 2012; Morris et al., 2013).

According to Ashiabi (2000) teachers significantly influence children’s emotional development via modeling, coaching and conditioned responses. To begin with, teachers give intentional or unintentional messages via modeling about the nature and expression of emotions and regulation of positive-negative emotions. Secondly, teachers intend to create awareness by verbally expressing emotions at specific circumstances to point out obtained outcomes. Lastly, teachers affect children via their reactions and responses to children’s emotions and with interpretations and explanations in relation to children’s moods. When reactions and responses are appropriate to the specific circumstance in question, children will be able to make connections with how they feel; however, when reactions are negative and unrelated; no associations will be made (Ahn, 2005).

Daily instructional process in preschools includes many stressful and emotion-
filled experiences for children such as leaving their parents, sharing their toys and taking turns (Ahn, 2005). Therefore, the approaches and practices used by teachers in relation to EI should be composed of experiences that allow children to identify, understand and manage emotions. Hyson (1994) identifies the basic role of teachers as structuring the instructional setting in a manner to allow children manage their emotions and provide appropriate responses to the emotions of others. Routines that allow sharing of emotions, teachers’ smiling to children, effective touches and supportive words are considered as indicators of early childhood programs that focus on emotions (Ahn, 2005).

Supporting children’s EI starts with the significance and priority given to EI by teachers. It is reported that students taught by teachers who cannot manage their emotions reflect negative emotions to a bigger extent (Bracket & Katulak, 2007). It is found that teachers with higher EI have more job satisfaction, motivate children better, structure learning based on child-centered approaches and their students have increased EI and academic achievement. Hence, teachers’ awareness about the significance of EI is important to identify and adjust their personal development along with the instructional program, instructional setting and classroom management strategies in this direction and to support children’s social-emotional achievements and Learning outcomes (Öztürk & Engin Deniz, 2008; Önen, 2012; Arsenijević, Andevski, & Maljković, 2012; Ulutaş & Macun, 2016; Dolev & Leshem, 2017).

Although there are many studies in recent years on teachers’ EI levels and the factors that affect their EI, studies on teachers’ EI perceptions and the reflections of these perceptions on the program are insufficient.

In this context, the main purpose of this study was to determine preschool teachers’ views on EI. In line with this purpose, answers were sought to the questions listed below:

1. What are preschool teachers’ views on EI and its characteristics?
2. What are the practices undertaken by preschool teachers to support children’s EI?

METHOD

Research Model: This study was designed as a qualitative phenomenological study. Phenomenological research is interested in individuals’ experiences, perceptions and comprehensions about the phenomena they come across in their universe. While there are several methods to reveal how an individual understands a specific phenomenon, these methods usually include interviews composed of open-ended questions. Categories that reflect similarities and differences are generated from phenomenological research results and these categories are associated with one another (Çepni, 2012).

This study also utilized the interview technique to determine teachers’ views on EI and their instructional practices in relation to EI. Interview technique is a data collection technique used to learn about participants’ knowledge, thoughts, attitudes and behaviors on specific topics and the probable rationale behind these (Karasar, 2016: 210).
Study Group: The study was conducted with 15 voluntary preschool teachers employed in Trabzon province central district during 2016-2017 academic year. Among the participating teachers, one of the teachers was male, 14 were females; 13 teachers had B.A. degrees, 2 had M.A. degrees and 12 worked in independent preschools while 3 worked in nursery classes.

Data Collection Tools
The study was conducted by using the “Identification Form for Preschool Teachers’ Practices in Relation to EI”.

Identification Form for Preschool Teachers’ Practices in Relation to EI
This form, composed of 12 questions, was developed by the researchers to determine preschool teachers’ views on EI. Views of 3 experts in the field of social-emotional development were sought for interview questions and adjustments were made based on their suggestions before conducting the piloting with 2 preschool teachers. After piloting, the interview form with two sections was finalized. First section of the form consisted of personal information for participants and second section included questions to identify views on EI, characteristics of individuals with EI and what can be done to support EI.

Data Analysis
Content analysis, a qualitative data analysis method, was used in analyzing the data obtained in the study. The main purpose in content analysis is to reach concepts and relationships that can explain the data. In content analysis, similar data are combined around specific concepts and themes and organized and interpreted in a manner that the reader can understand (Şimşek & Yıldırım, 2011).

Researchers conducted a preliminary interview with the participants included in the sample and teachers were asked for appointment dates for the interview. Each teacher was interviewed for about 30 minutes and written and audio records were obtained. Interview records were transcribed and each teacher was coded as A, B, C, and D etc. Content analysis was conducted on interview documents and the results were interpreted.

FINDINGS
Teachers were first asked the following question to determine their views on EI: “What is EI in your opinion?”

Table 1: Definition of EI

<table>
<thead>
<tr>
<th>EI is;</th>
<th>f</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>6</td>
<td>G,J,K,M,H,O</td>
</tr>
<tr>
<td>...</td>
<td>3</td>
<td>A, B, E</td>
</tr>
<tr>
<td>...</td>
<td>3</td>
<td>C, D, N</td>
</tr>
<tr>
<td>...</td>
<td>1</td>
<td>F</td>
</tr>
<tr>
<td>...</td>
<td>1</td>
<td>I</td>
</tr>
</tbody>
</table>

Table 1 shows that preschool teachers defined EI as “understanding emotions, children’s emotions in the face of incidents and circumstances, understanding, perceiving, observing, assessing and evaluating the emotions of others in the environment, children’s communication with their surroundings and the ability to understand other living beings”. Teacher A and Teacher O expressed their views on EI as follows:

“In my opinion, EI is the emotions and behaviours that children feel in the face of incidents and circumstances such as crying, laughing, getting angry and getting irritated and it is the cause of these emotions and behaviours” (A).

“EI is a type of intelligence generated by an internal process formed by children’s understanding of themselves and of others” (O).

**Table 2: Characteristics of teachers with high EI**

<table>
<thead>
<tr>
<th>Teachers with high EI</th>
<th>f</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>have highly developed empathy skills.</td>
<td>14</td>
<td>A,B,C,D,E,G,H, I,J,K,L,M,N,O</td>
</tr>
<tr>
<td>value others.</td>
<td>7</td>
<td>D,G,H,I,J,M,O</td>
</tr>
<tr>
<td>can express themselves well.</td>
<td>7</td>
<td>E,F,J,K,L,M,N</td>
</tr>
<tr>
<td>are sensitive/tactful.</td>
<td>5</td>
<td>D,G,H,I,J</td>
</tr>
<tr>
<td>have high problem solving skills.</td>
<td>5</td>
<td>A,F,M,N,O</td>
</tr>
<tr>
<td>have high self-confidence.</td>
<td>3</td>
<td>E,F,N</td>
</tr>
<tr>
<td>are happy.</td>
<td>3</td>
<td>E,F,O</td>
</tr>
<tr>
<td>are outgoing and social.</td>
<td>3</td>
<td>B,C,M</td>
</tr>
<tr>
<td>are observant and detail oriented.</td>
<td>3</td>
<td>C,D,J</td>
</tr>
<tr>
<td>can adapt to their surroundings easily.</td>
<td>1</td>
<td>K</td>
</tr>
</tbody>
</table>

In Table 2, teachers cited the most common characteristics of teachers with high EI levels as “empathy, valuing others, having good communication skills, expressing themselves well, sensitivity/tactfulness, having good problem solving skills”. Teacher N and Teacher B expressed their views on the characteristics of teachers with high EI as follows:

“Individuals with high EI experience emotions on their own, solve their problems on their own, they exist on their own. They have highly developed strategies for coping with negative emotions” (N).

“These individuals have a special place in society. They are sought out and liked. Their views guide the society, they are leaders. They are the ones you always want to be by your side. They understand you, they have empathy skills” (B).

**Table 3: Benefits of having a teacher with high EI for children**

<table>
<thead>
<tr>
<th>Teacher with high EI for children;</th>
<th>f</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>are positive role models for children.</td>
<td>6</td>
<td>A,C,E,J,O,H</td>
</tr>
<tr>
<td>are aware of children’s development and their drawbacks.</td>
<td>5</td>
<td>F,I,L,L,N,O</td>
</tr>
<tr>
<td>support emotional awareness of children</td>
<td>4</td>
<td>B,D,M,O</td>
</tr>
<tr>
<td>care for children and their emotions.</td>
<td>4</td>
<td>G,J,M,N</td>
</tr>
<tr>
<td>Children who have Teacher with high EI;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>have higher communication skills</td>
<td>3</td>
<td>I,M,C</td>
</tr>
</tbody>
</table>
are more happier; they come to school with pleasure.  
have high self-confidence.  
learn to cope with negative emotions in a better way.  
feel safe.

According to teachers, the benefits of having a teacher with high EI for children are “being positive role models, awareness of children’s development, supporting for emotional awareness of children, caring for children and their emotions”. It is also stated children who have teacher with high EI can have higher communication skills, happiness and self-confidence. Teachers B, H and M expressed the following in relation to this question:

“... Children cannot decide which behaviors to display in which setting. Children come to us without knowing what emotions are, they come without the ability to decide how they feel. Teachers’ EI helps children to become aware of these emotions” (B).

“... Children (especially very young children) have pure love and commitment for us. They copy and practice whatever we do. We are important role models for them. Children will definitely learn the numbers, shapes, colors in the future but early ages are very important for the concepts of the emotional domain. Teachers should both be role models and teach children” (H).

“...Teachers, who care for whether children talk with them comfortably, whether they can communicate easily and whether have feelings of compassion, will guide children to these behaviors. These teachers do not educate students as individuals who are cognitively constrained in the classroom. Children do not think how they should act in specific situations, whether they should laugh or whether they should get angry. They will be aware of their emotions” (M).

Table 4: Adequacy of the National Preschool Program (MoNE 2013) in Terms of EI

<table>
<thead>
<tr>
<th>Adequacy of the Program</th>
<th>Reasons</th>
<th>f</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program adequately supports the development of EI, (f=13)</td>
<td>The program is flexible</td>
<td>8</td>
<td>D,E,G,H,I, J,N,O</td>
</tr>
<tr>
<td></td>
<td>Learning outcomes include EI</td>
<td>3</td>
<td>H,K,C</td>
</tr>
<tr>
<td></td>
<td>The program is child centered</td>
<td>2</td>
<td>F,J</td>
</tr>
<tr>
<td>Program does not adequately support the development of EI, it should be improved. (f=5)</td>
<td>The program has drawbacks in relation to values education</td>
<td>2</td>
<td>A,B</td>
</tr>
<tr>
<td></td>
<td>The Learning outcomes in social-emotional domains are limited</td>
<td>2</td>
<td>B,M</td>
</tr>
<tr>
<td></td>
<td>The Learning outcomes for different age groups are similar</td>
<td>1</td>
<td>M</td>
</tr>
</tbody>
</table>

When teachers were asked to evaluate MoNE 2013 Preschool Instructional Program in relation to EI, it was found that 13 teachers believed the program was adequate to support EI while 5 teachers found the program inadequate. Teachers who found the program adequate stated the flexibility and child centered nature of
the program as well as the inclusion of EI among Learning outcomes as their rationale.

Views of Teacher E and Teacher K, who found the program adequate in supporting EI, are below:

"In my opinion, the program is adequate in all domains. Since the program provides the teachers with freedom to do as they like, this assessment will change from one person to another. I believe that I care for EI and therefore I approach the program in this direction” (E).

“The program includes Learning outcomes in social-emotional domain. This program is a highly flexible and spiral program. Our program gives us every opportunity but (success) depends on how well teachers know the concepts and how they can integrate them in the program. I believe that each domain serves EI whether it is the cognitive domain or the psychomotor domain. Based on the method used by the teacher to reach the targets in the classroom, it is possible to develop children in all aspects with this program. The teacher is the key” (K).

Views of Teacher B and Teacher M, who found the program inadequate in terms of supporting EI, are provided below:

“Learning outcomes in social-emotional development are much fewer compared to those found in the cognitive domain. As a matter of fact, the abundance of learning outcomes in the cognitive domain is related to the expectations of the society. If we care for the emotional domain more, we will have higher number of learning outcomes in this domain as well” (B).

“There are 2 or 3 learning outcomes in the program in regards to emotions or EI: “Understanding the emotions of others, expressing emotions”. Therefore, we can see that the program does not include learning outcomes that focus on EI. Another problem is related to the fact that the learning outcomes are the same for a 3 year old child and a 5 year old child. Maybe I was unable to have that specific outcome with a 3 year old child but I could do it with a 5 year old child.

Table 5: Types of activities and materials used to support EI

<table>
<thead>
<tr>
<th>Activities</th>
<th>f</th>
<th>Teacher</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>No specific activities are undertaken</td>
<td>7</td>
<td>A,B,C,E,G,M,O</td>
<td>Emotion board (Expressions of emotions reflected on the face)</td>
</tr>
<tr>
<td>Play activities</td>
<td>1</td>
<td>J</td>
<td>Story books</td>
</tr>
<tr>
<td>Language activities in Turkish</td>
<td>1</td>
<td>H</td>
<td>Puppets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Emotion cube</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Magic words</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Costumes and accessories</td>
</tr>
</tbody>
</table>

What shall I do? How will a 3 year old child express herself? In my opinion, there should be learning outcomes and indicators based on age groups” (M).

In Table 5, many teachers (f=7) reported that they had no specific activities to
support EI and 6 teachers stated that they preferred drama activities. Teacher A and Teacher E expressed themselves in the following statements:

“I don’t plan the activities but it is as if they are planned. My main aim is not really EI but during the process, I place importance on children’s emotions…” (A).

“I don’t do activities specifically directed to EI. Rather, I have conversations with children when they arrive to school asking them how they are, what they did at the weekend and whether they had fun. After drama activities, I ask questions about the characters they personated focusing on how they felt and why they chose to act this way” (E).

In addition, it was identified that almost all teachers had emotion boards in their classrooms and had materials such as emotion cards, story books on emotions, puppets, emotion cube, magic words and drama materials. The majority of the teachers were found to believe that emotion boards are satisfactory in preschool education.

In regards to materials, Teacher C reported:

“We have an emotion banner for various emotional responses such as happy, sad and angry. In general everyone uses this banner to support EI. We do not have any other material. This is sufficient for preschool”.

Teacher D explained the materials for EI in the following statement:

“Paperboards with facial expressions such as smiley faces and crying faces and puppets, stories, animal figures, drama materials… Puppets and drama are very important to express emotion. Individuals are more comfortable (in drama) because they do not personate themselves; they express their emotions more comfortably”.

Table 6: Significant points that teachers place emphasis in activities that support EI

<table>
<thead>
<tr>
<th>Significant points</th>
<th>f</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning children’s thoughts by initiating conversations and asking questions</td>
<td>8</td>
<td>B,D,E,H,M,N, O,L</td>
</tr>
<tr>
<td>Focusing on understanding the emotions of others and showing empathy</td>
<td>5</td>
<td>A,B,M,N,O</td>
</tr>
<tr>
<td>Planning the activities by taking children’s emotional needs into consideration</td>
<td>5</td>
<td>C,D,E,H,L</td>
</tr>
<tr>
<td>Placing emphasis on making emotions concrete</td>
<td>5</td>
<td>F,G,H,J,K</td>
</tr>
</tbody>
</table>

Teacher stated that, during the activities directed to EI, they placed emphasis on learning about children’s thoughts by asking questions during conversations, pointing to the significance of understanding the emotions of others, planning the activities based on children’s needs and making emotions concrete. Teacher H and Teacher E respectively stated the following:

“I provide children with the opportunities especially to express themselves in front of the audience during the activities. I try to make the concepts concreter by using visuals. While reading a story, I ask questions like why is he (the character) angry, I wonder why is he laughing, in your opinion what did he find funny etc. My starting point is usually a shortcoming I have previously observed in the classroom or topics that the children should learn about” (H).

“I learn about children’s thought during conversations by asking questions. I
plan empowering activities for them by observing children. Sometimes different opportunities arise. For instance, a short while ago I started to hear slang in the classroom. Although I did not have politeness, eloquence and correct use of Turkish in my weekly plan; there was the need to focus on these issues. Hence, I adjusted my activities accordingly” (E).

Table 7: Methods of communication used to support children’s EI

<table>
<thead>
<tr>
<th>Methods of communication</th>
<th>f</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having regular conversations with children to share emotions</td>
<td>12</td>
<td>B,C,D,E,F,G,H,J,L,M,N,O</td>
</tr>
<tr>
<td>Providing children with opportunities to express themselves</td>
<td>9</td>
<td>C,F,G,H,I,L,M,N,O</td>
</tr>
<tr>
<td>Using empathic expression</td>
<td>9</td>
<td>A,B,D,F,H,I,M,N,O</td>
</tr>
<tr>
<td>Making children feel valued</td>
<td>8</td>
<td>D,E,F,J,K,M,N,O</td>
</tr>
<tr>
<td>Making eye contact while talking with children</td>
<td>7</td>
<td>C,D,E,F,G,I,L</td>
</tr>
<tr>
<td>Having children draw pictures when they do not wish to speak</td>
<td>2</td>
<td>G,L</td>
</tr>
</tbody>
</table>

Table 7 demonstrates that in order to support children’s EI, teachers initiate conversations and talk to children to learn their emotions, provide them with opportunities to express themselves, use empathic expression, make children feel valued and consider making eye contact important.

Table 8: Most frequently encountered emotional problems in children and solutions

<table>
<thead>
<tr>
<th>Problems</th>
<th>f</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression and violence</td>
<td>8</td>
<td>B,D,E,G,I,J,L,N</td>
</tr>
<tr>
<td>Disregarding rules</td>
<td>4</td>
<td>D,K,L,O</td>
</tr>
<tr>
<td>Inability to share</td>
<td>4</td>
<td>D,G,H,N</td>
</tr>
<tr>
<td>Technology addiction</td>
<td>4</td>
<td>B,J,N,O</td>
</tr>
<tr>
<td>Selfishness</td>
<td>4</td>
<td>A,B,D,O</td>
</tr>
<tr>
<td>Biting</td>
<td>3</td>
<td>D,H,O</td>
</tr>
<tr>
<td>Mocking</td>
<td>3</td>
<td>B,J,N</td>
</tr>
<tr>
<td>Confusing the emotions/inability to understand emotions</td>
<td>2</td>
<td>A,M</td>
</tr>
<tr>
<td>Shyness/timidity</td>
<td>2</td>
<td>C,F</td>
</tr>
<tr>
<td>Inability to accept different cultures</td>
<td>2</td>
<td>A,D</td>
</tr>
<tr>
<td>Fear of being ridiculed</td>
<td>1</td>
<td>M</td>
</tr>
<tr>
<td>Self-inadequacy in children due to the fact</td>
<td>1</td>
<td>A</td>
</tr>
</tbody>
</table>

Table 8: Most frequently encountered emotional problems in children and solutions

<table>
<thead>
<tr>
<th>Problems</th>
<th>f</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression and violence</td>
<td>8</td>
<td>B,D,E,G,I,J,L,N</td>
</tr>
<tr>
<td>Disregarding rules</td>
<td>4</td>
<td>D,K,L,O</td>
</tr>
<tr>
<td>Inability to share</td>
<td>4</td>
<td>D,G,H,N</td>
</tr>
<tr>
<td>Technology addiction</td>
<td>4</td>
<td>B,J,N,O</td>
</tr>
<tr>
<td>Selfishness</td>
<td>4</td>
<td>A,B,D,O</td>
</tr>
<tr>
<td>Biting</td>
<td>3</td>
<td>D,H,O</td>
</tr>
<tr>
<td>Mocking</td>
<td>3</td>
<td>B,J,N</td>
</tr>
<tr>
<td>Confusing the emotions/inability to understand emotions</td>
<td>2</td>
<td>A,M</td>
</tr>
<tr>
<td>Shyness/timidity</td>
<td>2</td>
<td>C,F</td>
</tr>
<tr>
<td>Inability to accept different cultures</td>
<td>2</td>
<td>A,D</td>
</tr>
<tr>
<td>Fear of being ridiculed</td>
<td>1</td>
<td>M</td>
</tr>
<tr>
<td>Self-inadequacy in children due to the fact</td>
<td>1</td>
<td>A</td>
</tr>
</tbody>
</table>
that parents do everything for them

Teacher C explained the significance of eye contact:

“In my opinion, the easiest and most effective ways to make the child feel valued are establishing eye contact and listening. When I have conversations with children by making eye contact, I see that they feel I value them”.

The majority of the teachers (f=8) reported the most common problem encountered in the classroom as aggression and violence. Other problems were also reported such as disregarding rules, inability to share, technology addiction, selfishness, biting, mocking, inability to identify emotions/confusing the encountered emotions, timidity, inability to accept different cultures, fear of being ridiculed and self-inadequacy due to the fact that parents do everything for them.

Teachers H, M and O expressed their views in the following statements:

“Children use violence to a serious extent and they enjoy it. Violence is a problem but enjoying violence is even a more serious problem. Especially the children who prefer to abstain from participating in activities, who have issues in expressing themselves and in starting, continuing and ending the communication process and who have shortcomings in social skills inflict violence on their friends” (H).

“Children have knowledge about emotions. They can answer correctly when they are presented with a sample visual and asked “In your opinion, what is this child feeling?” but they cannot answer when they are asked about what makes them happy, how they feel when they are sad and what they do when they feel sad. They can describe emotions but cannot identify with these emotions. Children do not know themselves, they do not know what they feel, what they like” (M).

“Many children have digital addiction. They tend to continuously talk about games, cartoons and series/shows on the computer or TV. In these programs, the people who disregard rules, who ridicule others always have the leading roles and they are liked. We decide on the classroom rules together with the children but the child learns from digital media that people who follow rules are not liked, they are alienated or the hero in a cartoon manages to undertake a good deed by disobeying rules and undertaking secret missions. When they see these examples, children do not want to follow rules because they learn that following rules is a bad thing” (O).

Explaining the reasons for emotions and reactions, verbal admonitions, unbiased and fair treatment of children, time outs, one on one communication and mediation to help children solve their problems are cited among the strategies used by teachers in supporting children’s EI. Teacher G reported the following in regards to strategies:

“Usually, I prefer mutual communication with the children. When they are on their own, they express themselves more comfortably... I try to establish eye contact. Sometimes I support them to draw when they do not want to talk. Children literally transfer their feelings on drawings. I have experienced that a child who continually scribbled and used the color black in his drawings had recently lost his grandfather. Or, I have seen explicit/remarkable incidents where children who
experience sibling jealousy do not draw their siblings or draw them too small or too large... Sometimes I yell at children, I use time out although I know it is not correct (to do that)’’.

Teacher J who encountered the situation that children in the classroom wanted to recreate the violent content in internet games with their classmates explained the solution that would be implemented:

“.... I have individual meetings with parents. We discuss together “what we should do, how to prevent this addiction, how to cope with violent behaviors generated from the games”. Then, when I converse with the children in the classroom, I talk about this problem as if it is something I have experienced or tell it as a story and we try to find a solution together”.

Table 9: Teachers’ needs to improve children’s EI

<table>
<thead>
<tr>
<th>Teachers need:</th>
<th>f</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminars/courses for teaching development</td>
<td>8</td>
<td>A,B,D,F,J,K,N,O</td>
</tr>
<tr>
<td>Seminars/courses for parents about developmental characteristics of their children</td>
<td>7</td>
<td>A,B,C,D,E,M,O</td>
</tr>
<tr>
<td>Materials</td>
<td>5</td>
<td>A,E,I,J,L</td>
</tr>
<tr>
<td>psychological counselors at schools</td>
<td>3</td>
<td>D,G,L</td>
</tr>
</tbody>
</table>

Table 9 shows that in order to improve children’s EI, teachers reported the need training seminars/courses for themselves (f=8), seminars/courses for parents about developmental characteristics of their children (f=7), materials (f=5) and psychological counselors at schools. Teachers B, D and K expressed their views as follows:

“Parents and teachers should be provided with training opportunities. Parents raise their children to be selfish and cruel. The training can include the following: “How to raise children? What are developmental characteristics? What to expect from children?” Teachers also need continual development. As time goes by, we become inadequate as well. Information does not stay valid by time. Training seminars that will keep us informed about innovations can be provided...” (B).

“Each school should have contact with an expert psychologist or guidance teacher. Because our training and knowledge are valid for some problems, while some problems need expertise. Right now we do not have this option. I learned about the theory of multiple intelligences a few years back at a seminar. Innovations, new practices in education like this will enable me to be more useful for children” (D).

“I would be very happy if we were given training on what is done abroad and what is happening in the field of preschool education. It is necessary to learn other practices in order to compare what we do” (K).

DISCUSSION AND CONCLUSION

Research findings point to the fact that preschool teachers’ definition of EI mostly centers on “understanding emotions” dimension and preschool teachers’ awareness on EI skills is limited. Previous studies drew attention to preschool teachers’ moderate knowledge levels in regards to EI (Jacobs, Kemp & Mitchell, 2008; Raj & Uniyal, 2016; Mehta, 2015). Also, the fact that the majority of
participants identified empathy as the characteristic of teachers with high EI levels demonstrates that preschool teachers regard EI as “understanding emotions”. EI is a comprehensive concept that includes basic skills such as identifying, understanding and managing emotions along with various other skills such as empathy, tolerance, motivation, regulation, goodness and sociality under each dimension. Since learning in young children is established on affective and emotional foundations, preschool teachers’ high awareness in relation to EI will enable them to support emotional learning outcomes in the program. Jacobs, Kemp and Mitchell (2008) also remarked that teachers try to explain EI solely with emotions. This study conducted with preschool teachers has a similar situation as well. The reason for this is believed to be related to the fact that the word “emotion” is included in the concept.

Preschool teachers defined the most common problems encountered in relation to EI as aggression and violence, disregarding rules, inability to share, internet/TV addiction and inability to accept different cultures. The findings obtained by Uysal, Altun and Akgün (2010) and Alisinanoğlu and Kesicioğlu (2010) also presented aggression, disregarding rules and inability to share as the most frequently encountered problems in preschool children. It was identified that, as a solution to problems, preschool teachers usually meet with parents and have conversations/talks with children. Uysal, Altun and Akgün (2010) reported that teachers used Type 1 punishments such as verbal admonitions, non-verbal warnings (eye contact, physical proximity) the most and yelling and preferred meeting with parents the least. It can be argued that teachers’ solutions in behavioral management are more reactional/reactive, external and momentary. Akgün, Yarar and Dinçer (2011) and Bulut and Iflaçoğlu (2007) also expressed that preschool teachers adopted the method of decreasing undesired behaviors by acting reactionally. However, in order to solve problems effectively, it is necessary to investigate the causes, make observations, cooperate with families and select the most appropriate learning strategy for children.

The study found that teachers preferred to have conversations/talks in communication and behavioral management. Ahn (2005) remarked that teachers provide responses such as directing children to verbally express emotions and ignoring. While it is possible that children will learn as a result of conversations, direct teaching is not effective and permanent. Limited language skills may cause social-emotional problems due to inability to express themselves comfortably (Ashiabi, 2000). Additionally, children with high self-esteem may directly express their emotions in front of the group but children with low self-esteem may abstain from expressing themselves and they may feel embarrassed (Brackett & Katulak, 2007). By using different strategies, methods can be found to help children express themselves more comfortably. For instance, games such as “as if”, puppets and stories can be used for sharing and managing emotions.

The study found shortcomings in terms of preschool teachers’ activity planning and material provision to support children’s EI. While it is possible to observe emotions, reasoning and identification may not always be possible for preschool children when specific emotions occur. Therefore, it is necessary to provide children with experiences with concrete materials and to ensure that they make
sense of emotions. The finding that materials were limited at schools and teachers reported lack of materials in interviews may be related to low EI awareness since no specially designed materials are required to support emotional skills, any materials can be easily designed and prepared.

Teachers reported that they needed support activities such as seminars/courses both for themselves and parents. Buchanan, Gueldner, Tran and Merrell (2009) also found that teachers who implemented social-emotional programs desired to receive consultancy services. Education requires constant improvement. Teachers’ need for updates and professional support should be regarded as a natural requirement to continue this improvement.

Based on the general assessment of the research findings, it can be argued that preschool teachers have limitations in their EI definitions and they should be supported with in-service training opportunities, seminars etc. in regards to activity planning, instructional settings, material preparation and use of classroom management strategies to support children’s EI.

Since data in this study were collected with face to face interviews, the study group only consisted of the teachers that were reached. Also, generalizability of data in qualitative research methods is another limitation of the study. It is suggested to conduct future studies with a higher number of teachers and to observe teachers’ practices.

In order to improve children’s EI levels, it is necessary to strengthen parents’ and teachers’ EI and to systematically support them. By preparing various training programs on EI and by providing theoretical and applied in-service training programs and courses, guidance can be provided as to how teachers may adapt EI to daily instructional processes. Based on teachers’ identification of the parental need for EI training, parents’ views on EI and ways to support their children in this area can be studied.

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Chapter 17

Examination of Emotional States of Children with Chronic Conditions by Picture

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INTRODUCTION

The prevalence of childhood illness has been increasing in the world and Turkey day by day. The illnesses such as cancer, diabetes, asthma, cardiac illnesses, epilepsy, phenylketonuria, thalassemia, hemophilia, cystic fibrosis and chronic renal impairment which require long-term treatment, care and surveillance are among the chronic illnesses which affect the children (Er, 2006; Fazlıoğlu et al., 2010; Gürsoy & Mercanoğlu, 2015). The childhood illnesses affect every child in different ways due to factors such as being acute or chronic, starting of symptoms, recurrence of illness, existence of a life threat, causing a permanent defect, hospitalization (İnal et al., 2008). The exposure degree of child to illness and hospitalization vary depending on the child’s age, cognitive enhancement, duration and type of the illness, previous experiences, being ready for hospitalization, attitude of family and cultural characteristics (Başbakkal et al., 2010). The illness-dependent problems and inadequacy adversely affect the social and emotional development of children since independence and peers are important for school-age children, specifically six-twelve-year-old ones. The child can stay away from social relationships to hide his/her inadequacy, experience the feelings of loneliness and isolation and feel diffidence, anger and rage (Törüner & Büyükönenç, 2012). Moreover, it is stated that the more frequent and the longer exacerbation stages of illness are, the higher necrophobia will be experienced. The despair, concerns for the future, depression, necrophobia and anger which arise along with the illness, are the most common fears and anxieties (Toros et al., 2002). The hospitalization of child adversely affects the growth and development of child as well as that it may lead to miscellaneous emotional and behavioral problems in the child. The hospitalization-oriented stress may cause the anxiety, depression, regression, unhappiness, apathy, hyperactivity, aggression and sleep disorders in the children. The mood swings such as concern, regression, anxiety, fear, etc. vary depending on the age and development level. The physical illnesses significantly affect the social adaptation of children. It is known that the illness and hospitalization of children, specifically at the school age, bring along the social adaptation problems (Başbakkal et al., 2010; Baykoç, 2006; İnal-Emiroğlu & Pekcanlar-Akay, 2008).

The picture is one of the tools which are used for establishing communication
with the children on whom social adaptation problems are observed and who suffer from an illness for a prolonged period, and which are supposed to get know the child. The picture is the out picture of child’s emotions and opinions (Tiels & Alen, 2005; Wong et al., 1995). The children, specifically preschool and school-aged ones, can express their emotions and opinions by picture, rather than words (Matsuri, 2005; Yavuzer, 2015). In this regard, the child pictures are an effective method which may be used for evaluating the emotional states of pediatric patients since they reflect the distresses and disorders of children (Evans & Reilly, 1996; Malchiodi, 2001). In the researches made, the miscellaneous drawing characteristics such as the human figures in the pictures of pediatric patients, showing the body parts exaggeratedly or missing and disconnected body parts which are unrelated, the disproportions with respect to the length of figures and reflecting the normal appearance exaggeratedly compared to pictures of other children in the same age group, were observed (Tiels & Alen, 2005; Driessnack, 2005). It is very significant to encourage the children with chronic conditions to express their emotions (Törüner & Büyükönenç, 2012). In the children who express their emotional states verbally in a more limited way compared to adults, the use of picture which is a projective method, is suggested (Clatworthy et al., 1999). The pictures drawn by the children with chronic conditions provide significant clues to examine their emotional states. In this research, it was aimed to investigate the emotional states of five-twelve years old children with chronic conditions who were undergoing a treatment in the pediatric services by picture depending on some variables.

MATERIALS AND METHODS

Research model

The research is a screening research made with the aim of investigating the emotional states of five-twelve years old children with chronic conditions who were undergoing an inpatient treatment, by picture based on some variables.

Research population

The research population consisted of 50 children in total as 20 females and 30 males at the age of five-twelve years who were hospitalized in the pediatric services in a state university in Ankara and received the diagnosis at least six months ago, and the pictures drawn by them.

Data collection tools

In the research, the “General Information Form” was used with the aim of determining the characteristics of children and their families. The pictures drawn by children were evaluated within the direction of Koppitz’s “Draw A Person” test and their emotional states were determined.

In the General Information Form, there were questions such as the age, gender, birth order, sibling number, class, illness, diagnosis age, hospitalization period, family type, mother’s and father’s age, educational background and occupation, employment status, income level.

The Koppitz’s Drawing Human Figure Evaluation (Draw A Person Test) is used for emotional states of five-twelve years old children. Koppitz examined the
human figure drawings with the aim of evaluating the emotional states of children. The articles belonging to emotional development have clinical validity and consist of 28 articles in total. These articles are classified in five subgroups such as impulsivity, feeling of insecurity/inadequacy, anxiety, shyness/timidity and anger/aggression and they were graded in the form of “available” or “non-available” based on the picture drawn by child (Koppitz, 1968; Koppitz, 1984).

Data collection

After receiving necessary permissions from institution, mothers-fathers and children, the children and mothers-fathers were acquainted, spent time together, communication was established and they were relieved. The “General Information Form” was implemented to mothers-fathers and children who accepted to participate in the study voluntarily. Then, the A4 paper, crayons consisting of 12 colors, pencil and eraser were given to children and they were requested to draw a human figure. The pictures drawn by the children were evaluated by three experts within the direction of Koppitz’s evaluation criteria. The research data were collected between the dates of October-December 2016.

Evaluation and analysis of data

The percentages and frequencies of sociodemographic attributes of children and their mothers-fathers who were included in the research, were given. Pursuant to Chi-Square and Fisher’s Exact tests, whether the emotional states of children determined based on the pictures drawn by them varied in terms of some variables or not, was determined. The consistency between experts was determined with Fleiss’s kappa coefficient. Accordingly, a poor level of coherence was determined in the subdimension of impulsivity (ƙ=0.329, p=0.012) while a very good level of coherence was determined in the subdimension of feeling of insecurity/inadequacy (ƙ=0.888, p=0.001), a good level of coherence was determined in the subdimension of anxiety (ƙ=0.630, p=0.001), a good level of coherence was determined in the subdimension of shyness/timidity(ƙ=0.737, p=0.001) and a moderate level of coherence was determined in the subdimension of anger/aggression (ƙ=0.490, p=0.001).

RESULTS

It was seen that 44% of children in the research were at the age of 8-10 years, 60% of them were males, 36% of them were the last child, 70% of them had one-three siblings, 42% of them were not going to school, the academic success of 46% was very good. It was determined that 56% of children’s mothers were at the age of 31-40 years, 38% of them were primary school graduates and 82% of them were not working while 56% of fathers were at the age of 31-40 years, 36% of them were high school graduates and 96% of them were working. It was found that 88% of children were living in the nuclear family, there were two-four individuals in the families of 48% and the families of 58% of children had subsistence level and below and 60% of them perceived their family’s income level as low. 52% of children were cancer (ALL and osteosarcoma), 34% of them received diagnosis between the age of six-eight years, 6-12 months and 37 months and more time
elapsed over receiving diagnosis for 32% and 46% of them hospitalized for one-five times, the siblings of 82% had no an illness and the alopecia had not observed in 58% of them.

Table 1: Test results for some variables of impulsivities of children in the research

<table>
<thead>
<tr>
<th>IMPULSIVITY</th>
<th>Available</th>
<th>Non-available</th>
<th>$\chi^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-7 years</td>
<td>14</td>
<td>37.8</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>8-10 years</td>
<td>17</td>
<td>45.9</td>
<td>5</td>
<td>38.5</td>
</tr>
<tr>
<td>11-12 years</td>
<td>6</td>
<td>16.3</td>
<td>7</td>
<td>53.8</td>
</tr>
<tr>
<td><strong>Academic Success</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>9</td>
<td>24.3</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>Very good</td>
<td>13</td>
<td>35.2</td>
<td>10</td>
<td>76.9</td>
</tr>
<tr>
<td>Not go to school</td>
<td>15</td>
<td>40.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Age of Receiving Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 years</td>
<td>8</td>
<td>21.6</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>3-5 years</td>
<td>10</td>
<td>27</td>
<td>1</td>
<td>7.7</td>
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<tr>
<td>6-8 years</td>
<td>13</td>
<td>35.2</td>
<td>4</td>
<td>30.8</td>
</tr>
<tr>
<td>9-11 years</td>
<td>6</td>
<td>16.2</td>
<td>7</td>
<td>53.8</td>
</tr>
<tr>
<td><strong>Period of Receiving Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-12 months</td>
<td>13</td>
<td>35.1</td>
<td>3</td>
<td>23.1</td>
</tr>
<tr>
<td>13-24 months</td>
<td>6</td>
<td>16.2</td>
<td>5</td>
<td>38.5</td>
</tr>
<tr>
<td>25-36 months</td>
<td>6</td>
<td>16.2</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>37 months and above</td>
<td>12</td>
<td>32.5</td>
<td>4</td>
<td>30.7</td>
</tr>
</tbody>
</table>

In the research, it was determined that there was impulsivity in 56.8% of males, 43.2% of children who were the last child, 70.3% of children having one-three siblings, 51.4% of children who were not cancer, 35.2% of children who received diagnosis at the age of six-eight years, 35.1% of children who received diagnosis six-twelve months ago and 45.9% of children who were hospitalized for one-five times. In the research, it was determined that there was impulsivity in the children of 69.2% of mothers in the age group of 31-40 years, 83.8% of mothers who were not working, 29.7% of high school graduate mothers, 56.8% of fathers at the age of 31-40 years, 97.3% of working fathers and 35.1% of high school graduate fathers (p>0.05).

At the end of analyses made, it was determined that there was a significant difference between the ages and academic successes of children in the research-going to school and their impulsivities (p<0.05). A higher impulsivity was observed in eight-ten years old children and the ones who were not going to school.

In the research, it was determined that there was lack of self-confidence/inadequacy in the 40% of five-seven years old children, 60% of males, 46.7% of ones who were last child, 66.7% of children who had one-three siblings and 40% of children who were not going to school. It was seen that there was lack of self-confidence/inadequacy in the half of children with and without cancer, 36.6% of the children who received diagnosis at the age of six-eight years, 33.3% of children who received diagnosis six-twelve months ago and more than 37 months ago and 36.7% of children who were hospitalized for one-five times and 16 times and above. In the research, it was determined that the lack of self-
confidence/inadequacy was higher in the children of half of mothers at the age of 31-40 years, 83.3% of working mothers, 26.7% of high school graduate mothers, whole of working fathers and 40% of high school graduate fathers (p>0.05).

At the end of analyses made, it was determined that the difference between the ages of fathers of children in the research and the lack of self-confidences/inadequacy (p<0.05). A higher level of lack of self-confidence/inadequacy was determined in the children of fathers at the age of 41 years and above.

Table 2: Test results for some variables of feelings of insecurity/inadequacy of children in the research

<table>
<thead>
<tr>
<th>FEELING OF INSECURITY/INADEQUACY</th>
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<th>Non-available</th>
<th>( \chi^2 )</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
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<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-7 years</td>
<td>12</td>
<td>40</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>8-10 years</td>
<td>11</td>
<td>36.7</td>
<td>11</td>
<td>55</td>
</tr>
<tr>
<td>11-12 years</td>
<td>7</td>
<td>23.3</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Age of Receiving Diagnosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 years</td>
<td>6</td>
<td>20</td>
<td>3</td>
<td>15</td>
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<tr>
<td>3-5 years</td>
<td>8</td>
<td>26.7</td>
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<td>6-8 years</td>
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<td>30</td>
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<tr>
<td>9-11 years</td>
<td>5</td>
<td>16.7</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>Period of Receiving Diagnosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-12 months</td>
<td>10</td>
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<td>30</td>
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<td>13-24 months</td>
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<td>25-36 months</td>
<td>5</td>
<td>16.7</td>
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<td>10</td>
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<tr>
<td>37 months and above</td>
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<td>33.3</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Father's Age</td>
<td></td>
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</tr>
<tr>
<td>31-40 years</td>
<td>13</td>
<td>43.3</td>
<td>15</td>
<td>75</td>
</tr>
<tr>
<td>41 years and above</td>
<td>17</td>
<td><strong>56.7</strong></td>
<td>5</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 3: Test results for some variables of anxieties of children in the research

<table>
<thead>
<tr>
<th>ANXIETY</th>
<th>Variable</th>
<th>Available</th>
<th>Non-available</th>
<th>( \chi^2 )</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Years</td>
<td>5-7 years</td>
<td>11</td>
<td>31.4</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td></td>
<td>8-10 years</td>
<td>15</td>
<td>42.9</td>
<td>7</td>
<td>46.6</td>
</tr>
<tr>
<td></td>
<td>11-12 years</td>
<td>9</td>
<td>25.7</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>Age of Receiving Diagnosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 years</td>
<td>8</td>
<td>22.9</td>
<td>1</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>3-5 years</td>
<td>8</td>
<td>22.9</td>
<td>3</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>6-8 years</td>
<td>11</td>
<td>31.3</td>
<td>6</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>9-11 years</td>
<td>8</td>
<td>22.9</td>
<td>5</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td>Frequency of Hospitalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5 times</td>
<td>16</td>
<td>45.7</td>
<td>7</td>
<td>46.7</td>
<td></td>
</tr>
<tr>
<td>6-10 times</td>
<td>4</td>
<td>11.4</td>
<td>4</td>
<td>26.6</td>
<td></td>
</tr>
<tr>
<td>11-15 times</td>
<td>3</td>
<td>8.6</td>
<td>1</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>16 times and above</td>
<td>12</td>
<td>34.3</td>
<td>3</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Employment Status of Father</td>
<td>Working</td>
<td>35</td>
<td><strong>100</strong></td>
<td>13</td>
<td>86.7</td>
</tr>
<tr>
<td></td>
<td>Not working</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>13.3</td>
</tr>
</tbody>
</table>

188
In the research, it was determined that there was anxiety in 42.9% of children in the age group of eight-ten years, 57.1% of males, 34.3% of children who were last child, 68.6% of children who had one-three siblings and 48.6% of children whose academic successes were very good. It was seen that there was anxiety in 51.4% of children who were cancer, 31.3% of children who received diagnosis at the age of six-eight years, 34.3% of children who received diagnosis more than 37 months and 45.7% of children who were hospitalized for one-five times. In the research, it was determined that there was anxiety in 57.1% of mothers in the age group of 31-40 years, 80% of mothers not working, 40% of primary school graduate mothers, 51.4% of fathers at the age of 41 years and above and 42.9% of high school graduate fathers (p>0.05).

It was determined that there was a significant difference between employment statuses of fathers of children in the research and anxieties of children (p<0.05). A higher level of anxiety was observed in entire of working fathers.

**Table 4:** Test results for some variables of shyness/timidities of children in the research

<table>
<thead>
<tr>
<th>SHYNESS/TIMIDITY</th>
<th>Available</th>
<th>Non-available</th>
<th>( \chi^2 )</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Years</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-7 years</td>
<td>14</td>
<td>35</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>8-10 years</td>
<td>19</td>
<td>47.5</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>11-12 years</td>
<td>7</td>
<td>17.5</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td><strong>Age of Receiving Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 years</td>
<td>7</td>
<td>17.5</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>3-5 years</td>
<td>9</td>
<td>22.5</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>6-8 years</td>
<td>14</td>
<td>35</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>9-11 years</td>
<td>10</td>
<td>25</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td><strong>Period of Receiving Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-12 months</td>
<td>14</td>
<td>35</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>13-24 months</td>
<td>9</td>
<td>22.5</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>25-36 months</td>
<td>4</td>
<td>10</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>37 months and above</td>
<td>13</td>
<td>32.5</td>
<td>3</td>
<td>30</td>
</tr>
</tbody>
</table>

In the research, it was seen that there was shyness in 57.5% of males, 40% of children who were last child, 70% of children who had one-three siblings, 45% of children whose academic successes were very good, 52.5% of children who were cancer, 35% of children who received diagnosis at the age of six-eight years, 35% of children who received diagnosis six-twelve months ago and 52.% of children who were hospitalized for one-five times. In the research, it was determined that there was shyness/timidity in children of 52.5% of mothers at the age of 31-40 years, 97.5% of working fathers and 42.5% of high school graduate children.

At the end of analyses made, it was determined that there was a significant difference between ages of children in the research and their shyness (p<0.05). A higher level of shyness/timidity was observed in children at the age of six-ten years.

In the research, it was determined there was anger and aggression in half of
children at the age of eight-ten years, 61.1% of males, half of children who were last child, 72.2% of children who had one-three siblings and half of children whose academic successes were very good. It was seen that there was anger in the half of children with and without cancer, 44.4% of children who received diagnosis at the age of six-eight years and half of children who were hospitalized for 16 times and more. In the research, it was determined that there was anger and aggression in the half of children of mothers at the age of 31-40 years, 88.9% of not working mothers, 27.8% of primary school and high school graduate mothers, half of fathers in the age group of 31-41 years and 41 years and above, entire of working fathers and 33.3% of high school and undergraduate fathers (p>0.05).

**Table 5:** Test results for some variables of anger/aggressions of children in the research

<table>
<thead>
<tr>
<th>Variable</th>
<th>Available</th>
<th>Non-available</th>
<th>( \chi^2 )</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Years</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-7 years</td>
<td>5</td>
<td>27.8</td>
<td>10</td>
<td>31.2</td>
</tr>
<tr>
<td>8-10 years</td>
<td>9</td>
<td>50</td>
<td>13</td>
<td>40.6</td>
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<td>11-12 years</td>
<td>4</td>
<td>22.2</td>
<td>9</td>
<td>28.1</td>
</tr>
<tr>
<td><strong>Age of Receiving Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 years</td>
<td>3</td>
<td>16.7</td>
<td>6</td>
<td>18.8</td>
</tr>
<tr>
<td>3-5 years</td>
<td>3</td>
<td>16.7</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>6-8 years</td>
<td>8</td>
<td>44.4</td>
<td>9</td>
<td>28.1</td>
</tr>
<tr>
<td>9-11 years</td>
<td>4</td>
<td>22.2</td>
<td>9</td>
<td>28.1</td>
</tr>
<tr>
<td><strong>Period of Receiving Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-12 months</td>
<td>5</td>
<td>27.8</td>
<td>11</td>
<td>34.4</td>
</tr>
<tr>
<td>13-24 months</td>
<td>3</td>
<td>16.7</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>25-36 months</td>
<td>6</td>
<td>33.3</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>37 months and above</td>
<td>4</td>
<td>22.2</td>
<td>12</td>
<td>37.5</td>
</tr>
<tr>
<td><strong>Frequency of Hospitalization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5 times</td>
<td>5</td>
<td>27.8</td>
<td>18</td>
<td>56.2</td>
</tr>
<tr>
<td>6-10 times</td>
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<td>16.7</td>
<td>5</td>
<td>15.6</td>
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<tr>
<td>11-15 times</td>
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<td>3</td>
<td>9.4</td>
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<tr>
<td>16 times and above</td>
<td>9</td>
<td>50</td>
<td>6</td>
<td>18.8</td>
</tr>
</tbody>
</table>

At the end of analyses made, it was determined that there was a significant difference between period of receiving diagnosis and angers of children in the research (p<0.05). The anger was observed more in the children who received diagnosis 25-36 months ago.

**DISCUSSION AND CONCLUSIONS**

The children act by their drives in the early life stage and they learn to control their drives with the effect of social environment, primarily the family. Since they are not conscious of thinking the cause-effect relationship, understand the feelings of opposite and perceive the dimension of giving harm yet, they are incapable of controlling their behaviors. The impulsivity which can be defined as taking action without thinking the result, is the most significant symptom which damages the social adaptation of children and it is a case which reveals itself as having difficulty in planning behaviors, delaying the desires and ability of self-controlling in the
individuals (Öztürk, 2014). It was determined that there was a significant difference between ages and impulsivities of children in the research (p<0.05). More impulsivity was seen in the children at the age of eight-ten years. The hospitalization of children at the age of six-twelve may lead to loss of control and prevention of feelings of independence in the children. Due to increasing independence requirements, most of children may become furious and offended since they become dependent in the hospital. If the chronic illness adversely affects the daily life of child, his/her dependence to assistance and other individuals is high and his/her acts and actions are restricted, this loss of control may adversely affect the child. While the illness reveals itself as adduction and passive indulgence to everything in some children, it may reveal itself as aggressive and reactional behaviors in some of them (Çavuşoğlu, 2008; Törüner & Büyükgönenç, 2012).

The impulsivities of children in the research who were not going to school were determined to be significantly higher (p<0.05). It is reported that the children and youth with chronic illness may experience cognitive losses and some academic problems. It is known that the peers are important for school age children. The physical inadequacy in the children may affect his/her feeling of belonging to a group. Moreover, the children in these ages feel a need for developing their feelings of sedulity, initiative and success. The inadequacy of enhancing these feelings may lead to low self-esteem and reactional behaviors (Özbaran & Erermiş, 2006; Törüner & Büyükgönenç, 2012).

The behavior of insecurity/inadequacy are evaluated based on the drawing criteria of inclined figure, small head, not having hands, monster or comic projection, not having arms, legs and feet. Yavuzer (2000) explains that not having arms in the picture expresses the insecurity while the arms determine the lack of power and force. The legs are the organs supporting the body and not drawing them is interpreted as synonymous with the child’s perceiving himself/herself as unsupported and immobile. The lack of legs in the picture may be explained as the child’s feeling himself/herself as insecure and unsupported (Çakmak & Darıca, 2012). In some studies, it was stated that the hospital experiences of children increased their self-confidences and they were more successful in controlling their stresses (O’Conner-Von, 2000). It is seen that the feelings of insecurity/inadequacy decrease as the ages of children increase. The illness of school age children prevents their participation into group activities with their peers. This leads to anger and feelings of detention and adductively (Çavuşoğlu, 2008). In the research, it was seen that the lack of self-confidence/inadequacy of children who have just received diagnosis (six-twelve years) and who received diagnosis a long time ago were higher compared to others. It is thought that the emotional and psychological problems may be seen more frequently in most of children who have just hospitalized and who have been ill for a long period. At the end of diagnosis of chronic illness, the children at the age of five-twelve years become distanced from their social lives and peers. Therefore, the children who have just received diagnosis and who have received diagnosis for a long time ago may have difficulty in establishing communication with the persons around them and this may bring along the feeling of distrust and insecurity. It was determined that the
insecurity/ability was higher in the children who were hospitalized for one-five times and 16 times and above compared to others. It can be said that the children who are hospitalized with the diagnosis of chronic illness may have difficulty in adaptation to illness and treatment process, hospital environment and changing life in their hospitalization. Moreover, it can be thought that the repetitive hospitalizations and prolonged illness and treatment process lead to emotional and psychological problems in the children. The difference observed between the ages of fathers of children in the research and the insecurities/inadequacy of children was significant (p<0.05). A higher level of insecurity/inadequacy was observed in the children of fathers who were 41 years and above 41 years. In general, the mothers may stay with their children with chronic conditions as companion. The fathers may see with their children in the hospital visits. Therefore, the children may not spend much time with their fathers during their hospitalization period. The limited time spent by children and fathers may increase their feelings of insecurity/inadequacy. In conclusion, the insecurities/inadequacy of these children may be lower than the children whose fathers are older.

The illness and hospitalization are an unpleasant experience which intimidates and disturbs the child. A child who was hospitalized is obliged to struggle with the side effects of treatments, agonizing procedures and anxiety caused by being dissented from their family, playmates and school environment (Çakıroğlu, 1991). The hospitalization breaks the school age children who are patient and hospitalized, from their social circles and leads the children to experience anxiety of being dissented from his/her immediate vicinity (Törüner & Büyükgoñenç, 2012). The anxiety is defined as unknown fear. When the child comes across a real situation causing the anxiety, the anxiety comes to existence by becoming definite. The anxiety is high in most children, specifically who have just hospitalized, hospitalized for a prolonged period and who have undergone an operation. Drawing picture, using the puppets and books within the scope of training preparatory to hospital, dramatization, bibliotherapy and music training may be used to eliminate the anxiety of hospitalized children (Baykoç, 2006). In the research, more anxiety was observed in the entire of children of working fathers (p<0.05). The causes such as the decrease of time spent together with fathers and their children depending on their working condition, ability to see their fathers when they desire, and restriction of spending qualified time may increase the anxiety of children.

In the research, it was seen that the anxieties of children whose academic successes were very good, were more than others. The inadequacy of continuing the school and falling behind for children who had been continuing the school before receiving chronic illness diagnosis and whose academic successes were high, may increase the anxiety devoted their educations and future lives. The children who are continuing their educations can follow their courses and take their exams thanks to bedside support program within the period of their hospitalization. In this way, they can continue their schools in the same class with their peers when they recover their health. However, the process of illness and treatment leads the children who are receiving education, to experience high level of anxiety. If we take the future occupational dreams of children, especially whose academic successes are very
good, are taken in consideration, we can make sense of the higher level of anxieties. In the research, it was determined that the children who were hospitalized for one-five times and 16 times and above experienced a higher level of anxiety. The children who have just received chronic illness diagnosis may experience more anxiety due to uncertainty of what they will learn within the process of illness. It may be thought that the recovery desires of children who have been undergoing treatment for a long period due to chronic illness diagnosis may increase day by day, but their anxieties may increase due to extension of treatment period. In the research, it was determined that the anxiety of children without cancer who received chronic illness diagnosis was 51.4% and this was higher compared to children who did not receive cancer diagnosis. In the research made by Şen Beytut et al. (2009), it was determined that the anxiety was 92.9% in the ones with acute illness while the depression was 57.1% in the ones with chronic illness and the low self-esteem was 53.8%. In their study, Giannakopoulos et al., (2009) determined that the anxiety score of children at the age of eight-twelve years who were undergoing cancer treatment was very high.

All children reflect their inner worlds by means of lines and symbols that they create on paper and they express their miscellaneous emotions and opinions which are impossible to express verbally. The picture also reflects some problems which may not be expressed verbally in the relationships with other children and adults as well as that it ensures the communication with himself/herself and outer world for a silent and shy child since it is an easy tool of expression (Çakmak & Darıca, 2012). One of these problems if shyness and timidity. The shyness is the insecurity that some people experience when they are together with others and they speak or seek help (Yüksel, 2013). The shyness-timidity behavior was evaluated based on the criteria such as small figures, short arms, arms attached to body, not having a nose and mouth in the children’s pictures. In the research, the shyness and timidity of children at the age of eight-ten years were determined to be higher (p<0.05). The peer relations and school life are very important for school age children at the age of eight-ten years. The children who received chronic illness diagnosis in the school age and obliged to keep away the social life may have difficulty in establishing communication with healthcare professional and even with their families throughout their hospitalizations and they may not establish verbal communication with new people they meet. In the research, it was determined that the children who were hospitalized for one-five times showed more shyness. It is thought that the children who had just received chronic illness diagnosis may have difficulty in establishing communication with healthcare personnel and they may exhibit more shy behaviors in a new and different environment. In the study made with children with cancer, Rollins (2005) determined that drawing picture increased with the communication with the children with cancer and facilitated understanding the feelings of children. In the study that they compared the emotional indicators and depressive symptoms of children with cancer and healthy children at the age of six-twelve years, Durualp and Altay (2012) determined that the impulsivity, insecurity and anger (p<0.05), shyness were seen much more in children with cancer while the anxiety was observed at equal levels in both groups.
The anger or aggression is a basic way of affectivity which is put forth with the aim of defending himself/herself and warning the opposite as a result of preventing the desires, needs and plans of individual and perceiving different situations as an injustice, unfairness and self-oriented threat (Şahin, 2006). Based on Koppitz’s criteria, the children reflect their feelings of anger by drawing cross eyes and they reflect their feelings of aggression by drawing teeth. Drawing long arm is interpreted as ambition to win and making effort to love-be loved. While drawing big hand indicates the emotions of inadequacy of manipulative skills, drawing sexual organs or naked figure indicates body anxiety and poorness of controlling the stimulants (Koppitz, 1968). It was determined that the children in the research who received diagnosis more than two years ago experienced a higher level of anger (p<0.05). The behavioral problems and depression findings are frequently observed in the children in case of long hospitalization (Törüner & Büyükgönenç, 2011). In their study, Kökçar and Gürol (2013) determined that the anxiety and aggression of children who were cancer and exposed to long term treatment process were higher compared to healthy children in the same age group. It is important that when the children received chronic illness diagnosis and for how long they had been continuing treatment. The emotional disorders experienced by a child who has just received an illness diagnosis and a child who had received a diagnosis for a long time ago and the ways of expression themselves may be different. When verbal communication is not established, the tacit communication tools gain importance and one of these tools is the picture. It is thought that the picture can be used as an effective communication tool for investigating the emotional states of children with chronic conditions.

Within the direction of findings obtained, it is suggested;

✔ To encourage the children who have chronic illness to express themselves with projective methods at various times based on their ages and developmental characteristics,
✔ To popularize the bedside applications which enable the children with chronic conditions to express their feelings,
✔ To enable their friends to visit the hospital for a short period with the aim of making positive contribution to emotional development of children who are hospitalized,
✔ To enable the children with chronic conditions to spend qualified time with their mothers and fathers.

REFERENCES

INTRODUCTION

Although there is a speedy development of early childhood workforce and policy changes in favour of men who work in the early years, there is still prepotency of female worker an account for 99% (Rolfe, 2006). The issue of men working in the early years sector is very topical especially in the developed countries. There is a tendency to increase the number of men working in the early years education and care in all over the world and a common understanding that children could benefit from both female and male workers in the early years settings, however, the percentage of male workers is between 1% and 3% in most of European countries including the UK (Peeters & Emilsen, 2015). This article outlines and critically discusses the role of men working in the field of early years education and care in an international level with two aspects which are men as fathers and men as early years educators. First of all, it sets out to look at the constructions of mothering and fathering. Then it examines men as fathers in early years by taking into account the recent political and social changes, followed by the need of men workers as ‘being a role model’ in early years. Then it looks at the issue of men as early years educators regarding the initiatives for them. After that the reasons that remove men to work in early years education and care sector are examined. Finally, it discusses the importance of the cooperation between male and female workers in early years settings.

Constructions of Mothering and Fathering

Many researchers studying on family see the parenthood ‘as a social construct’ (Woollett & Lloyd, 1991 cited by Francis-Connolly, 2013). Environment and the society where we live, experience and diversify over the time has an effect on this construction process. From the perspective of social construction theory, people ‘receive cultural messages regarding the roles they should assume and how these roles might be fulfilled’ (Francis-Connolly, 2013, p.17). Throughout the history fathers has been seen as the people who works for their family and ‘bread-winners’, whereas mothers has been considered as ‘non-earning housekeepers and carers (Cohen, 1993; Lewis, 2000, p.2). This patriarchal gendered discourse that refers to Victorian idealized middle-class home places the women to subordinate statue (Robert-Holmes and Brownhill, 2011). Owing to women’s role as mothers,
childcare work has always been considered as ‘women’s work’ (Cameron & Moss, 1998, p.18). Moreover, because of this perception ‘nurseries and pre-schools have been historically constructed as an extension of the home’ (Moss & Petrie, 2002 cited by Robert-Holmes & Brownhill, 2011).

**Men as Fathers in Early Years**

In more recent years there has been a crucial changing in gendered model of childcare in many families including the increase of men primary carers (Robert-Holmes, 2009). Due to the increase of female worker having a child, men has been expected to share caring responsibilities (Robert-Holmes & Brownhill, 2011) and are expected to be ‘accessible and nurturing as well as economically supportive to their children’ (O’Brien, 2005, p.1). Roberts-Holmes (2009) carried out a study by interviewing with male primary carers and showed that fathers as primary carers were ‘frustrated, tired and bored’ in the period of caring the children, however, they were good at maintaining their daily routine works and were quite competent in looking after their young children (p.286). In light of this study, it could be said that the evidence from the research challenges the stereotype that men give the majority of childcare responsibility to their partners. Furthermore, with the changed situation, now the majority of mothers hold the view that fathers are capable of looking after the children as much as mothers (Roberts-Holmes, 2009).

It is well known that father involvement has an essential impact on young children’s social and emotional development and learning (DfES, 2004; Robert-Holmes, 2009). Research carried out shows these positive effects as the following: ‘better peer relationships; fewer behaviour problems; lower criminality and substance abuse; higher educational / occupational mobility relative to parents’ employment; capacity for empathy; non-traditional attitudes to earning and childcare; more satisfying adult sexual partnerships; and higher self-esteem and life-satisfaction’ (Burgess, 2006, p.29). More specifically Burgess (2006) indicates that in the period between birth and the following months, if fathers involve the child care sensitively and supportively, such involvement would turns into with a big range of outcomes such as better language development and higher IQs to babies and toddlers. Similarly, Allen (2011) suggests that positive father involvement in the young children’s learning process has an essential impact on such children’s future school career and mental health. The shifting roles of fathers have been supported in the governmental level to provide ‘culture shift’ towards fathers both in the UK and internationally (Roberts-Holmes & Brownhill, 2011). For example, in 1995 the Sweden government introduced an initiative called ‘Daddy Month’ that paid paternity leave for thirteen months; in Canada ‘Quebec’ where fathers has a right to leave for five weeks (Roberts-Holmes, ibid). As clearly seen that Scandinavian countries support fathers by utilizing ‘Daddy Month’, whereas in April 2003, in the UK fathers has been given the paid paternal leave for the first time for two weeks (Roberts-Holmes, 2009). Kato-Wallace et al. (2014) argue that gender norms have an impact on men’s utilisation of paternity leave in those global north countries, which offer it. In addition, in the UK, with the growth in children centres and the awareness of parents’ impacts on children’s learning and
wellbeing, there was a need to find out other ways of how fathers can be involved and supported. Therefore, some different activities and practices were created to increase father involvement in early childhood education and care. One of the ways to support father involvement in early childhood is the activity carried out by father development workers (FDWs). Chawla-Duggan (2006) conducted a study to examine the role of FDWs in supporting father involvement in children’s learning and showed that the support for the fathers emphasizes on raising fathers’ confidence and their sense of responsibility, however, in terms of the interaction between the child and the father, it seems limited.

Besides the importance of father involvement to children’s development, some fatherhood studies shows that positive fathering experiences has also an impact on men themselves via having personal growth and experiences (Ihmeideh, 2014). Research shows that involved fathers are more likely to have less stress, to be more sensitive and better husbands and citizens (ibid). Newland et al. (2013) confirmed the previous research regarding the correlation between the involvement of parents and their education levels. They suggest that less educated parents are more likely to intend to avoid from involvement. Therefore, when considering the father involvement, it could be beneficial to bear in mind the educational levels of fathers in order to act upon such fathers and provide their involvement. In addition, it is worth noting that in more recent years with the increase of the number of mother working in a job, not only the involvement of fathers but also mother involvement has become an issue (Coyl-Shepherd & Newland, 2013). Roberts-Holmes (2009) indicates that in order to support father involvement in early childhood education and care, it would be a sound way to encourage men to work professionally in early childhood education and care.

The Need for Male Workers as the Role Models in the Early Years

As mentioned above, having more men in early years is desirable with its contributions to the improvement of childcare and early years education services. There is no doubt that the main concern for having more men in early years education and care based on the idea that male workers are the “role models” for young children in particular for boys. According to Hutchings et al. (2007) a role model could be defined with the following three aspects: first of all, a role model is ‘an ethical template for the exercise for adult responsibilities (p.138). Hence, all teachers could be considered as role models. Secondly, a role model is ‘a nurturer providing educational services’ (Hutchings et al., 2007, p.138). This aspect also refers to all teachers. As the third aspect a role model is a ‘symbol of special achievement’ (ibid).Jones (2003) discusses the issue of being a role model by obtaining the ideas of female workers with the five key elements as the following: ‘balance, family, literacy, the notion that men are ‘better for boys’ and finally, sport’ (p.568). In her study female workers express that the presence of male workers brings the balance and normality to the sector. In other words it is believed that when more men work in the sector, schools would become to represent the society. In terms of the family factor the study shows that female workers believe that males as the role models are crucial for the children to experience ‘a positive
male influence’. The female teachers expressed this concern with more related to the absent fathers and poor father role models although they did not articulate the reasons for the importance of help from the role models (Jones 2003, p.569).

In more recent years, there has been a concern of the low attainment of boys. A popular view about this issue is that although male practitioners and teachers are for the benefit of boys who are underachievement, boys are suffer from the presence of male in their lives (Johannesson, 2004 cited by Brownhill, 2014). With the increasing on the numbers of the boys who grow up with a single mother, the concerns related to the shortage of male workers in the early years settings has been increased. In other words, boys are trained in an environment with the feminization effects. Therefore, it has been suggested when more male workers are employed in early years settings and schools, boys’ achievement level and motivation could be increased (Brownhill, 2014). In order to understand the term ‘male role model’ Brownhill (2014) carried out a study and reveal that men working in the early years (0-8) identified their personal and professional characteristics as role models. The most common answer for the personal attributes of male role models was ‘being a good person’ such as reliability, trustworthiness, respect, kindness and the sense of humour. On the other hand, Carrington et al. (2008) carried out a study to question the impacts of gender matching of teachers and students at the age of 11 and argue that this matching has no remarkable influence on both girls’ and boys’ academic attainment and their attitudes towards school. However, as Farquhar (1997) claim that presence of male workers and the gender balance in early childhood education and care could be more important than the presence of such staff in other education levels.

Another reason for the need of men in early childhood education and care would be the way that young children learn. It is well known that from the perspective of socio cultural theories of learning, children best learn when they interact with their peers and adults around them. As Losardo & Notari-Syverson (2001) indicate that adult’s assistance is an inevitable feature of contributing children’s performance. Moreover, from the socio cultural aspects of learning, the collaboration between children and teachers has a crucial importance on children’s development and learning in terms of the contribution to ‘each other’s thinking process’ (Dunphy, 2008, p.17). Therefore, it could be said that to provide the best environment for children requires being free gender inequality (Anderson, 2014).

**Men as Early Years Educators and Initiatives for Them**

In an international level there have been initiatives and campaigns for recruiting men to early years education and care. For example, in 1986 European Commission set up the European Childcare Network in which Prof. Peter Moss was the leader. Childcare Network approached the issue with their aspects which are ‘services for young children, leave for parents, and men as carers’ (Peeters, 2007, p.2). In 1993, experts from different European countries came together and agreed that providing the positive father involvement in early years education in an effective way requires to increase the number of men working in the sector. In 1995, the Network published a report named ‘Forty Quality Targets in services for
young children’.

The target 29 was that the percentage of male workers in childcare sector should be 20% before 2006. Also, in 2000 Childcare Recruitment Campaign aimed to increase the number of male workers by up to 6% by 2004 (Peeters, 2007). When looking at other European countries, there have been successful campaigns in increasing the men workforce, such as Denmark, Norway and Belgium. For example, while in 2002 the number of men working in early years setting was 142 in Belgium, in 2006 the number of male works increased to 415, account for 2.3% (Kind &Gezin, 2007 cited by Peeters, 2007).

Furthermore, like in other European countries in the UK there have been some prospering projects that encourage men to early childhood education and care. For example, in the Sheffield Children’s Centre 25 workers out of a total of 58 is male, similarly in Scotland in the Men in Childcare project trained 900 men (Roberts-Holmes and Brownhill, 2011). In addition, in England, the Fatherhood Institute developed a campaign called “Men In The Early Years” (MITEY) in order to contribute to gender balance and diversity in early years workforce. In 2011 the UK government stated: “We … want to tackle … the gender imbalance in the sector and make early education and childcare a viable career choice for all.” However, in spite of all these calls and initiatives for men in most of the European countries including the UK, the proportion of male worker is quite limited such as in the UK it is only 2% of the workforce (Rolfe, 2006). On the contrary ‘only in Norway, Denmark and recently Turkey, more than 5% of the early years workforce is male’ (Peeterset al., 2015). Lysklett (2007) showed that in 300 outdoor pre-schools of Norway, 19% of workers are men and it has been found that these men tend to work with young children outdoors because of their existing interest and the belief that they find themselves physically playful outdoors. Beyond this gender segregation some research shows that there is no difference between male and female early years practitioners in terms of their professionalism. For example, Brandeset al. (2015) carried on research to find out the differences between male and female early years workers in terms of their pedagogical activities and suggest that gender does not make difference and does not have an impact on how workers behave in terms of professionalism towards young children. When it comes to gender differences they found some minimal differences. For example, they reveal that female early years workers tend to practice the handicraft activities whereas male workers mention handicraft activities in a negative way and some male workers honestly say that they do not like handicraft activities. Another example shows that male workers incline to plan some activities based on ‘building with wood and large-scale materials’ and prefer the woodwork room as an activity place unlike the female workers (Brandeset al., 2015, p.325).

In terms of the parents’ opinions about the presence of men in nurseries, the general view is that most of the parents are in favour of men workers. In Cameron et al. (1998)’s study one father holds the view that ‘a voice is a voice telling the kids to do something. It's just the same whether it's a man or a woman.’ (p.12). In addition, some parents bear in mind that male workers could be the role models for the boys which has been discussed above, in particular this idea was expressed by
the lane mothers (Owen, 2013). In Cameron et al. (1999)’s study, when parents were asked about the differences between male and female workers, some parents hold the view that male workers are more likely to be ‘enthusiastic, fun, authoritative and playful’ (p.9). However, some parents believe that such staff are more directive, bossy, louder and less sympathetic compared to female workers.

Wohlgemuth (2015) carried out a study in Denmark by obtaining the ideas of bachelor students in order to find out the reasons why men choose to become pedagogues and categorise the reasons for becoming pedagogues with three aspects which are career, insurance and care perspectives. The study shows the motives for such people to become a pedagogue as the following: ‘further education, management ambitions, the good job opportunities, a new beginning and the unskilled care work’ (Wohlgemuth, 2015, p.396). In the similar line Rentzou & Ziganitidou (2009)’s study indicates that the main reason for males to work in the field of early childhood education and care is that they love and enjoy working with young children. Research conducted about the job satisfaction of male workers shows that nursery nurses, educational assistants and other childcare workers are more satisfied workers in spite of the shortage of sample size (Rolfe, 2006). On the contrary, research clearly shows the reasons why men do not choose such profession as a career option, which will be discussed in the following part.

The Barriers and Key Challenges to Men Working in the Early Years Education Sector

Koch & Farquhar (2015) conducted a study by comparing Austria and New Zealand contexts in order to reveal the reasons why it is difficult to increase the proportion of men in early childhood education. They point out that whereas there is an awareness of the gender imbalance in the early childhood education and care and encouraging men to work with young children, the percentage of men working in the area is small.

‘The scarcity of men in the sector is seen as a problem from a range of different perspectives: it is seen as an issue for government plans for workforce expansion to meet parental employment and childcare objectives; secondly, as an issue for equal opportunities and diversity given the extreme gender segregation within the sector; and as an issue for the quality of childcare’ (Rolfe, 2006).

As understood from the quote above, the dearth of male worker in the sector is a problematic issue in particular in terms of the quality of childcare and early years education. Therefore, it is important to discuss the reasons why men do not intended to work in early years education and care.

Koch & Farquhar (2015) suggest that in theory there is no obstacle for men who would like to work in the field of early childhood education and care, however, when it comes to practice there is some barriers which are ‘unseen and unacknowledged discriminatory’ (p.388). Koch & Farquhar (2015) called these barriers as ‘glass doors’ because they are ‘not seen until they are walked into’ (p.381). When considered the reasons why there is a shortage of men in the sector, the first factor reveals as the concerns related to the men as potential child abusers (Rentzou and Ziganitidou, 2009). Roberts-Holmes & Brownhill (2011) argues that the big obstacle for men in the sector is the questions about the sexuality of men. As
Carrington & Skelton (2003) state that men working with young children are often considered as being pedophiles.

‘Older people (adults) look at you a bit funny, like you are a bit dodgy, a pedophile or something. It’s more looks than what they say although they sometimes say to me “isn’t that a bit weird?” I just walk away and swear under my breath.’ (Rolfe et al., 2003, p.51).

As it can be clearly seen from the experience of young nursery practitioner, men face some negative and disappointing reactions. Hence, this kind of reactions discourages men who would like to work with young children.

Other barriers for men who want to work in early years education and care are low salary and low professional statues, the notion of carework as a women’s work, the social understanding that men are not patience to work with young children and less capable and last but not the least the job title ‘nursery nurse’ (Farquhar 1997, Owen 2003).

Owen (2013) says that when women have decided to work in the field of childcare or early childhood education, they are supported by their families or the people around them whereas men have made such decision they face with the different reactions like surprise, derision or confusion. Therefore, obtaining the approval from family or friends helps the women to feel motivated for the job at the beginning, but when it comes to men it seems a kind of disappointment and they can feel ‘isolated or uneasy’ (Owen, 2013, p.4).

In terms of making a decision on the career men see the childcare as a ‘second chance career’ because of the ‘education and qualifications, to the support of family and friends, and to personal ambition’ (Rolfe, 2005, p.10; Owen, 2013, p.4). For example, men who take into participation in Owen (2013)’s study explain that none of them did not grow with the target of working with the young children. However, when they think of working in the field of childcare, they did not have the opportunity to do courses on the area, so they tended to get the higher certificate or qualification in order to obtain higher job position and salary.

There is no doubt that salary is an essential factor in choosing a career including the field of early childhood education and care. Men are often expected to choose career that they are passionate about it and afford the financial needs of their family. Cohen (1992) stated ‘The vast share of male teachers are in the upper grades, and many trained in early childhood education move rapidly into higher-paying and higher-status jobs in school administration and higher education’ (p.11). A study conducted by MORI for the Daycare Trust indicated that approximately half of 2000 interviewees said that higher salary would encourage more men to consider have career in the field of early years education and care (Daycare Trust, 2003).

As mentioned above another barrier for men in the area is the working environment with female predominance. Men who think of a career in early childhood education sector sometimes do not see the early childhood education as a workplace because of the setting environment where female teachers bring their norms and attitudes from their home (Friis, 2008 cited by Koch & Farquhar, 2015). The common belief that childcare is a work that women ‘naturally do and better at’
has an impact on the environment where practitioner work and even the job titles, for instance nursery nurse and nanny. All points mentioned above show that because of these barriers early years education and care has been highly gendered.

Cooperation between Male and Female Workers in Early Childhood Education

Cameron *et al.* (2001) hold the view that when men and women practitioners work together in settings, this collaboration can bring some benefits. According to the study that they carried out, the inclusions of men in early childhood programs had an importance on children’s experiences in settings. The presence of male in settings provided the children to see different models of men’s roles and their capacity for caring. In addition, they challenged the gender stereotypes and gave an opportunity to children to establish a relationship with men practitioners as needed and desired.

It is well known that there are differences between males and females in terms of the way that they communicate and form their relationship. It could be said that when children observe the model relationship of both men and women practitioners at the same time, this opportunity contribute children to expand their social development. Hedlin & Åberg (2013) support the idea that due to the differences between male and female practitioners, men practitioners in early years settings are more likely to be able to understand boys compared to women practitioners. A man approach things or events from the male’s perspective. The existence of male practitioners in settings can provide boys to be understood easily and this turns into the boys as an advantage (Hedlin & Åberg, 2013). Therefore, it could be suggested that the collaboration between male and female practitioners is important in terms of providing a friendly environment where children learn from both male and female practitioners.

The presence of both male and female caregivers in the early settings provides the male divergent interaction component to children’s experiences, which complements the female softer reaction style of caregiving (Murray, 1996). Merritt (2007) cited the advantage of working with the opposite sex as one of strength for the business. The different points of view, which are women’s emotional response and men’s non-emotional response, provide practical outcomes, which benefit the organization. Young children benefit from their experiences with both genders working together.

Conclusion

To conclude, as discussed above the role of men in early years is one of the most topical issue in the field of early years education and care. As the aim of this paper, to discuss the role of men in early years, two aspects of the issue were addressed which are, men as fathers and men as early years educators. When looking at the role of men as fathers in early years, a big change stands out. In the past traditionally fathers were seen as breadwinners and the people who have to afford the needs of their family, whereas today with the increase of the number of
women working in a job, fathers are considered as caregivers to their children as well as mothers. Therefore, it is well known that the involvement of father is an essential factor for children development and research clearly shows that father involvement has a crucial impact on children’s social and emotional development, mental health and even their IQs. In terms of the policies to provide father involvement, paternal leaves take place in literature. In European countries there has been a trend to increase the time for paternal leave. Sweden might be the best example with thirteen months. Therefore, it could be argued that paternal leave could be the very first beginning for the father involvement. In order to encourage fathers to involve children’s lives, experts and governments has been given the attention to the workforce in early years settings. Besides this, research shows that male workers in settings are considered as role models. In particular, for underachievement boys the presence of male workers in schools is seen as a big contribution. Although there has been initiatives and campaigns to increase the number of men in the sector, in all over the world the men workforce in early years education and care is around 2%. When asking the men working in this sector about the reasons to work with young children, studies indicates that majority of the men choose this job because of their love of children. On the other hand, such men says that they did not grow up with plans to have a career in early years sector and they see the early years as a ‘second chance career’ because of the barriers that are discussed in detailed earlier.

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Chapter 19

Strategies Used By Preschool Teachers to Organize and Manage Learning Centers

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INTRODUCTION

Child education is a long-standing process that begins with birth. This process is accepted as a critical time frame for 0-6 year period for many aspects such as physical, social, emotional, cognitive and language development alongside with the shape of the child's personality, the acquisition of basic knowledge, skills and habits and the development of problem solving and reasoning skills (Ari, 2003; Barnett, 2008; Gürkan, 2000; Haktanır, 2012; Oktay, 1999). This critical area should be supported by a qualified, systematic and planned preschool education in which all development areas of the child are supported (Eliason & Jenkins, 2003). The achievement of desired goals in preschool education, the success of preschool education and the quality of education given in preschool education institutions are closely related to the quality of the education programs to be implemented (Albrect & Miller, 2004; Kandır & Kurt, 2010; Temel et al., 2005).

Variety of preschool education programs have been implemented in Turkey since 1952. These programs that are being used, have been updated and renewed according the researches that are made, and approaches and changing needs that are happening in Turkey and in the world. The latest update and arrangement in the program was carried out in 2012 within the context of national and international field surveys, the feedback from applications and “Preschool Education Strengthening Project”. The “Preschool Education Program” currently applied in Turkey is a multi-faceted developmental program which is supportive and preventive for the progress of all developmental areas of children.

It is the preschool education institutions that can be the best in assessing the preschool period and in providing the best education for the child. It is very important that a preschool education institution is designed to meet the educational needs of children. Well-designed learning environments support children’s active learning and improve their creative problem-solving skills. The preschool education program which is updated in 2012, aims to bring teachers new perspective on classroom arrangement. It is proposed in the program for the teachers to create learning centers, which can enable children to become more active in their classrooms and enable them to support their abilities and to structure their knowledge even more, in small groups or individually. Learning centers are the
playgrounds which are selected according to the achievements and demonstrations in the activities included in the daily education flow and which have different materials, separated from each other by materials such as cabinets, boards, different colors of carpets, floor coverings or adhesive tapes. Although learning centers are separated, they are not free and independent from each other. It has also been expressed that certain points are separated from each other such as noisy centers and silent centers. Centers should be placed in class according to their specifications. For example, arranging the block center, which offers the ability to play more animated games, as far away from the book center as possible, will help children in different areas of interest and naturally provide order in classroom arrangements (MEB, 2013). Centers that should always be found in preschool education institutions are the block, book, music, art, science and dramatic play centers. Apart from these, teachers can also create new and temporary centers, at necessary times and circumstances in line with the selected themes, for a period or according to the interest of the children; as educational toys, computers, water and sand, table toys, reading and writing and science centers (Catron & Allen, 2008; Cowling, 2015; MEB, 2013).

Amongst these centers; the dramatic playground is a playground where children learn gender roles and social relationships through animating and imitating an event. This area may include small models of the tools used by adults in their daily lives (such as bags, an old camera, jewelry, home accessories, trinkets) (Acer, 2014), or it can include different clothes, puppets and puppetry, dolls and kitchenware (Öztürk Aynal, 2010a). By offering child-specific works in book centers located in preschool education institutions, reading habits can be developed from early ages (Demircan, 2006; MEB, 2013), and it will enable them to develop their imagination and creativity (Dynia et al., 2016; Gündüz, 2007).

According to the Ministry of National Education Preschool Education Program (2013), science centers aim to motivate children's curiosity and desire for learning and to encourage them to learn new things about the world they live in. According to Acer (2012), there are plants, seeds, animals, soil, stone-rock fragments, crusts, leaves, magnets and enlarging lenses in the field of science and discovery, which is an area that enables children to actively experiment and explore. The arts center should be in a position that, children can work comfortably and safely in a wide and bright environment, in tables, on picture stands, on the floor, on the wall, and on similar grounds, without bothering each other. The proximity of this space to the window will allow children to observe the environment. As for the art center being in a relatively quiet part of the classroom will make it easier for children to concentrate on their work (Demiriz et al., 2003). The music center is a field that allows children to explore the sense of sound and rhythm. Children recognize different musical instruments in this corner and have the opportunity to use them. They develop aesthetic feelings and creativity; and get relaxed with music accompaniment. Because the music center is a loud center, it should be placed at a place where it will not disturb the children who spend time in other centers (Aral et al., 2001; Demiriz et al., 2003; Ramazan 2007). The block center supports the development of children's creative thinking and independent mobility skills. In
addition, blocks allow children to gain experience about concepts such as weight, volume, size, shape and distance, to learn mathematical concepts such as large and small; to do classification, comparison, matching, counting and grouping; to understand the space-object relationship and to gain problem-solving skills (Aral et al., 2000; Arnas Aktaş, 2002). The block center also supports social skills such as cooperation between children, sharing and development of language skills during exchange of ideas and conversation (Beaty, 2008). It is beneficial of these centers to be large enough for children to play freely and to be covered with carpets so as not to disturb the other centers (MEB, 2013). Provisional centers can be prepared on the basis of achievements and demonstrations, supported by materials according to the interests of the children. It is possible to keep the interest of children in centers alive by changing these materials from time to time (Dereobali, 2007; Öztürk Aynal, 2010b; Tok, 2010).

The most important role is the teachers’ in the planning and implementation of preschool education program, and in influencing the nature and development of the quality of preschool education (MEB, 2013; Şimşek, 2012). It is necessary for the teacher to know the education program very well, adopt the program, use and apply it efficiently so that the child can benefit from the preschool education institutions and the teacher can be productive (Aral et al., 2002). Taking the evaluations of the implemented programs, taking the opinions of the teachers who are practitioners and arranging them according to the results, have a great role in the development process of the program in relation to the strengths and weaknesses of the program. In light of these considerations, this research is planned to examine the views and practices of preschool teachers about arranging learning centers, to determine the strategies they use in organizing and managing learning centers and to make suggestions.

**MATERIALS AND METHODS**

**Model of the Research**

The case study was used in the study as a qualitative research model. A case study is a research that defines and customizes an entity depending on location and time (Büyüköztürk et al., 2014), and its most basic feature is to investigate one or more cases in depth. Situation studies are a research method that allows a researcher to examine a phenomenon or an event based on "how" and "why" questions that he or she cannot control (Yıldırım & Şimşek, 2009).

In this study, a semi-structured interview technique was chosen for the collection of data in the context of the basic interpretive qualitative research design, as it was tried to elaborate the strategies used to organize and manage the educational setting by the preschool teachers.

**Study Group**

The study group of the study was consisted of 36 preschool education teachers working in independent kindergartens affiliated to the Uşak Provincial Directorate of National Education and primary school dependent kindergartens in the 2016-2017 educational years. Volunteerism was taken as a basis for the participation of
the sample group. In order to avoid the loss of time and money in the study, easy-
to-reach samples were selected from intentional sampling forms. In the situations
that this technique is used, the sample is made up of participants that the researcher
can easily reach (Patton, 2014).

A personal information form was prepared by the researchers for the
identification of the demographics of the teachers who constituted the study group.
This form included a total of six questions about the teachers’ gender, age,
educational status, and the duration of employment in their school, number of
children in their class and the adequacy of the class size. The demographic
information of the study group is shown in the table 1 below.

Table 1: Gender and Age Ranges of Teachers Participating In the Survey

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number (n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>33</td>
<td>91,6</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>8,4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Number (n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>26-30</td>
<td>5</td>
<td>13,8</td>
</tr>
<tr>
<td>31-35</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>36-40</td>
<td>5</td>
<td>13,8</td>
</tr>
<tr>
<td>41-49</td>
<td>13</td>
<td>36,11</td>
</tr>
<tr>
<td>50+</td>
<td>2</td>
<td>5,5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>72</td>
<td>100</td>
</tr>
</tbody>
</table>

33 of the teachers who compose the study group are female, 3 of them are male
and their ages varied between 25 and 50.

Table 2: Educational Status of Teachers Participating In the Survey and Duration
of Their Employment at School

<table>
<thead>
<tr>
<th>Educational Status</th>
<th>Number (n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>College</td>
<td>3</td>
<td>8,3</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>31</td>
<td>86,11</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>2</td>
<td>5,5</td>
</tr>
<tr>
<td>University</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duration of Employment at School</th>
<th>Number (n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>4</td>
<td>11,11</td>
</tr>
<tr>
<td>1-2 year</td>
<td>3</td>
<td>8,3</td>
</tr>
<tr>
<td>2-3 year</td>
<td>4</td>
<td>11,11</td>
</tr>
<tr>
<td>3-5 year</td>
<td>8</td>
<td>22,22</td>
</tr>
<tr>
<td>5-10 year</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>10-15 year</td>
<td>5</td>
<td>13,8</td>
</tr>
<tr>
<td>More than 20year</td>
<td>3</td>
<td>8,3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>72</td>
<td>100</td>
</tr>
</tbody>
</table>
It is seen that the teachers who constitute the research group of the study mostly graduated with a bachelor's degree, while the duration of their service were varied between 1 year and 20 years, although 3 teachers had more than 20 years.

Table 3: The Number of Children and the Class Size in the Classes of Teachers Participating in the Survey

<table>
<thead>
<tr>
<th>Number of Children</th>
<th>Number (n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10 children</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>10-15 children</td>
<td>2</td>
<td>5.5</td>
</tr>
<tr>
<td>15-20 children</td>
<td>15</td>
<td>41.66</td>
</tr>
<tr>
<td>20-25 children</td>
<td>14</td>
<td>38.88</td>
</tr>
<tr>
<td>25-30 children</td>
<td>5</td>
<td>13.88</td>
</tr>
<tr>
<td>30 and more children</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class Size</th>
<th>Adequate Size</th>
<th>Inadequate Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>Adequate Size</td>
<td>63.88</td>
<td>26.12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>72</td>
<td>100</td>
</tr>
</tbody>
</table>

It appears that the number of children in the classroom of the teachers varied from 15 to 20 children (n:15) and between 20 and 25 children (n:14), and that the majority of teachers (n:23) found the class to be large enough.

Data Collection Tool

The "Personal Information Form" and the semi-structured “Strategies Form Used in the Regulation and Management of the Educational Environment”, which were developed by the researchers and included questions about the gender, age, educational status, the number of years of teaching, the number of children in the class and the size of the class, are used as a data collection tool in the research.

Semi-structured interviews, which are often used in qualitative research, provide a flexible structure that allows researchers to identify the main frame of the subject and ask questions within its own context, as well as to add questions according to new situations that may arise during the interview (DiCicco-Bloom & Crabtree, 2006; Merriam, 2013). The researcher has the opportunity to gain in-depth knowledge about the subject, focusing on the answers given by the interviewee (Güler et al., 2013).

In the preparation of the interview form, a draft interview form was formed by scanning the literature first. Later on, two academic members’ (one of them was a preschool education teacher and the other one was a specialist in assessment and evaluation) views about the draft forms were applied. For the applicability and clarity of the form arranged in line with the specialists’ views, three preschool teachers (different from the participants of the study) were applied previously and it was observed that no problems occurred. The final form was composed of 12 questions in total. As an example to the questions that are on the form "Which learning centers do you usually place in your education environment?", "Which is
the most different learning center you have created in your teaching life so far?”，“Why did you form this center and for what purpose? “, "What are the strategies you use when creating learning centers?” can be given.

**Data Collecting Process**

The data related to the research were collected through the preschool education teachers who are working in independent kindergartens and primary education dependent kindergartens affiliated to the Uşak Provincial Directorate of National Education during the 2016-2017 academic years. At the beginning of the research, necessary permissions were obtained from the Provincial Directorate of National Education by researchers. The researchers then contacted the preschool teachers through the school administrators and conducted face-to-face interviews with the teachers. The teachers who participated in the study were briefly informed about the content and purpose of the study firstly and it was stated that the data obtained from the study will be confidential and used only within the scope of scientific research. Teachers who volunteered to participate in the study were interviewed individually in the school, at the places and times as they prefer. During the interviews, questions were asked to all teachers with the same order for reliability. The implementation process lasted approximately 20-25 minutes. The process of collecting the data was completed in about a week.

**Data Analysis**

Descriptive analysis was used in the analysis of research data. Descriptive analysis is an approach that explains and interprets the obtained data under the established themes, and examines cause-effect relations and achieves the result (Yıldırım & Şimşek, 2009). In descriptive analysis, researchers form a general framework from the information they obtain from the interviews that they will undertake. Thus, they determine under which themes the data will be arranged. Then they read and edit the data obtained. Thus, they can bring data together in a meaningful and logical way. They describe the data in the third step. In doing so, they can make direct quotations where necessary (Yıldırım & Şimşek, 2009).

For this purpose, interviews were firstly converted into written form by the researchers in the computer environment. Then, all the data obtained in the study were read many times and coded. The answers given by the teachers to each question were grouped and coded separately by two researchers. The reliability of the research was made by comparing the coding made by the researchers. In the inter-encoder reliability study, inter encoders consistency was found to be 87%. In the study, it was decided to combine the findings of several questions in the same table, in order to combine them in line with the opinions of the experts, since some of the answers given after the gathering were found to be close to each other. After the data collection process is complete, the researchers are coded the teachers as Ö1, Ö2, ... Ö15, Ö36.

**RESULTS**

In this part of the study, the findings from the data are presented in a semi-
structured interview form for the strategies that preschool teachers use to organize and manage the educational environment. The table consists of 12 questions for each question on the questionnaire form and the related responses of the participant to the questionnaire.

**Opinions Regarding Learning Centers in Educational Environment and Generally Used Learning Centers.**

In the semi-structured interview form, the opinions related to Question 1 and 2, in which questions about learning centers in the learning environment and frequently used learning centers are included, are listed in Table 4 below under two different categories.

**Table 4: Learning Centers in Educational Environment, Generally Used Learning Centers**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CODES</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existent Learning Centers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>2</td>
<td>0,8</td>
<td></td>
</tr>
<tr>
<td>Block</td>
<td>29</td>
<td>11,78</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>18</td>
<td>7,31</td>
<td></td>
</tr>
<tr>
<td>Science-Nature</td>
<td>16</td>
<td>6,50</td>
<td></td>
</tr>
<tr>
<td>Book</td>
<td>23</td>
<td>9,34</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>6</td>
<td>2,43</td>
<td></td>
</tr>
<tr>
<td>Dramatic play</td>
<td>6</td>
<td>2,43</td>
<td></td>
</tr>
<tr>
<td>Temporary Interest Centers</td>
<td>2</td>
<td>0,8</td>
<td></td>
</tr>
<tr>
<td>Picture</td>
<td>4</td>
<td>1,6</td>
<td></td>
</tr>
<tr>
<td>Educational toy</td>
<td>11</td>
<td>4,47</td>
<td></td>
</tr>
<tr>
<td>Puppet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>1,6</td>
<td></td>
</tr>
<tr>
<td>Play</td>
<td>3</td>
<td>1,21</td>
<td></td>
</tr>
<tr>
<td>Atatürk</td>
<td>8</td>
<td>3,25</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>1</td>
<td>0,4</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>2</td>
<td>0,8</td>
<td></td>
</tr>
<tr>
<td>Playing house</td>
<td>17</td>
<td>6,9</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td>4</td>
<td>0,4</td>
<td></td>
</tr>
<tr>
<td>Table Toys</td>
<td>2</td>
<td>1,6</td>
<td></td>
</tr>
<tr>
<td>Free picture</td>
<td></td>
<td></td>
<td>0,8</td>
</tr>
<tr>
<td><strong>Generally Used Learning Centers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science-Nature</td>
<td>20</td>
<td>2,4</td>
<td></td>
</tr>
<tr>
<td>Block</td>
<td>4</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Dramatic play</td>
<td>10</td>
<td>1,6</td>
<td></td>
</tr>
<tr>
<td>House play</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>10</td>
<td>2,4</td>
<td></td>
</tr>
<tr>
<td>Book</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
According to the event, all Puppet Educational toy Build Mathematics Play Information Activity Table Toys

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Music</td>
<td>10</td>
<td>1,6</td>
</tr>
<tr>
<td>According to the event, all</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Puppet</td>
<td>1</td>
<td>1,2</td>
</tr>
<tr>
<td>Educational toy</td>
<td>1</td>
<td>0,4</td>
</tr>
<tr>
<td>Build</td>
<td>3</td>
<td>0,4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1</td>
<td>1,2</td>
</tr>
<tr>
<td>Play</td>
<td>1</td>
<td>0,4</td>
</tr>
<tr>
<td>Information</td>
<td>2</td>
<td>0,4</td>
</tr>
<tr>
<td>Activity</td>
<td></td>
<td>0,8</td>
</tr>
<tr>
<td>Table Toys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary Interest Centers</td>
<td>2</td>
<td>0,8</td>
</tr>
</tbody>
</table>

TOTAL OPINIONS 246

When the above table is analyzed, it has been determined that the teachers indicated a total of 246 opinions about learning centers in the educational environment and generally used learning centers. According to the opinions of preschool teachers, there are 20 different codes for learning centers in their classes, and 17 different codes for learning centers used in their classes. When the f values of the participants' opinions were analyzed, it was stated that they mostly used the block center (n:29), book center, n:23), music center (n:18) and house play center (n:17) In addition, preschool teachers frequently used block center (n:20), house play center (n:10), book center (n:19) and regularly use all of them in accordance with the activity (n:10).

Opinions on the Creating of the Learning Centers and the Selection of Materials, Diversity of Materials and Frequency of Diversity

Question 4, Question 8, Question 7 and Question 9 which are related with the selection of materials in the semi-structured interview form, attention to elements in material selection, diversity of materials and frequency of variation are included in the same table. In addition, Question 7 and Question 9 are combined and evaluated because the answers given are very similar / close to each other. In this context, the opinions of the teachers belonging to the questions are collected under 3 different categories and they are stated in Table 5.

When the above table is analyzed, a total of 123 opinions have been determined in the direction of the answers given by the participants. In this direction, 20 codes for the attention items, 22 codes for the points to be taken into consideration when selecting materials for the learning centers, 15 learning centers for learning centers and materials, and 15 codes for the frequency of variation of these materials were analyzed.

Table 5: Factors to Be Considered When Creating Learning Centers, Attention Factors in Material Selection, Variety of Materials and Frequency of Variation

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>CODES</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
</table>

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### Points to note when creating Learning Centers

<table>
<thead>
<tr>
<th>Material</th>
<th>Attention factors in material selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials in the class</td>
<td>5</td>
</tr>
<tr>
<td>Children’s Curiosity</td>
<td>Educational</td>
</tr>
<tr>
<td>Children’s Interest</td>
<td>10</td>
</tr>
<tr>
<td>The contents of the program</td>
<td>Attractive</td>
</tr>
<tr>
<td>Distance, Relationship and Intercompatibility</td>
<td>Supporting development</td>
</tr>
<tr>
<td>Sufficient Area</td>
<td>Conformity to the learning center</td>
</tr>
<tr>
<td>Quite-Moving activities separation</td>
<td>Developmental appropriateness</td>
</tr>
<tr>
<td>Purposeful materials</td>
<td>Usability and functionality</td>
</tr>
<tr>
<td>Remarkable materials</td>
<td>Guidance to thinking</td>
</tr>
<tr>
<td>Suitability of children with age and development</td>
<td>Entertaining</td>
</tr>
<tr>
<td>The size of the educational environment</td>
<td>Interests and Needs</td>
</tr>
<tr>
<td>To support your creativity</td>
<td>Difference and beautiful</td>
</tr>
<tr>
<td>Easy applicability</td>
<td>Secure</td>
</tr>
<tr>
<td>To update</td>
<td>Conformity to achievement indicators</td>
</tr>
<tr>
<td>Visuality</td>
<td>Having a sufficient number of materials</td>
</tr>
<tr>
<td>I could not create it as I wanted</td>
<td>Health compliance</td>
</tr>
<tr>
<td>Materials they may encounter in everyday life</td>
<td>Supporting creativity</td>
</tr>
<tr>
<td>To keep active and passive students together</td>
<td>Visuality</td>
</tr>
<tr>
<td>Developers of experiences</td>
<td>I have no choice</td>
</tr>
<tr>
<td>Diversity</td>
<td>Can be used in everyday life</td>
</tr>
<tr>
<td></td>
<td>Supporting problem-solving skills</td>
</tr>
<tr>
<td></td>
<td>Guidance to multiple thinking</td>
</tr>
<tr>
<td></td>
<td>Simple to hard right</td>
</tr>
<tr>
<td></td>
<td>According to topic flow</td>
</tr>
<tr>
<td></td>
<td>On a monthly basis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials in the class</td>
<td>0.8</td>
</tr>
<tr>
<td>Children’s Curiosity</td>
<td>1.6</td>
</tr>
<tr>
<td>Children’s Interest</td>
<td>10.56</td>
</tr>
<tr>
<td>The contents of the program</td>
<td>2.4</td>
</tr>
<tr>
<td>Distance, Relationship and Intercompatibility</td>
<td>4.8</td>
</tr>
<tr>
<td>Sufficient Area</td>
<td>4.8</td>
</tr>
<tr>
<td>Quite-Moving activities separation</td>
<td>3.2</td>
</tr>
<tr>
<td>Purposeful materials</td>
<td>1.6</td>
</tr>
<tr>
<td>Remarkable materials</td>
<td>3.2</td>
</tr>
<tr>
<td>Suitability of children with age and development</td>
<td>6.4</td>
</tr>
<tr>
<td>The size of the educational environment</td>
<td>8.0</td>
</tr>
<tr>
<td>To support your creativity</td>
<td>2.4</td>
</tr>
<tr>
<td>Easy applicability</td>
<td>0.8</td>
</tr>
<tr>
<td>To update</td>
<td>0.8</td>
</tr>
<tr>
<td>Visuality</td>
<td>0.8</td>
</tr>
<tr>
<td>I could not create it as I wanted</td>
<td>0.8</td>
</tr>
<tr>
<td>Materials they may encounter in everyday life</td>
<td>0.8</td>
</tr>
<tr>
<td>To keep active and passive students together</td>
<td>0.8</td>
</tr>
<tr>
<td>Developers of experiences</td>
<td>0.8</td>
</tr>
<tr>
<td>Diversity</td>
<td>0.8</td>
</tr>
<tr>
<td>Educational</td>
<td>4.6</td>
</tr>
<tr>
<td>Durable</td>
<td>9.2</td>
</tr>
<tr>
<td>Attractive</td>
<td>9.75</td>
</tr>
<tr>
<td>Supporting development</td>
<td>2.43</td>
</tr>
<tr>
<td>Conformity to the learning center</td>
<td>4.87</td>
</tr>
<tr>
<td>Developmental appropriateness</td>
<td>9.2</td>
</tr>
<tr>
<td>Usability and functionality</td>
<td>3.2</td>
</tr>
<tr>
<td>Guidance to thinking</td>
<td>1.6</td>
</tr>
<tr>
<td>Entertaining</td>
<td>0.8</td>
</tr>
<tr>
<td>Interests and Needs</td>
<td>5.69</td>
</tr>
<tr>
<td>Difference and beautiful</td>
<td>1.6</td>
</tr>
<tr>
<td>Secure</td>
<td>3.2</td>
</tr>
<tr>
<td>Conformity to achievement indicators</td>
<td>1.6</td>
</tr>
<tr>
<td>Having a sufficient number of materials</td>
<td>0.8</td>
</tr>
<tr>
<td>Health compliance</td>
<td>0.8</td>
</tr>
<tr>
<td>Supporting creativity</td>
<td>2.43</td>
</tr>
<tr>
<td>Visuality</td>
<td>0.8</td>
</tr>
<tr>
<td>I have no choice</td>
<td>0.8</td>
</tr>
<tr>
<td>Can be used in everyday life</td>
<td>0.8</td>
</tr>
<tr>
<td>Supporting problem-solving skills</td>
<td>0.8</td>
</tr>
<tr>
<td>Guidance to multiple thinking</td>
<td>1.6</td>
</tr>
<tr>
<td>Simple to hard right</td>
<td>0.8</td>
</tr>
</tbody>
</table>

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When the f values of the opinions on the factors that are considered while forming the learning centers of the participants are examined, following codes were analyzed; Most of the opinions about children's interest (n:13), Suitability of children with age and development (n:8), Distance, relationship and intercompatibility (n:6) and Sufficient Area (n:6). Some of the teacher's opinions are expressed below.

“I pay attention to interesting and child-curious materials that reflect the content of the learning center” (Ö2)

“The distance between them and Intercompatibility. I consider that children do not disturb each other while playing, I try to separate them as quite activities centers and moving centers” (Ö4)

“I pay attention to the age and development levels, and also take care to arrange for the active participation of children” (Ö21)

“I try to direct the passive student and the active student to the same center, and I pay attention to arrange it, and I also take care to separate some noisy centers (house-block) of some quiet center (science nature-book)” (Ö22)

When the f values of the opinions on the elements that the participants pay attention to when choosing materials for the learning centers of the participants are analyzed, following codes were analyzed; attractive (n:12), durable (n:10) and developmental appropriateness (n:10). In this direction, a few of the teachers expressed their opinions with the following words;

"To have interesting materials that are durable, entertaining, and educational, appropriate for the child's development and age" (Ö9)

"Durable, useful, I pay attention to the quality of the materials which respond to children's needs.” (Ö25)

When the f values of participants' learning centers and opinions on the diversity / variation frequency of materials are analyzed, 12 codes for the topic flow and 7 codes for rarely except for certain centers were analyzed. In this direction, a few of the teachers expressed their opinions with the following words;
"I try to change according to the topic flow, the material should change according to the behavior that needs to be learned." (ÖZ20)

"The frequency varies according to the behavior desired to be earned" (ÖZ21)

"I rarely change except for centers. At this point I am changing within the subjects of the daily flow "(ÖZ25)

Opinions on Importance of Learning Centers and Different Learning Centers

In this part of the study, question 5, question 6 where the questions about the need for learning centers, the learning environment and the importance for children and the most different learning centers that teachers have created up to now are analyzed in the same table. In this context, the opinions of the teachers belonging to the questions are collected under two different categories and are analyzed in Table 6.

When the table is analyzed, a total of 101 opinions have been determined in accordance with the answers given by the participants. In this direction, 13 codes related to the necessity and importance of preschool teachers' learning centers and 2 codes related to the created learning centers were determined. Particularly when the f values of the participants' views on the necessity and importance of the learning centers are analyzed, following codes were analyzed; supporting development (n:6), Reveal children's interests and abilities (n:6), ensuring communication and socialization among children (n:6), and Providing focus on topics (n:6). In addition, all the teachers thought that learning centers were necessary (n:36).

| Table 6: Importance of Learning Centers and Different Learning Centers Created |
|---------------------------------|-----|-------|
| CATEGORIES                                                                 |
| Learning centers necessity and importance (in terms of children and educational environment) |
| I think it is necessary (all) | 36  | 35.64 |
| Supporting development       | 6   | 5.94  |
| Supporting imagination      | 1   | 0.99  |
| Attention and interest      | 5   | 4.9   |
| Reveal children's interests and abilities | 6   | 5.94  |
| Ensuring communication and socialization among children | 6   | 5.94  |
| Providing focus on topics    | 6   | 5.94  |
| Effective learning environment | 2   | 1.98  |
| Increasing the applicability of the program | 3   | 2.97  |
| Providing children with daily life and different experiences | 1   | 0.99  |
| Preventing the confusion   | 1   | 0.99  |
| Children's grouping skills  | 1   | 0.99  |
| Personality development     | 1   | 0.99  |
| Different learning centers created |
| I did not set a different center | 14  | 13.86 |
| I set up a different center  | 19  | 18.81 |
| TOTAL OPINIONS               | 101 |

In this direction, a few of the teachers expressed their opinions with the
following words:
"It contributes positively to the mental, physical and psychological development of children. Children's imaginations are supported by learning centers" (Ö2)
"It is important to support the development of children" (Ö13)
"Learning centers allow children to work in groups according to their interests" (Ö23)

When the f values of the opinions of the participants on the different learning centers are analyzed, following codes were analyzed; I set up a different center (n:19) and I did not set a different center (n:14). In this direction, a few of the teachers expressed their opinions with the following words;
"Sometimes we can create temporary learning centers. One of the most different is the tissue center. We set up a weekly center by placing fabrics and materials in different textures "(Ö7)
"In the forest during the week, we formed a forest center with balloons and various materials. They learned about the various creatures and forests living here "(Ö25)

Opinions about Children's Learning Centers Frequently and Least Interested
In this part of the study, questions 10 and 11 on the question of interest centers where children are frequently and least interested are analyzed in the same table. In this context, the opinions of the teachers regarding the questions are stated in Table 7 under two different categories.

Table 7: Learning Centers Where Children Are Frequently and Least Interested.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>CODES</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>House play</td>
<td>24</td>
<td>22,22</td>
<td></td>
</tr>
<tr>
<td>Blocks</td>
<td>23</td>
<td>21,29</td>
<td></td>
</tr>
<tr>
<td>Puppet</td>
<td>5</td>
<td>4,68</td>
<td></td>
</tr>
<tr>
<td>Science and nature</td>
<td>9</td>
<td>8,33</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>3</td>
<td>2,77</td>
<td></td>
</tr>
<tr>
<td>Play</td>
<td>2</td>
<td>1,85</td>
<td></td>
</tr>
<tr>
<td>Table toys</td>
<td>2</td>
<td>1,85</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>6</td>
<td>5,55</td>
<td></td>
</tr>
<tr>
<td>Book</td>
<td>6</td>
<td>5,55</td>
<td></td>
</tr>
<tr>
<td>Informatics</td>
<td>1</td>
<td>0,92</td>
<td></td>
</tr>
<tr>
<td>Dramatic play</td>
<td>1</td>
<td>0,92</td>
<td></td>
</tr>
<tr>
<td>Mind games</td>
<td>1</td>
<td>0,92</td>
<td></td>
</tr>
<tr>
<td>Free picture</td>
<td>1</td>
<td>0,92</td>
<td></td>
</tr>
<tr>
<td>Temporary interest centers</td>
<td>2</td>
<td>1,85</td>
<td></td>
</tr>
</tbody>
</table>
When the above table was analyzed, 108 opinions were determined in the direction of the answers given by the participants. In this direction, 14 codes for the learning center, which children frequently show interest in the direction of preschool teachers' opinions, and 8 codes for the learning center where they showed the least interest were identified.

When the f values of the opinions of the participants about the learning centers that children frequently show interest especially are analyzed, it is found that house play center (n:24) and block center (n:23) are the most popular ones. In this direction, a few of the teachers expressed their opinions with the following words:

"Girls are more at home centers and men are more at the block center" (Ö2)
"Block center and dramatic game center. Children also draw puzzles from the book center "(Ö20)

On the other hand, music center (n: 6) and book center (n: 5) were found to be the centers that children show the least interest. In this direction, a few of the teachers expressed their opinions with the following words:

"I see especially that the book and the puppet center are least" (Ö2)
"The music center is not rich at all because the class is crowded, they can not use this center as they want it" (Ö19)

Teachers' Opinions Regarding Problems in the Learning Center and Management Strategies

In this part of the study, teachers' opinions on question 12 on what kind of problems children experience in learning centers and what strategies they use in managing learning centers are examined. In this context, teacher opinions are stated in Table 8 in two different categories.

Table 8: Problems in the Learning Center and Management Strategies

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>CODES</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems in the learning center</td>
<td>Material / Toy sharing</td>
<td>13</td>
<td>23.21</td>
</tr>
<tr>
<td></td>
<td>Aggregation at the same center</td>
<td>2</td>
<td>3.38</td>
</tr>
<tr>
<td></td>
<td>Communication Problems</td>
<td>2</td>
<td>3.38</td>
</tr>
<tr>
<td></td>
<td>insufficient environment</td>
<td>4</td>
<td>6.77</td>
</tr>
<tr>
<td></td>
<td>Cleanliness</td>
<td>2</td>
<td>3.38</td>
</tr>
<tr>
<td></td>
<td>There is no problem</td>
<td>4</td>
<td>6.77</td>
</tr>
</tbody>
</table>
When Table 8 was analyzed, a total of 59 opinions were determined according to the answers given by the participants. In this direction, 6 codes for the problems in the learning center and 11 codes for the strategies used in managing the problems are identified in line with the opinions of preschool teachers. When the f values of the participants' opinions on the problems in the learning center are analyzed, Material / toy sharing (n:14) were determined. When the f values of the opinions on the management strategy are analyzed; dialogue (n:7) and playing respectively (n:6) were seen in the majority. In this direction, a few of the teachers expressed their opinions with the following words;

"Sometimes the environments are not enough, the noise can cause discomfort. In such cases, I change the locations of groups or learning centers and warn them "(Ö5)

"There is a problem with sharing because of the aggregation in particular centers. I limit myself to a maximum of 5 people in certain centers. Or at the beginning of the day we set the center for everyone to play. There are problems such as tidying up toys. Then I close one of the centers that day "(Ö9)

"Because there is not enough material and environment, sharing is a problem. We overcome this problem by using a time-keeping method "(Ö19)

"There are problems with the roles they share among themselves while play. In this case, I guide them to solve this problem. "(Ö25)

"Usually there are problems such as sharing toys. Noise-related problems can be experienced because our class is small in these situations, I find a solution by playing a certain number of children in certain centers. I guide the children to play in every center by changing their places"(Ö34)

**CONCLUSION AND DISCUSSION**

The purpose of this research; is to determine the strategies preschool teachers use to organize and manage their learning centers.

When interviews with teachers are analyzed, it is seen that some of the preschool teachers still call their learning centers as points of interest. This situation suggests that the knowledge and practice of the teachers about the "learning centers" in the new preschool program is not enough. With regard to the question to determine the learning centers located in the classrooms, the teachers were mostly
in the block center (29), then the book center (23), the music center (18), the house corner (17), the science center (16) and the puppet center (11). There are also dramatic play (6), art (6), and educational toy (4), play center (3) centers. Gürpınar (2006) found that most of the schools in which the teachers were working had the most interest, and that house play center, educational toys center and book center were mostly located in the Eskişehir province in order to determine teacher opinion about the points of interest and preference of preschool educated children. Kubanç (2014) observed ten preschool education institutions in his study on the study of the physical condition of preschool institutions and found that 8 of these schools had library corners, 7 of them puppet corners, 4 of science and nature corners, 2 of computer corners and that all classes have a house play corner. In addition, music, computer and science and nature corner is the most neglected corner is revealed.

According to Aysu and Aral's (2016) research, half of sixteen preschool teachers stated that all of the learning centers are in their classes. When the answers given by the teachers were analyzed, it was determined that the block center was not in two classes, the dramatic play center was not in four classes, and the science center was not in six classes. Demirci and Şıvgın (2017) examined the situations in which preschool teachers participate in learning centers in their classrooms as they are involved in the program. In the study carried out with twenty-four teachers, it is stated that in the classes in which teachers are working, there are dramatic play center, seven book center, six art centers, five block center and three music center. Eight of the teachers stated that there were some materials belonging to the centers but nothing was formed in the center. In addition, research has shown that there is no science center in any class.

In the study, the teachers listed the learning centers which they usually use as block (20), house (10), book (10), while ten teachers answered "all in accordance with the event".

Teachers who answered the question to determine what they pay attention when they formed learning centers responded with "children's interest (13)" and “remarkable materials (4)". Their desires must also be considered in order to create environments for children's interests and needs. For this reason, it would be more interesting to design the physical arrangement of the classroom with children. On the other hand, this situation is seen as important in terms of making their own decisions, assuring self-confidence and support for their self-esteem (Finn & Panazzo, 2004, as cited in Çelebi Öncü, 2017). The organization, planning, design and management of the physical environment are important for ensuring the participation of children (Hart, 2007). Çelebi Öncü's (2015) study examines the views of preschool teachers about arranging learning centers. Of the 112 teachers who participated in the survey, 52.7% stated that the centers of learning had organized centers of learning according to the purpose of the center, 22.3% according to the equipment in the class and 15.2% according to the physical characteristics of the class. In another research, teachers stated that they put materials in the center that are appropriate to their children's descriptions and age characteristics (Özyürek & Kılınç, 2015).

When they were asked about the choice of materials, they pointed out that they
pay attention to whether they are remarkable (12), enduring (10), developmentally appropriate (10) and suitable for children's interests and needs (7). Any material to be kept in the educational environment needs to respond to the development and needs of the child (Acer, 2012). In their study, Ulutaş and Demiriz (2006) found that the teachers' centers in the classrooms provided interesting materials, and they also directed the children to work in different centers, accompanied by activities in the centers that were less interesting. Özyürek and Aydoğan (2011) stated that the educational environment in preschool education and learning centers should include a diverse group of materials that children can explore, mix and transform.

When the f values of participants' learning centers and opinions on the diversity / variation frequency of materials are analyzed, according to the topic flow (n: 12) and rarely (n: 7) opinions except for certain centers were analyzed, it is seen that majority. According to the results of the research, the times of arranging the learning centers in the teachers' classes are different from each other. According to Henniger (2005), teachers should change about three of the materials at each center at least weekly. Erşan (2011) research found that when teachers are less interested in the center, they organize centers once a month, every fifteen days in accordance with the plan, topic and activities. Özyürek and Kılınç (2015) stated that three of the participating teachers in the study conducted with twenty preschool teachers only updated science and art centers. They also found that two teachers used materials differently from other classes and changed them when children are bored, three teachers were added to the new toys centers, and one teacher updated the materials in the centers every two weeks. According to the findings of the study, the fact that teachers do not generally make changes in the materials in the learning centers can be interpreted as the fact that the teachers may not have enough knowledge in this issue or that they do not have enough time to make changes.

All of the teachers shared a common opinion about the importance of the learning centers. When the teachers were asked about the learning centers where they showed the most interest in their classes during the day, they mostly expressed house play (24) and block centers (23). Teachers stated that music (6), then book center (5) and science-nature center (4) were the least interesting learning centers for children. The studies are parallel to the findings of this study. In the study of Aysu and Aral (2016), the centers where children showed intense interest were mentioned as half of teachers and as a block and dramatic game center. Demirci and Şıvgın (2017) stated that the centers preferred by children were block center and dramatic play center respectively according to the teachers' opinions, while the least preferred centers were art, music and book centers. Studies have shown that there are not enough materials for the science-nature center (Çakır, 2011; Aysu & Aral, 2016; Özyürek & Kılınç, 2015) or that they are not science-nature centers in preschool classes (Demirci & Şıvgın, 2017).

Among the problems faced by teachers in learning centers, they noted that "material/toy sharing" (13) was the most common. In this study, it was determined that teachers use the strategies of dialogue (7), playing respectively (6) and guidance (5) to solve the problems. When the studies related to classroom management of preschool teachers are examined (Akgün et al., 2011; Altun et al.,
2010; Sadık, 2002), it was revealed that the teachers focus on verbal communication in dealing with inappropriate behaviors. In addition, Sadık’s (2003) found that "warn" was used in the first place in the study which investigated the methods teachers follow in coping with the problem behaviors encountered in preschool classes.

Utilizing the findings of the study, the following can be suggested:

- In setting up learning centers, children's views can be taken.
- In-service training activities can be carried out on topics such as the importance of the learning centers, the benefits, and points to be taken into consideration.
- Teachers can receive support from school administrations, national education directorates, private institutions and organizations, and projects can be made about the lack of materials.
- Studies may be planned in different subjects and not only teachers but parents and administrators should be included in these studies.

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Chapter 20

Samples of Drama Based Topics in Life Studies Textbooks with the Views of Classroom Teacher Candidates

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1. Introduction

It is known that the degree to which students participate in the instructional process using their bodies in education influences their ability to express themselves and their creativity. Students seem to prefer lessons in which they are actively involved in the instructional process, instead of the lessons taught while they sit in the classroom environment.

It is stated that drama is an activity developed with games during the educational process and, with this feature of it, drama is an inseparable part of education. Drama is seen as a viable option in this process, because what is important in education is to be able to rescue students from being passive listeners, to put them into action with their bodies and sense organs, and to bring subjects into life so that they can be experienced (Üstündağ, 2003; 2005). Thus, students get to be active in the learning process. On the one hand, students learn by doing, and on the other, they experience events or situations by activating their sense organs.

McCaslin (1990) has stated that the information provider role that the teacher has undertaken in the traditional instructional methodology will turn into a “guide” and “director” role for students through drama activities. Instead of giving information directly, the teacher enables students to explore information and create opportunities for self-production. He has also stated that it enables students to express themselves in the classroom, discuss, criticize their friends’ ideas and produce new ideas together, in addition to the importance of drama for education.

Especially those who participate in drama activities are said to have the opportunity to enjoy emotional relief and to develop social skills in a threat-free environment, as well as to learn cooperation and solidarity. Moreover, it has been stated that the fact that dramas are all about the human being provides individuals with opportunities for researching and analyzing their personal, emotional and social problems. It has been mentioned that drama is effective in helping individuals to complete their emotional development while, at the same time, improving their social skills and helping them know themselves; and it has been stated that the use of drama in education is important (Freeman, Sullivan & Fulton, 2003).

Dramas are divided into formal (structured) and informal (improvisational) drama in the literature. In formal drama, students who will participate in drama must first investigate a situation or event during the activity. They should draw the
general framework of a particular scenario. Informal drama is a type of drama in which students exhibit their creativity with their individual interpretations about a topic in a very short period of time, regardless of a predetermined text or scenario (Kabapınar, 2012, pp. 222–223).

Life studies are known as a course in elementary school that enables individuals to face everyday life problems. In Turkey, life studies courses are offered in the first three years in elementary school, followed by the social studies course offered at the 4th grade. These courses are the continuation of each other. Recently, changes have been made in the curriculum of life studies course in Turkey starting with the 2018 curriculum. The constructivist approach in this program continues to maintain its place. However, there have been some significant changes in the curriculum compared to the old one. The reduction of the number of course outcomes and hours of courses, the removal of the three basic themes, and the introduction of six basic units are among the main changes (Ministry of National Education, 2018). The 2018 Life Studies Curriculum also includes the following statement: “The rapid change in science and technology, the changing needs of the individual and society, innovation and development in learning/teaching theories and approaches have also directly affected the roles expected from individuals. This change defines a person with qualifications to produce knowledge, use it functionally in life, solve problems, think critically, be entrepreneurial, be decisive, have communication skills, empathize, and contribute to the society and the culture and so on” (Ministry of National Education, 2018).

It is thought that dramas will have a positive effect in upbringing of qualified individuals through the life studies course. As it is seen in the study of Ütkür (2016), the drama method can be used easily in life studies course, and it is very beneficial for students. It is important for future teachers to be able to categorize the subjects of the life studies course according to the types of drama and thus develop activities. For this reason, we believe that this study will make a significant contribution to the literature.

In this context, it was aimed in this study to determine the opinions of elementary school teacher candidates on which drama types were suitable for teaching the subjects of elementary school life studies course. For this purpose, answers to the following research questions were sought.

1) What are the topics that teacher candidates find suitable for formal and informal drama from the textbook of the 2nd grade life studies course in elementary school?

2) What are the topics that teacher candidates find suitable for formal and informal drama from the textbook of the 3rd grade life studies course in elementary school?

2. Method

2.1. Research model

This study was carried out as a case study, one of the qualitative research designs. The most important feature of case studies is that it offers in depth study of one or several situations. The factors related to a situation are investigated by a
holistic approach. During the study, attention is paid to identify how the factors affect the mentioned situation and how they are affected by the mentioned situation. Case studies are suitable for the nature of this study because of the features such as the fact that a current phenomenon is studied within its own framework of life and that multiple sources of evidence or data are available (Yıldırım and Şimşek, 2013).

2.2 Sample

The sample of the study consisted of 47 teacher candidates who were juniors studying in the Elementary Education Department of Faculty of Education at Istanbul University. Volunteerism was used as the basis for choosing individuals, and the convenience sampling method was used (Patton, 2014).

2.3. Data collection instrument

In this study, a “drama-based life studies education” was given to the teacher candidates about the use of drama in life studies course, formal and informal drama types, drama samples and practices in courses. Expert opinions were obtained from expert academicians in the field regarding the validity of this education.

After the education, examples of the subjects related to formal and informal drama that the prospective teachers revealed about the 2nd and 3rd grade life studies course of elementary school were examined through document analysis. At the time of the study, the 2018 Life Studies Curriculum had begun to be applied in the 2nd grade life studies textbook, and the old program was being applied in the 3rd grade. For this reason, while there were units in the 2nd grade textbook, there were themes in the 3rd grade textbook. Therefore, the teacher candidates evaluated the topics under units and themes.

2.4. Data analysis

The data were analyzed using content analysis, which is one of the qualitative research methods. The main purpose of content analysis is to reach concepts and relations that can explain collected data (Yıldırım and Şimşek, 2013). Two expert instructors helped to code the data. The codes of the researcher and the instructors were compared with each other. In doing so, Miles and Huberman’s (1994) intercoder reliability formula was used. According to Miles and Huberman (1994), when this value is above 0.80, the analysis is considered reliable. In the analysis of the data collection instruments, the intercoder reliability coefficients between the different instructors are given in Table 1.

<table>
<thead>
<tr>
<th>Data Collection Instrument</th>
<th>Expert 1</th>
<th>Expert 2</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Review</td>
<td>0.92</td>
<td>0.96</td>
<td>0.94</td>
</tr>
</tbody>
</table>

According to Table 1, when the data were analyzed, the coefficient averages of the analyses of the researcher and the other two instructors were 0.94. Accordingly, it can be said that the analysis of the data collection tool used in this study was reliable.
3. Findings

In this section, the topics that are relevant to formal and informal drama are presented. These topics were put forward by the prospective teachers after examining life studies textbooks. Table 2 lists the number of topics relevant to formal and informal drama based on classes.

Table 2: Number of formal and informal drama on the basis of grades

<table>
<thead>
<tr>
<th>Grades</th>
<th>Drama type</th>
<th>Number (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd grade</td>
<td>Formal</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Informal</td>
<td>27</td>
</tr>
<tr>
<td>3rd grade</td>
<td>Formal</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Informal</td>
<td>40</td>
</tr>
</tbody>
</table>

According to Table 2, there were 20 subjects suitable for formal drama and 27 subjects suitable for informal drama determined by the prospective teachers from the 2nd grade elementary school life studies textbook. From the 3rd grade elementary school life studies textbook, 32 formal and 40 informal subjects were determined to be suitable for dramas.

According to these findings, it was found that the teacher candidates mostly thought that the subjects in the 3rd grade elementary school textbook were suitable for formal and informal drama.

3.1. Second grade elementary school life studies course topics

Topics suitable for the formal and informal drama examples that were determined by the teacher candidates for the 2nd grade elementary school are given in Table 3 and Table 4.

Table 3: Formal drama subjects in 2nd grade life studies textbooks

<table>
<thead>
<tr>
<th>Units</th>
<th>Subjects</th>
<th>Number of Teacher Candidates (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1- Me and My</td>
<td>The Republic Day</td>
<td>2</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 2- My Family</td>
<td>Our home address</td>
<td>1</td>
</tr>
<tr>
<td>and Home</td>
<td>Do not use unnecessarily</td>
<td>1</td>
</tr>
<tr>
<td>Unit 3- Healthy Life</td>
<td>For our health</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Food we consume</td>
<td>1</td>
</tr>
<tr>
<td>Unit 4- Safe Life</td>
<td>There is an emergency</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Traffic rules for us</td>
<td>1</td>
</tr>
<tr>
<td>Unit 5- I Love My</td>
<td>We are learning the location of our country</td>
<td>5</td>
</tr>
<tr>
<td>Country</td>
<td>Our leader is Ataturk</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Our national holidays</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Our religious holidays</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Our flag and our national anthem</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Our productions</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>We are learning natural</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 3 lists the names of 20 topics suitable for formal drama in 2nd grade life studies textbooks determined by the prospective teachers. There were a total of 42 opinions stated by the teacher candidates, indicating that the 2nd grade elementary school topics in Table 3 were suitable for formal drama. The fifth unit was where the prospective teachers found the topics most relevant to formal drama. There was a total of 18 prospective teachers who thought that the following topics selected from the “I love my country” unit were suitable for formal drama: “We are learning the location of our country, Our leader is Ataturk, Our national holidays, Our religious holidays, Our flag and our national anthem, and Our productions.” This was followed by the sixth unit, “Nature and Environment.” There were 13 teacher candidates who thought that the topics in this unit were suitable for formal drama. These topics were namely “We are learning natural disasters, We are finding our way, How plants grow, We are reusing, We are learning the benefits of plants, and What animals want.”

The topics suitable for formal drama, which the teacher candidates mentioned the least, were in the “Me and My School, My Family and Home, and Healthy Life” units. These topics were “The Republic Day, Our home address, Do not use unnecessarily, For our health, and Food we consume,” and 2 candidates expressed their views on them.

Table 4 lists the topics suitable for informal drama in 2nd grade life studies textbooks determined by the prospective teachers.

**Table 4: Informal drama subjects in 2nd grade life studies textbooks**

<table>
<thead>
<tr>
<th>Units</th>
<th>Subjects</th>
<th>Number of Teacher Candidates (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1- Me and My School</td>
<td>My friends and me</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Our one day</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>My opinions are valuable</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>We introduce ourselves</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>We are all different</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>We are in group work</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>We are playing game</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>I express myself</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Our needs and requests</td>
<td>2</td>
</tr>
<tr>
<td>Unit 2- My Family and Home</td>
<td>Everyone has a duty</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>We are clean and organized</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Everywhere is immaculate</td>
<td>4</td>
</tr>
</tbody>
</table>
As shown in Table 4, there were a total of 27 topics that the teacher candidates identified as informal drama topics in the 2nd grade elementary school life studies textbook. There were a total of 81 opinions stated by the teacher candidates, indicating that the 2nd grade elementary school topics in Table 4 were suitable for informal drama.

The teacher candidates identified the topics in the first unit as best suited to informal drama from among the topics in the 2nd grade elementary school textbook. There were 37 people who thought that the topics in this unit that were mentioned in Table 4 were appropriate to be taught through informal drama. On the other hand, the least mentioned topics were the “Clean environment, healthy life, and Food we consume” topics in the 3rd unit, “Healthy Life.” Five of the teacher candidates expressed their views on these topics.

### Table 5: Formal drama subjects in 3rd grade life studies textbooks

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subjects</th>
<th>Number of Teacher Candidates (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic rules</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Ataturk's learning life</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Knowing my rights as a consumer</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Hooray Republic</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Democratic solutions</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>The history of my school</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Special days</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Theme 1- My School Excitement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2. **Third grade elementary school life studies course topics**

Topics suitable for the formal and informal drama examples that were determined by the teacher candidates for the 3rd grade elementary school are given in Table 5 and Table 6.
<table>
<thead>
<tr>
<th>Theme 2- My Unique Home</th>
<th>On school road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ataturk and human rights</td>
<td>18</td>
</tr>
<tr>
<td>To find the way</td>
<td>9</td>
</tr>
<tr>
<td>The athletes, inventors, artists</td>
<td>9</td>
</tr>
<tr>
<td>Types of communication</td>
<td>9</td>
</tr>
<tr>
<td>When choose this job</td>
<td>6</td>
</tr>
<tr>
<td>My Turkey</td>
<td>4</td>
</tr>
<tr>
<td>The effects of leaders</td>
<td>2</td>
</tr>
<tr>
<td>Our body is telling</td>
<td>2</td>
</tr>
<tr>
<td>Things to do</td>
<td>2</td>
</tr>
<tr>
<td>While describing the location of my house</td>
<td>2</td>
</tr>
<tr>
<td>To be worthy of trial</td>
<td>1</td>
</tr>
<tr>
<td>While spending my money</td>
<td>1</td>
</tr>
<tr>
<td>You need to know</td>
<td>1</td>
</tr>
<tr>
<td>Attention</td>
<td>1</td>
</tr>
<tr>
<td>National holidays</td>
<td>16</td>
</tr>
<tr>
<td>Ready for natural disasters</td>
<td>12</td>
</tr>
<tr>
<td>Ataturk’s life</td>
<td>9</td>
</tr>
<tr>
<td>Transportation tools are developing</td>
<td>7</td>
</tr>
<tr>
<td>Changes in communication</td>
<td>4</td>
</tr>
<tr>
<td>Which job should I choose</td>
<td>3</td>
</tr>
<tr>
<td>Weather conditions and traffic</td>
<td>2</td>
</tr>
<tr>
<td>Our flag</td>
<td>1</td>
</tr>
<tr>
<td>Mutual dependence</td>
<td>1</td>
</tr>
<tr>
<td>Changes in our lives</td>
<td>1</td>
</tr>
</tbody>
</table>

As can be seen in Table 5, the prospective teachers expressed a balanced view of the topics in the 3rd grade elementary school themes. Eight topics related to the theme of “My School Excitement” - the first theme - were found to be suitable for formal drama. For the second theme, “My Unique Home,” the number of topics found to be suitable for formal drama was 14. The number of topics for the third theme, “Yesterday, Today, and Tomorrow” was 3. There was a total of 191 opinions stated by the teacher candidates, indicating that the topics in Table 5 were suitable for formal drama. The teacher candidates thought that the subjects of “Traffic rules, Ataturk and human rights, and National holidays” were suitable for formal drama in the 3rd grade subjects. The proportion of the subjects of the 3rd grade textbook determined as formal drama by the prospective teachers was more balanced in each theme than in the 2nd grade units.

The topics suitable for informal drama identified by the teacher candidates are listed in Table 6.
Table 6: Informal drama subjects in 3rd grade life studies textbooks

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subjects</th>
<th>Number of Teacher Candidates (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 1 - My School Excitement</td>
<td>Our emotions</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>When choosing my friend</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>It's natural to be different</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Rules for all of us</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Correct behaviors</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I can say no</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Communication in school</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>I solve my problem</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Democratic solutions</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The important thing is to compete</td>
<td>2</td>
</tr>
<tr>
<td>Theme 2 - My Unique Home</td>
<td>We may have differences</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>While spending my money</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>My responsibilities</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>When not used attentively</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Together easier</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>I love myself</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>My beautiful house</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>My family is special</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Let’s plan</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>My dream home</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I'm having fun with my family</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Appropriate behaviors</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>While describing the place of house</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Our body is telling</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Which occupation to choose</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>While reaching a goal</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>To be worthy of trial</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>To protect the rights</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Types of communication</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>They were children too</td>
<td>1</td>
</tr>
<tr>
<td>Theme 3 - Yesterday, Today, and Tomorrow</td>
<td>Weather conditions and traffic</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>I can do it now</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Which job should I choose</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Computers in our lives</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Changes in communication</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Changes in our lives</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Old and new</td>
<td>1</td>
</tr>
</tbody>
</table>

There were 10 topics in the 1st theme, 20 topics in the second theme, and 10 topics in the third theme, which were selected from the 3rd grade life studies textbook and were found to be suitable for informal drama by the teacher.
candidates. There was a total of 158 opinions stated by the teacher candidates, indicating that the 3rd grade elementary school topics in Table 6 were suitable for informal drama. The teacher candidates thought that the topics of “Our emotions, We may have differences, While spending my money, and Events and emotions” were suitable for formal drama in the 3rd grade topics. The topics that were selected the least by the teacher candidates were the topics of “While reaching a goal, To be worthy of trial, To protect the rights, Types of communication, They were children too, Computers in our lives, Changes in communication, Changes in our life, Old and new.”

Again, the proportion of the subjects of the 3rd grade textbook determined as informal drama by the prospective teachers was more balanced in each theme than in the 2nd grade units.

### 3.3. Subjects determined to be suitable for formal and informal drama at 2nd and 3rd grade elementary school levels

It was found that the prospective teachers indicated some topics in the 2nd and 3rd grade textbooks of elementary school to be suitable for both informal and formal drama. These topics are listed in Table 7.

**Table 7: Subjects determined to be suitable for formal and informal drama**

<table>
<thead>
<tr>
<th>Grades</th>
<th>Subjects</th>
<th>Number of informal (f)</th>
<th>Number of formal (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd grade</td>
<td>Do not use unnecessarily</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Traffic rules for us</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Food we consume</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>We are reusing</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3rd grade</td>
<td>Weather conditions and traffic</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Which occupation to choose</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>After choosing this occupation</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Changes in communication</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Changes in our lives</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

According to Table 7, the topics of “Do not use unnecessarily, Traffic rules for us, Food we consume, and we are reusing” from among the 2nd grade elementary school topics were appropriate for both formal and informal drama. The same was true for the following 3rd grade subjects: “Weather conditions and traffic, which occupation to choose, after choosing this occupation, Changes in communication, and Changes in our lives.” There were 16 teacher candidates who thought that the topics were suitable for informal drama, while there were 20 candidates thinking that the topics were suitable for formal drama. The conclusion drawn here is that it is not possible to say a subject will necessarily be suitable for formal drama or necessarily be suitable for informal drama. Different types of drama can be tried based on the way the topic is taught.

### 4. Conclusion, Discussion and Recommendations

It was aimed in this study to determine the opinions of elementary school teacher candidates on which drama types were suitable for teaching the subjects of
elementary school life studies course. For this purpose, the prospective teachers were asked to classify the topics they selected after they examined the 2nd and 3rd grade elementary school textbooks, according to formal and informal drama.

According to the results that were obtained, the prospective teachers thought that the third-grade subjects of elementary school life studies course were more suitable for teaching by using formal and informal drama. It was also found that they recommended both formal and informal drama to be used when teaching some subjects from the 2nd and 3rd grades. These topics were usually the topics such as traffic rules, occupations, weather conditions, and communication. Teachers are able to give information about these subjects and ask students to portray them through formal drama. Teachers can also informally allow students to improvise on their own pre-knowledge. It is thought that the drama activities done in this way will be very beneficial for the students in life studies courses.

Wagner’s (2002) study has also reported that informal drama and improvisational activities play an important role in teaching foreign language. Language skills, as well as face, hand, arm, gestures, facial expressions and body activities are developed as students participate in informally organized improvisations. Many studies have indicated that drama influences thinking, oral language, reading and writing skills. At the same time, through role playing, it also supports thinking, behavior, emotion and cognitive framework.

Considering the studies conducted in relation to drama in the national literature on elementary education, Aykaç (2008) has concluded that the drama method has an effect on students’ achievement in Social Studies courses. As a result of the research done by Onur (2008), the drama method has been found to be more effective for students to comply with the school rules than the direct instruction method. Similarly, Zayimoğlu (2006) has concluded that the drama method is more effective to teach the “Geography and Earth” unit than using the traditional method. In addition, Göncüoğlu (2010) has concluded that the drama method is more effective in student success when teaching democracy compared to the traditional method.

Considering studies on elementary school in the international literature, Rosler (2008) has concluded that teaching Social Studies courses using the drama method has a positive influence on student participation and individual development. In his case study, McNaughton (2004), similarly, has come to the conclusion that the use of drama in Social Studies classes can change students’ behaviors positively and that students can gain the ability to put themselves in someone’s shoes. Moreover, Morris (2001) claims that Social Studies lessons using the drama method improve students’ problem-solving skills and at the same time that students improve their skills of communication with their peers.

In addition to enhancing the academic achievement of students, there are many positive effects of teaching lessons with drama. For this reason, it is very important to be able to activate students in different courses and different levels of education by using drama. However, some suggestions can be made in order to make the lessons that are taught by using the drama method more efficient and effective. As mentioned in the study of Celikkaya (2014), it will be useful to establish drama
classes in order to use the drama method more effectively in lessons related to social sciences. It is also important to offer teachers in-service trainings, to put drama lessons in curricula and to increase hours of these lessons. In future studies on this topic, it can also be suggested to provide teachers with activities related to drama and to increase opportunities for them to practice.

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Chapter 21

Early Intervention Programs in Autism Spectrum Disorder

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INTRODUCTION

In addition to the normally developing individuals, special needs individuals are always living in an integrated manner within the social structure within their lives. Individuals with special needs are treated as a subject that is more important today than in the past. The issues that are considered to be important and highly up-to-date for the acquisition of special needs individuals; integrating into social life, gaining independent living skills, acting in tune with their peers, and the development of communication skills. In order to develop these areas, parents need to learn how to live with the special needs individual. This learning can be realized primarily with early intervention awareness. On the list of things to do about early intervention, parents are the ones who will motivate them while children are the first. After their parents, the trained specialist therapists and educators come. Therefore, early intervention practices, which are priorities for special needs individuals, are also very important for the development of individuals with normal development. It is known that when the planning, implementation and follow-up of early intervention practices are made by experts, the individual gives positive feedback to the work done. Early intervention programs should immediately begin after the early identification of autism spectrum disorders. Following the diagnosis of the individual, the regular application of the practices, keeping the motivation of the individual at a high level and carrying out routine controls will contribute to the social harmony of the autistic person. Studies have shown that an undeniable success has been seen in changes in the developmental follow-up forms of autistic individuals who have been carefully trained by early intervention programs. This also changes the inventory of change in the individual's being autism process. The rapid and steady development and change of the autistic individual can ensure the individual’s connection to the life with his / her qualities, and they can live like normal individuals if their lives are under control. When examined in this respect, it is necessary that individuals living with autism spectrum disorder should be diagnosed early and trained in early intervention programs. Early intervention programs vary in terms of content, implementation process, type of disability, level of educational performance, practicing specialists or therapists, and the places
where they are applied. The early intervention programs to be included in this section were formed by the selection of programs with content that could be implemented by the family.

**DIAGNOSIS OF AUTISM AND EARLY DIAGNOSIS**

One of the disadvantages of being a developing country is that being a society which cannot afford enough facilities to the special needs individual and their family. For families and autistic individuals who suffer from this situation, there are always hard-to-find patterns of events to be struggled at every moment. This is especially the case for families. This challenging life sometimes has to oppose the social environment, sometimes against the legal legislation, sometimes to a doctor in the hospital, sometimes to a school principle when he goes to school for registration and sometimes to a mother or father who has a child who develops normally.

It is necessary not only for the parents who have an autistic individual but also for the parents who have the entire special needs individual. In Turkey, it is not enough to make progress with more effective practices, awareness studies, and making legislation protecting the family and special needs individuals in recent times. Experts should emphasize how much it is necessary to study and read for parents, as well as to open each path for raising awareness of their families (Akmanoglu, 2012).

When the definition of autism spectrum disorder is examined it is stated that inadequate development in communication skills for socializing and interacting in peers or society, repetitive, limited and identical attitudes, shows him/her with activities and abilities and as a neurodevelopmental disorder that continues through a life that usually occurs before three years of age (Body and Shaw: 2010; Ekinci, Sabuncuoglu and Berken 2009; Gabing, 2008; Heward, 2007; Landa, 2007).

When the diagnosis is examined, it is known that it is first divided into two. The first is the medical diagnosis and the second is the educational diagnosis. Diagnosis is not just a local application. In order to be able to diagnose it, the DSM-IV which is commonly used in international field and (ICD-10) is required which is used for classifying the related health problems as statistical (Hall, 2009; Gul, 2012).

Parents who realize for the first time that their child has special needs are experiencing difficulties due to their disability and time of discovery. In some types of barriers, the diagnosis of individuals in particularly severe conditions can be made early, but there are delays in the identification of special needs individuals who are simply deficient in developmental features that are not obvious or with light condition ones. The early unrecognized barrier is considered to be a process that is quite late for both the individual and the family. In this case, it is difficult to talk about early diagnosis and early intervention. The socio-cultural and socio-economic structure of the family, the type of inadequacy and the level of disability may prevent the family from considering early intervention in terms of many factors. Because of these factors, when it is diagnosed for the first time, some families may act solution focused, while some families may have unexpected and
negative reactions and a dismissive attitude. The factors that support the family in this process are the material and spiritual possibilities offered by the state. The existence of these possibilities changes the acceptance levels of family with special needs of children (Diken, 2013: 234).

Behavioral assessment scales are a widely used assessment tool for the diagnosis of autism spectrum disorder. These scales are the scales that should be applied to the information received by the closest of the autistic individual. Therefore, the extent to which the autistic subject is observed is extremely important (Bryson, Rogers and Fambonne, 2003).

There are two areas for diagnosis of autism spectrum disorder, medical and educational diagnosis. Pediatricians, pediatric neurologists and child psychiatrists are involved in the medical diagnosis process while guidance research centers are in charge of educational diagnosis. Following the diagnosis process, the educational process planning and maintenance of schools, and special education and early intervention programs are implemented (Diken, 2008).

**AUTISTIC INDIVIDUAL AND FAMILY**

In this section, information about the family of the autistic individual, which supports the autistic individual to discover, learn, socialize, and be aware of life, will be shared.

**Adaptation of Families to Autism with Autistic Children**

There is no emotional explanation of the fact that the family of the person who receives the diagnosis of autism is in the middle of a life where there are many situations in which he or she must struggle. This process is psychologically explained by different emotional and behavioral disorders, but it is clear that there is not enough clearness about what families feel. While the family tries to manage their own emotional state changes, on the other hand also has to think and plan the most appropriate education program for their children, such as school, specialists and materials. This ability to cope and struggle is not a feature that each family with an autistic individual possesses. From this point of view, studies have been carried out on the management of autistic individuals by their families and a number of scientific developments have been recorded in order to facilitate the lives of these families. These scientific developments have been modeled and it has been possible to work on the development of the qualifications of the aids that should be done to the families. These models are examined in two categories, personal and interpersonal. The personal ones are; the stage model, the chronic sadness model, the individual structuring model, the meaninglessness and the weakness model and the family adjustment model studied in 2004 by Whitman belongs to the group of interpersonal models.

**STAGE MODEL**

It is the stage that the family who learns to have an autistic individual becomes able to control the process after experiencing shock and other phases. Parents of this model experienced psychologically significant stages of emotional trauma following all the details they heard about children with autism (Hornby, 1994;
Dorn, 1996). The stages of the bet are expressed as follows; (Hornby, 1994, Dale, 1996, Gok) shock is the first living response of these stages. The reason for this reaction is that they learn that they have a child who has a disorder, despite of the family and the expectation of a child of a developed and matched age. In the second stage, the families do not believe in the facts and live the process of rejection. In the third phase, parents begin to look for reasons why their child is diagnosed with this cause, and they feel guilty and anger. On the fourth stage, the parents who are aware of the facts, experience the process of regret with understanding that this process is not temporary while they may have anticipation of their children throughout their lives. In the fifth stage, the family questioning the meaning of life falls into doubt about the values and emotions. In the sixth phase, parents not only accept the situation, but also try to learn the details they can about education and practice and focus their lives on reorganizing their educational work. In the seventh phase, the parents are now focused on completely overcoming the obstacles.

While some of the parents dwell these stages step by step, some families may not be able to do this and constantly come and go between these stages (Dale, 1996).

All of the above-mentioned stages describe how the parents of the diagnosed individual cope with the disorder and how they manage this diagnostic process (Whitman, 2004).

When all stages were examined, it was seen that all of the parents were not sure whether they had experienced the adjustment phase (Dale, 1996).

**CONTINUOUS SADNESS MODEL (CHRONIC SORROW)**

In this model the rejection of the child who diagnosed with an obstacle, causes anxiety and sadness for the family. Though the family thinks how well they adapt, they may still feel sad when they see any negative reaction in the social environment. While these genders enable some families to contribute to their children and their education processes, some families feel the opposite and feel desperate (Akkok, 1997).

**PERSONAL CONSTRUCTION MODEL**

This model, which evaluates mothers and fathers in terms of cognition, brings about different perspectives on the processes and processes of adaptation. It is known that the differentiation of the parents' reactions to situations, events, and people is caused by differences in perceptions, interpretations, cultures, and so on. Every parent manages this process in accordance with his / her socio-cultural and economic situation. This management takes place through the arrangement of cognitive strings. Parents who cannot control this process when they first acquire the diagnosis begin to be able to coordinate the disability, education and adaptation process in their lives over time (Akkok, 2003).

**DESPERATION, WEAKNESS AND FUTILITY MODEL**

Parents under social pressures are constantly anxious, inquisitive and desperate. This situation affects parents and consumes them negatively and it also affects the child who diagnosed with the disability very negatively (Akkok, 2003).
In this model, parents see children with disabilities as how they see them in the society. Therefore, while the individuals accepted by the society are welcomed by the parents with positive behaviors and feelings, those who are not accepted are confronted with a feeling of rejection. Especially when the grandparents of their parents describe the situation as negative, they are able to turn the mood of the family, which is even hoped, into negative. The exhaustion of remedy and loss of power is natural for every parent who has a newborn baby, but it can last a lifetime for individuals with a disabled child (Dale, 1996; akt: Aslan, 2010).

Parents start to experience significant differences in order to be able to turn their negative attitudes toward positive thoughts against children with disabilities. Parents who are living in different periods with these beginnings may not be able to live up to the harmonization process. The fact that the possibilities of the family have developed for the purpose of overcoming these periods and transforming the process into a positive one are the important factors that explain the process of harmonization of the family with the disabled children (Esen Çoban, 2003).

The social support services that make life easier for the parents of the state and the disabled children, health service, early intervention practices, level of quality of this service group, can express the parents' feelings and obstacle diagnosis processes can be evaluated positively (Akkök, 1997).

**EARLY INTERVENTION**

Early intervention is defined as all of the preventive and remedial work after determining whether the insufficiencies of individuals' age and development levels from postpartum birth to the beginning of school age are permanent impairments (Karoly, Kilburn and Cannon 2005).

Early intervention studies are being studied and implemented as widely used programs as international revisions as they are different in the whole world. The psychiatrists, child development workers, neurologists, psychologists, pediatricians and physiotherapists are working in this area. It is seen that the program that should be applied for the child who is disabled or diagnosed as infertility at an early age has rapid development and change when it starts at an early age.

Early intervention programs were prepared with the intention to accompany early childhood education programs in the United States in the 1930s when the history was examined. It is particularly important to contribute to the cognitive development of children in this period. The Head Start program is designed for children in the United States with low socioeconomic levels and special needs. As a result of the developments under this program, early intervention programs have been defined by the state as a process with an institutional stance, including the law and the regulations. Between 1985 and 1990, these programs were enacted for children under the age of five, including newborn babies. This law has been transformed into a program that includes services for families and all groups without normal development for children (Deniz, 2009).

**Purposes of Early Intervention**

The definition and purpose of early intervention is a whole. Early intervention is a process that reveals the common power of the family and the child at the same
Children who are in need of early intervention should be subject to the programs, which will speed up their development. However, it is important to support the parents especially the mother of children in social and spiritual aspects in order to ensure the motivation of children and the continuity of early intervention.

It is necessary to provide informative and practical education and information to the family on details such as child development, family support, special education, inadequacies, drug use, exercises, activities, early intervention programs, therapists, home program applications. The parents of a child with a disability or a diagnosis of inability can also fall into despair about their parenting roles. In this case, it is necessary to provide support for consistency and self-confidence in parenting characters. It is important to teaching the techniques in children's problem behaviors and crisis management. It is necessary to solve the problems of the families who have material problems and concentrate completely on their children. Continuous improvements in social and physical habitats are essential for the appropriate use of early intervention (Brookes, Berlin and Fuligni, 2000).

Early intervention practices that are expected to benefit the whole life of the disabled individual have been determined that it can benefit to give them independence life skills while it is only interpreting the benefits of life in general and benefit the development of the disability. For this reason, attention must be paid to the preparation of programs that will contribute especially to life while early intervention programs are being prepared. Early intervention programs should be prepared and updated by specialists, with particular attention to the individual differences and characterizations of the disability. The program is proportional to the content richness and independent living skills. Early intervention programs are for disabled people as well as important programs within families during pregnancy. At any stage, these programs should be implemented in cooperation with the family and phased (Karoly et al., 2005).

The main purpose of the regular implementation of early intervention practices is to professionally perform all approaches, especially during the time spent by the mother's children, as well as the limited time spent with professionals. These details were determined in such a way that self-care routines, such as nutrition and sleep were carried out and details of the length and duration of the conversation of mothers focused on constant communication. Not all early intervention programs work with the same focus. While some work with cognitive focus, others focus on language and socialization (Halperen 2009).

While new practices are becoming common all over the world today, applications continues in the United States for more than twenty years because of its richness of the history of special education. These applications are actively utilized by the units and especially in the hospital environment following the individuals with normal development as well as following the abnormal development individuals. The working records of these units include 1985 and later years. Early intervention programs are not fixed and limited. Every city, every region can prepare and implement a program according to its own needs. For example; NEILS (national early intervention program) states that babies and the children aged 0-3
years can benefit from this program if they meet the criteria.

**Early Intervention Services**

They are the first establishments in the United States and then continue to be widely and systematically implemented worldwide, especially in clinics and hospitals. In the first years of its founding, some principles have been determined in order to be able to work systematically and to protect the rights of individuals.

- Making appropriate support studies for the developmental areas of infants who do not show normal development,
- To ensure that families who need special education have a more comfortable life, especially by reducing the material part,
- In particular, increasing the educational capacity of the families and ensuring that they are more beneficial to their children has been determined (Erdoğan, 2002).

**FAMILY BASIS EARLY INTERVENTION PROGRAMS**

Early intervention is a lasting condition for the adaptation processes and developmental progress of the individuals with special needs. The prospects for families to follow the early intervention process and to reduce the time lose in the developmental development of the special needs individual bear an unquestionable reality. When this is considered for autistic individuals, intervention in early ages, especially in the context of communicative deficiencies and adaptation to life, is important in supporting positive developments in the coming years. These situations are also explained by the investigations. Recently work on early intervention and early intervention programs have been increased. It is thought that the foundation of this process is based on acceptance and support of the family. From this reality, all early intervention programs, which cannot be worked independently from the family, have programs in which family applications are preliminary. In this study, four of the early intervention programs for cooperation with the family will be included. These are; Applied behavior analysis, sense integration, Denver early education model and neuroplay method.

In the United States, early intervention programs based on the NEILS Program, which was being worked on in the early construction of early intervention programs, were not structured independently from the family. In some programs, the main focus is the family, while in some programs the family is with the specialist. Looking briefly to this program, which explains basic family-based practices, will make it easier to understand the structures at later projects.

An early intervention program needs to respond to an interview consisting of five questions, according to the NEILS criteria.

These questions are;

1. What are the sociological structures and personal characteristics of families and children who can take early intervention practices?
2. What are the services that family and children receive in the scope of early intervention services?
3. How much should you pay for early intervention services?
4. What are the criteria for the permanent gains of the child and the family at the end of the practices of these early intervention programs?

5. What are the consequences of family and child levels in terms of where they started and where they come to?

Answering these questions contributes to the implementation of the program. The main thing about this program is that the family and the child are encouraged to make every possible improvement to the obstacle by providing the highest benefit from all possibilities. The NEILS program is important in terms of contributing to today's early intervention practices (Erdoğan, 2010).

**APPLIED BEHAVIOR ANALYSIS**

Applied behavior analysis, which is structured on the basis of learning theory, aims to achieve the individual's ability to cope with behavior problems as well as to acquire new skills (Smith, 2011).

The main goal of this approach is to plan the development of the life after the diagnosis, in accordance with the age and development level criteria of the individual, without losing time, waiting for the other causes or researches to appear, and planning the life in the family trainings and expert coexistence. Because autistic individuals have yet to be unexplained causes and developmental processes, specialists are interested in starting work without losing time (Lovaas, & Smith 2003).

Applied behavioral analysis, which is used effectively among early intervention programs, can be applied only after considering the necessary planning and individual differences in all disability individuals, not just individuals with autism spectrum disorder (Howard, 2005). When analyzed semantically, it is known that applied behavior analysis has a content that covers all areas and environments related to exhibiting behaviors in particular (Lovaas, 1973). In the part of the analysis that constitutes part of the program, measurement and evaluation criteria and quantitative results should be assessed and the follow-up of the process should be considered (Smith 2011).

In applied behavior analysis, which is an early intervention program, experts are at the core of the practice. However, it is important to emphasize the importance of family education in the table that emerges when the individual who is separated from the specialist is taken care of with his family and emphasizes the importance of taking an active role at every moment of the life of the child especially in routine life skills acquisition. The main point in the analysis of applied behavior is the examination of the learning process of the autistic child, and the effects on the autistic subject of the role model individuals with the conditional and family model are very important. Especially the detail that families need to pay attention to in observation and practice is a precursor and a result of each behavior. Those that influence these premises and outcomes are reinforcements. When the behavior is implemented during the specialist training, if it strengthens according to whether it is positive or absent, the family should be able to reinforce it in the same way and it is expressed as extinguisher if it contributes to the extinguishment of negative behaviors. (Mukaddes, 2017).
The early intervention program, which is particularly important for the behavioral gains of the autistic individual, has been noted in literature on the scanned area where changes are noticeable in the autistic individual when conducted in collaboration with a family-based specialist.

SENSE APPLICATIONS / SENSE INTEGRATION APPLICATIONS

Sense integration is a theory that expresses neurological and behavioral integrity. Because every moment of an individual's life is a sensory perception process, every moment of an individual's life is full of steps that should not be lost, and development is expressed as very clear processes. Sense exercises and sensory integration are extremely important in the development of autistic individuals as well as individuals with normal development. In particular, stimulation of multiple senses, as well as stimulation of a single sensory, should be considered for the speed of development and for the advancement of the interaction skills. This early intervention is systematically progressing when it is conducted in the presence of experts. It is stated that the sensory integration practices based on and executed by the family are seen to be recorded in a shorter time (Uyanik, Kayihan, 2010).

Sensory integration needs to be planned with the view that communication, interaction, hypersensitivity to sound and light in the individuals experiencing autism spectrum disorder, and the other details that should be taken into consideration during the use of sensory materials should be beyond the benefit of the autistic individual (Hoevenaars-van den Boom et al., 2009; Kircaali-Iftar, 2003 Webber and Scheuermann, 2007).

DENVER EARLY START MODEL

The Denver early start development model was prepared recently to early intervention practices by taking the path from the Denver developmental schedules. This model is a model in which a group under control for 0-2 year-old infants is tested for efficacy in a randomized study. This model was influenced both by applied behavior analysis and by relationship-based approach. This program is a comprehensive early intervention implementation program that cares about development (Dawson 2010).

This approach is thought to have different effects than others because it is a comprehensive early intervention program structured in the recent period. When this model is examined, it is seen that similarities and common practices are common with all early intervention programs examined within the scope of this research (Kurt, Yurtcu, 2017).

When the privileges are examined, it implies the scope of the domain to have developmental and game-based applications. Each stage is carried out by trained specialist therapists and they are working with the family every step of the study. It is the only model that limits the age level of the individual in its practice. Due to the age range s/he has, there are similarities with the process of applying sensory integration therapy. In addition, there are similar developmental orientations with the ten skills in relationship development intervention programs and Denver curriculum (Kurt and Yurteu, 2017).
It is the first model which specified as 12 weeks of application time. First of all, it is a control list model that specifies the different skill levels and goals of the model, and also it is a model that specifies the quality of the parent's application for the first time as "hot, positive, fun". Another different feature from the other models is that the intervention program in the model has the step of monitoring the intervention program. In this model, while the differences are remarkable, the concept of application reliability used for the first time (Kurt and Yurtcu, 2017).

**NEUROPLAY METHOD**

Neuroplay method is one of the newest early intervention programs of our time. Neurological development and change consist of games played in the natural learning environment in daily life and other activities that support the daily routine flow. The main practitioner of this method and the hero on the base are especially the mothers. She has a scope that being always with the child and allows the autistic person to live by planning every movement as being aware of it. This early intervention practice method is a method which is recorded as positive progressed and is easy to apply, only in the effort of stability and regular movement, in the presence of natural teaching conditions and in the presence of natural materials which takes place through playing games in the routine life for both the family and the child (Ekici and Yildiz Bicakci, 2017).

In this study, it was found out that the results of the investigation of the family based early intervention practices showed that all the disabled people, especially the autistic individuals, can make progress in the process of struggling with obstacles and insufficiency, when the main duties fall down to their families and when their determination is acted with determination and planning.

**LITERATURE SEARCH FOR EARLY INTERVENTION PROGRAMS**

Aytekin and Bayhan, examined the "Studies On The Bahp Model In The Work Of The Early Intervention Application Steps" and in their study in 2015, have especially examined the scope and applicability of early intervention practices in the legal processes and regulations located in Turkey.

Aytekin, in his study conducted in 2016 scanned the postgraduate thesis for early intervention in Turkey. In this study, the researcher who obtained the findings related to the open and closed theses, especially in YÖK thesis bank, carried out a study with the suggestion regarding the early intervention to the new investigators.

Kashefimehr examined his doctoral dissertation in 2014 according to the "Sensory Perception Buildup Model According to MOHO Model in Children with Autism Spectrum Disorder". Within the scope of the research, both the MOHO model was introduced and the content knowledge was shared and the theoretical perception integration and family expert practices were shared.

Degirmenci and Karahisar provide comprehensive information and research on the family education content of the NEILS model, which contributed to the birth of early intervention practices in their study named "A sample model for family centered applications in the Early Intervention Program: National Early Intervention Longitudinal Study (NEILS), USA" in 2015.
Kilinc and Aral prepared a study in which a sample of the application for the "Mother-Child Interaction Program" prepared for the 0-3 year-old children and their mother who is socio-culturally disadvantaged in the research titled "A model for early intervention: mother-child interaction program" in 2015.

REFERENCES


Chapter 22

Teaching Basic Microbiology Terminology in English to First Year Non-English Speaking Medical Students from Two Perspectives: Microbiology Specialist’s Perspective, English Teacher’s perspective

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1. INTRODUCTION

Since teaching English for Specific Purposes (ESP), in this case teaching basic microbiology terminology teaching, is different from teaching English for General Purpose (EGP), it needs to be scrutinized from different perspectives.

There are various factors which are of importance when we plan to design, implement and evaluate teaching basic terminology of microbiology in English to first year non-English speaking medical students. The issue of getting these students motivated, interested, and engaged while they learn basic microbiology terminology seems to be challenging, especially when we consider two perspectives namely microbiology specialist’s perspective and English teacher’s one.

On the one hand, some microbiology specialists might not be familiar enough with teaching methods and approaches in English teaching. This might create a considerable debate in teaching basic microbiology terminology in English to first year non-English speaking medical students by a microbiology specialist. On the other hand, some English teachers may not be equipped with adequate background knowledge and experience needed to foster their teaching abilities and skills in teaching basic microbiology terminology in English.

Both microbiology specialist and English teacher should gain necessary knowledge, skills, and experience in order to be able to improve themselves in this area. Accordingly, they can enhance the students’ learning and further motivate and engage the students in understanding and internalizing basic microbiology terminology in English as much as possible.

2. Similarities and Differences of ESP and EGP

Hutchinson & Waters (1987) and Potocar (2002) mention that English for General Purpose (EGP) in general focuses on structural /grammatical parts of English language. However, English for Specific Purposes (ESP) is viewed as a special and specific edition of EGP that joins practical linguistic skills in order to make it possible for the students to succeed in performing their professional tasks...
In fact, the basic goal in terms of having ESP in different non-native / international settings is to provide students with essential skills of English language to be applied when they encounter their practical challenges in their future professions. In this regard, Holme (1996 cited in Potocar, 2002) recommends that ESP can assist students to get language skills to be required through applying their knowledge and profession-related qualifications.

Regarding ESP program, an English teacher involved in teaching it should have various roles, teaching strategies, techniques and tactics for transferring knowledge to students. As Robinson (1991) suggests, the teacher has to identify the needs of students which will specify the method, material, and the level of language teaching.

3. Roles of ESP and EGP Teachers

Concerning the roles of an ESP teacher, Dudley-Evans & St. John (1998) determine some specific roles of an ESP teacher such as being course designer, material provider, collaborator, researcher and evaluator. Accordingly, these roles make an ESP teacher different from the teacher of General English. Besides, Robinson (1991) states that a personal quality of the ESP teacher is different from the teacher of General English. Robinson (1991) also expresses that the ESP teacher must acquire not only the qualities of a good general language teacher but also the specific qualities needed for the relevant major.

We should bear in mind that an ESP teacher is not going to be the first and mere source of knowledge of the field. Indeed, the students of the specific major, in this case, first year medical students and who are exposed to basic microbiology terminology, can know much more than English teacher about the subject.

Being the point, an experienced ESP teacher can relate the students’ knowledge (the first year medical students and who are exposed to basic microbiology terminology) to maximize the achievement of teaching and learning potential in the class and out of the class. Robinson (1991) states this circumstance as the situation in which the ESP teacher acts as a consultant to satisfy the students’ desired learning goals.

Broadly, an EGP teacher is to follow the ready program and teaches published textbooks assigned by the academic authorities. For this reason, an EGP teacher is needed to conduct the teaching methodology suggested in the book or advised by the authorities. However, it seems that this is the responsibility of ESP teachers to develop the relevant material program. Also, the ESP teacher should select appropriate textbook(s) based on the goals and objectives of the program and the students’ needs, accordingly.

An ESP teacher should also be interested in being a researcher which can help the teacher to carry out different tasks such as need analysis, program development, designing and selecting materials, and the like.

Although an EGP teacher is involved in the program evaluation, an ESP
teacher should deal with evaluation issue to a great extent. Being an evaluator, an ESP teacher should be aware of both formative and summative evaluations. It means that an ESP teacher should evaluate the students’ performance, his / her own performance (self-evaluation), his / her colleague’s evaluation (peer evaluation), and the program while implementing the program (during the program; formative evaluation) and at the end of the program (summative evaluation). At this point, it is important to get the students’ opinions and discuss with them in terms of the above-mentioned issues. Accordingly, it can lead the ESP teacher to have more objective and academic perspectives concerning the program.

Regarding teaching basic microbiology terminology in English to first year non-English speaking medical students, the effectiveness of the program needs to be evaluated both from the success of students in the program in general and the students’ satisfaction with various class activities in particular. It is absolutely necessary to be evaluated by an English teacher and a Microbiology specialist as well.

The first year non-English speaking medical students' abilities in basic microbiology field might improve their ability to acquire English. Since contextualization is one of the issues of teaching and learning, it seems that the first year non-English speaking medical students’ basic microbiology knowledge can assist them to get exposed to some contexts they need to have better understanding of the basic microbiology terminology in English. In the English class for EMP (English for Medical Purpose), and basic microbiology terminology, the students are shown how the microbiology content is expressed in English through some basic microbiology terminology. Accordingly, the English teacher has the chance, through utilizing most of the students' knowledge of microbiology, to help them improve their English in a meaningful manner to a great extent.

An English teacher having teaching English as a Second Language (ESL) experience is supposed to explore the choices and alternatives in teaching methods, approaches, skills, and techniques in terms of adapting teaching basic microbiology terminology in English to first year non-English speaking medical students.

At the same time, the English teacher should learn from and cooperate with microbiology specialist in order to develop appropriate lessons for basic microbiology terminology.

4. Roles of the English Teacher Teaching Basic Microbiology Terminology in English to First Year Non-English Speaking Medical Students

The English teacher has different roles. The English teacher needs to develop the program, to set learning objectives, to establish a rapport in the classroom, and also to evaluate his / her own progress as well as the students’ one.

Concerning developing teaching basic microbiology terminology in English to first year non-English speaking medical students, the English teacher is responsible to set learning goals and transform them into an instructional program in the time allotted. The English teacher must consider both setting long-term goals and short-term objectives for the students’ achievement.

In addition to design and organize basic microbiology terminology materials,
the English teacher is about to provide the students with academic and learning support as well as feedback on the students’ progress.

Being the point, the English teacher and Microbiology specialist should cooperate and collaborate with each other for the sake of having harmony while arranging the teaching and learning goals of this lesson. In fact, teaching basic microbiology terminology in English to first year non-English speaking medical students should be parallel to the teaching of Basic Microbiology program as much as possible. That is why the English teacher and Microbiology specialist should collaborate with each other from the initial point of developing the program they can learn from each other, guide each other, evaluate each other and improve theirsevels.

As a matter of fact, being aware of the students' concern in the learning situation while setting the realistic goals is highly significant. The English teacher’s knowledge of the students' background and potential is one of the key points while developing the program.

Another role of the English teacher is creating rapport. In order to develop a rapport, the English teacher should have adequate knowledge and experience of appropriate communication skills. Also, the English teacher needs to be quite familiar with medical education, microbiology education, teaching General English, teaching English for Specific Purposes, teaching English for Medical Purpose, teaching medical terminology, and teaching basic microbiology terminology in English to first year non-English speaking medical students. Through applying these skills and qualifications, the English teacher can strengthen ties with the students.

It should be noted that the students can acquire language (in this context, English language) when they have opportunities to use / apply English language in interaction with other speakers.

An English teacher might be one of the very few available sources or even the mere available source of English speaking person to the students. Despite the limitation of time, the English teacher may have the chance to create not only positive but also effective communication skills in the classroom and out of the classroom. It means that teaching and learning can happen everywhere. There is no need to have official settings for learning and teaching. This rapport can provide the opportunities for both sides, English teacher and the students, to communicate in different settings, time and circumstances to learn and improve themselves.

Broadly speaking, in the interactions with students, the English teacher should listen attentively to what the students verbalize and provide them with his / her professional academic feedback. Besides, English teacher should consider that in the lessons of basic microbiology terminology in English to first year non-English speaking medical students, the students must make many errors and mistakes for getting on and improvement.

The students should feel more self-confident in order to communicate in English with one another and the English teacher in the course of time. That is the responsibility of the English teacher to help build and support the students’ confidence in a positive, objective, and academic manner.
Once evaluating the students is the point, the English teacher is considered to be the reliable and available resource of knowledge and experience who assists the students identify both their English language learning obstacles and basic microbiology terminology ones. The English teacher can help the students systematize their learning English language in general and basic microbiology terminology in particular. Indeed, the English teacher cannot learn English and basic microbiology terminology instead of the students; however, the English teacher can help the students to maximize their potential to do so. At this point, English teacher and Microbiology specialist can share their ideas and collaborate together to pinpoint the students’ needs and problems in order for revising the program of basic microbiology terminology in English to first year non-English speaking medical students.

5. The Entry Behavior of the Students

The students come to basic microbiology terminology lesson with diversified backgrounds, characteristics, learning habits but specific interest for learning since they are first year medical students.

It is obvious that the students can learn languages more effectively when they have opportunities to perceive and apply their understanding with others in a context. In teaching basic microbiology terminology in English to first year non-English speaking medical students, having some backgrounds in medical education (Basic Sciences) in general and in basic microbiology education in particular seems to be a powerful means for such opportunities.

Logically, the students can acquire English when they deal with the materials which they find relevant and interesting owing to the fact that the students can utilize their knowledge in professional work or further studies in the course of medical education. For this reason, the program, materials, and teaching techniques should be organized in such a manner in which they can help retention of basic microbiology terminology. Accordingly, basic microbiology terminology program should be presented in authentic contexts or modified ones as much as possible.

As a conclusion, both ESP and EGP teachers have some common responsibilities; however, an ESP teacher has more roles and deeds which make teaching ESP in general and teaching basic microbiology terminology in English to first year non-English speaking medical students in particular more demanding. This teacher should consider performing EGP role and becoming a program developer, material designer, an organizer, a facilitator and researcher at the same time. This role diversity is needed to be reflected in the practices conducted in the class to meet teaching objectives of basic microbiology terminology.

6. Challenges in Teaching Basic Microbiology Terminology in English to First year Non-English Speaking Medical Students

Getting English teachers and first year non-English speaking medical students motivated, interested, and engaged while they learn basic microbiology terminology can be challenging, especially when English teachers do not have sufficient background in medical education, basic sciences, microbiology, medical
terminology, and microbiology terminology. Besides, since teaching General English is different from teaching English for Specific Purposes (ESP), Teaching English for medical Purpose (EMP), and teaching basic microbiology terminology, English teacher who is assigned to teach basic microbiology terminology should accumulate both necessary knowledge and experience regarding the above mentioned issues.

The lack of interest is often explained by the fact that most English teachers do not have reasonable motivations, either intrinsic or extrinsic one to make them try to learn about microbiology and its terminology. Also, it should be of personal choice and preference to get involved in teaching microbiology terminology. If these issues cannot be actualized, there can be a considerable obstacle in learning and teaching basic microbiology terminology.

An English teacher interested in teaching microbiology terminology can improve himself / herself through promoting the necessary techniques and approaches that will keep students interested, engaged, and excited regarding basic microbiology terminology. However, the English teacher should have already learned and practiced them as much as possible.

Microbiology specialist should help English teacher in terms of what is being taught in microbiology lesson (it is matter of what) and English teacher should share the way in which basic microbiology terminology is taught by him / her in English (it is matter of how).

As both microbiology specialist and English teacher are specialized in their own majors, they may not act on behalf of each other. Instead, they can share their knowledge and experience and collaborate in order to facilitate teaching basic microbiology terminology in English to first year non-English speaking medical students. Otherwise, meeting the goals and objectives of the program and their achievement cannot be realized as expected.

7. Teaching and Learning Strategies

The students have already acquired some basic knowledge in medical education and basic sciences. The English teacher should be aware of it well enough and try to utilize it for the sake of developing teaching and learning strategies.

Concerning deductive and inductive approaches, the deductive approach aims at teaching different grammatical rules one at a time by means of presentation and explanation by the teacher. Here, initially a grammatical rule is presented explicitly and it is followed by examples applying the rule. It seems to facilitate the learners’ acquisition by “making learners notice structures that they might not otherwise have noticed” (Ellis 1993, 1995, as quoted by Ruin 1996:104).

The inductive approach, however, moves from specific to general. The learners are initially exposed to examples having a certain grammatical structure in various contexts and then they are supposed to work out the rules by themselves. Some consider this approach helpful for the learners but others think it only disturbs the process of acquisition (Decoo, 1996). As Shaffer (1989:395) states, learners will learn the structure through examples until it becomes automatic.
As Ruin 1996 mentions, this approach also involves the learners in a more active participation and as they need to figure out the rules by themselves, the learners will remember and acquire them better than just by hearing them from the teacher.

In fact, deductive and inductive methods of teaching and learning differ in many aspects. In inductive learning, the flow of information is from specific to general, and it is more focused on the student. On the other hand, the information in deductive method moves from general to specific, and it is more focused on the teacher.

The deductive method introduces a concept and its process prior to applying it either in a test or activity. However, in the inductive method, the activity or test is introduced first before a discussion of the concept is initiated. Besides, in a large classroom setting the deductive method is preferred but in small groups inductive method is of choice of interest.

The English teacher and microbiology specialist can use both of these strategies. They can adapt either of the strategies based on the program and lesson goals and objectives.

8. Challenges Related to English Teacher and Microbiology Specialist in Teaching Basic Microbiology Terminology in English to First year Non-English Speaking Medical Students

Qualification and teaching methods of English teacher and microbiology specialist are highly significant. The qualification differences of them in general and in their own majors, their teaching method differences, the problems regarding program design, tasks, assignments are some challenges to be worthy of taking into account.

There could be a debate on whether teaching basic microbiology terminology in English to first year non-English speaking medical students should be considered as an obligatory lesson in the curriculum or not. Also, who is going to teach it, an English teacher, microbiology specialist or both of them together.

Under any circumstances, this is the teacher in the class who should be equipped with specialized knowledge in terms of the subject matter and teaching. In addition, being experienced enough regarding teaching the subject is a must unquestionably.

9. Recommendations for English Teacher and Microbiology Specialist in Teaching Basic Microbiology Terminology in English to First year Non-English Speaking Medical Students

There is no doubt that they must improve their language knowledge, especially English for Medical purpose and English for Microbiology Purpose. This allows them to expand their perspectives, understanding and exploring what is going on in the basic terminology program and accordingly they can evaluate, revise, and implement it.

Additionally, they can participate in national and international professional training courses of ESP, EMP, and microbiology terminology to be exposed to
other teachers’ and specialists’ ideas and share their own ideas and experience as well. It can, for sure, expand their horizons concerning teaching basic microbiology terminology in English to first year non-English speaking medical students.

English teacher and microbiology specialist also need to establish rapport with students in and out of the class to have better perception of the student’s difficulties they may face during the program. English teacher and microbiology specialist should allot the time together at the same time and in the same setting to be available to the students and be the students’ problem solvers. In this manner, the cooperation between English teacher and microbiology specialist for increasing the opportunities for learning and sharing experiences and knowledge with each other can be enhanced as much as possible.

And last but not least, Education and Training Department(s) of the universities can organize relevant seminars for improving both English teacher’s and microbiology specialist’s qualifications.

10. First Year Medical Education in Brief

Generally, the students are exposed to factual and procedural knowledge. Factual knowledge can be the theoretical background of medical education, for instance, learning the adverse effects of beta-blockers. Procedural knowledge can be defined as the practical part of medicine, to exemplify, how to draw blood, or conduct a clinical exam on a patient with Tuberculosis (TB).


When we consider first year medical school curriculum in brief, some common lessons in different medical schools can be as below:

- Principles of Biology,
- Organismal Biology,
- Principles of Biology Laboratory,
- Fundamental Chemistry I,
- Fundamental Chemistry I Laboratory,
- Fundamental Chemistry II,
- Fundamental Chemistry II Laboratory,
- General Physics I,
- General Physics II,
- Organic Chemistry I,
- Organic Chemistry I Laboratory,
- Organic Chemistry II,
- Organic Chemistry II Laboratory,
- General Genetics,
- General Genetics Laboratory,
- Statistics for Biological and Health Sciences,
- General Microbiology,
- General Microbiology Laboratory,
- Cell Biology Laboratory,
Biochemistry I,
Biochemistry II.
There could be a logical reason to highlight teaching basic microbiology terminology in English to first year non-English speaking medical students since the interdisciplinary program is conducted for the students. In accordance with this, the students need to be familiar with basic medical terminology and basic microbiology terminology as well.

11. Program of Teaching Basic Microbiology Terminology

Developing an effective English lesson program is essential to the process of teaching and learning. The development of effective lessons takes a great deal of time and effort without doubt. The teachers should be committed to spending the required time in this endeavor. The teachers who get prepared in different academic ways can be hopeful to gain successful instructional experience.

There are a variety of skills that need to be structured, gained and added to the English teacher’s teaching individual style. Also, the skills should be relevant so that they can be implemented in the real teaching / learning situation, and constantly evaluated and reconsidered when necessary.

There exist some main educational issues in terms of developing an effective English lesson program for teaching basic microbiology terminology to first year non-English speaking medical students. The educational philosophy of the university, the main educational objectives of the department, the individual differences of the learners in this situation seem to be some issues which are absolutely essential to be noticed.

Designing an English for Specific Purposes (ESP) course is described by Dudley-Evans and St John (1998) as a set of phases. For the authors, “the key stages in ESP are needs analysis, course (and syllabus) design, materials selection (and production), teaching and learning, and evaluation. These are not separate, linearly related activities, rather they represent phases which overlap and are interdependent,” (p.121).

First year non-English speaking medical students need to learn medical and microbiology terminology in order to read and understand medical words, phrases, sentences, paragraphs, articles, and texts and decipher them.

In fact, there is a logical method hidden in medical terminology. Almost most of the words used in medicine are made up of parts which are also applied in other words. When the students learn the meanings of the basic parts of the words, they are able to put them together to perceive the meanings of many medical terms. These basic parts of medical terms are called stems, prefixes, and suffixes. In the course of the program of teaching basic microbiology terminology in English to first year non-English speaking medical students, the students learn to identify and define a stem, a prefix, and a suffix. The students also learn how these parts are utilized in combination to describe a medical terminology.

Some points are highly significant in terms of teaching basic medical terminology and microbiology terminology. The students should be exposed to different pronunciation and accent symbols of the terminology.
Plural forms are also important. More often, the plural of a medical word is either irregularly formed or has alternate plurals.

In addition, Etymology (the tracing of a word back to its origins) needs to be taken into account.

Also, the definition or definitions of the terminology is the point. The synonyms and antonyms of the terminology as well as derived words of the terminology should be taught and learned.

Since more than 75% of medical terms are derived from Latin and Greek, a discussion of the transcription to English of Greek and Latin terms should be presented.

Indeed, lots of examples of various pieces of the terminology in isolation, and in relevant sentences, paragraphs and texts are needed to be practiced.

Chabner, D. E. (1996) mentions that medical terms are very much like individual jigsaw puzzles. They are constructed of small pieces that make each word unique, but the pieces can be used in different combinations in other words as well.

12. Microbiology Specialist’s and English Teacher’s perspectives

Broadly speaking, microbiology specialist is detail oriented. Microbiologists perform scientific experiments and analyses with accuracy and precision.

A microbiology specialist also has interpersonal skills. Generally, a microbiology specialist works with a team and manages the team.

In terms of logical-thinking skills, since a microbiology specialist is to draw conclusions from experimental results through sound reasoning and judgment, he / she needs to have logical-thinking skills.

Besides, a microbiology specialist possesses observation skills. He / She has to constantly monitor the experiments. A microbiology specialist must keep a thorough record of the work.

And a microbiology specialist is equipped with problem-solving skills in order to find appropriate solutions to various scientific, theoretical, and practical (laboratory) problems.

Teaching basic microbiology terminology is not separated from teaching basic medical terminology. In fact, the contents and curriculum of medical education, especially first year program, should be highly scrutinized.

Since basic medical terminology is derived from Latin and Greek, learning and teaching roots of the words, prefix, suffix, and abbreviations are of importance. In addition, due to the fact that the basic medical and microbiology words and phrases are also derived from Latin and Greek, it can lead us to the teaching basic microbiology terminology through applying some other basic science and disciplines words, phrases and readings. That is why teaching basic microbiology terminology should be considered from both English teacher’s perspective and microbiology specialist’s one.

In theoretical lessons, microbiology specialist who teaches basic microbiology makes the students expose to basic microbiology concepts, their relationship with other disciplines and through the relevant texts in the students’ native language ask
them to read, read, and read. Of course, reading some English relevant texts are suggested.

In practical lessons (laboratory), the students have the chance to practice some parts of their learning in the laboratory. Even in the laboratory, the students must be familiar with some laboratory instruments, processes, tests, guidelines, protocols, trainings, and the like. Still most of these are based on some microbiology terminology.

Finally, during their medical education and training, medical students need to deal with these medical and microbiology terminology. Hence, to provide retention of basic microbiology terminology, English teacher and microbiology specialist should collaborate with each other to facilitate and enhance first year non-English speaking medical students’ learning of basic microbiology terminology.

13. Conclusion

Since teaching General English is different from teaching basic microbiology terminology or in general term, English for Specific Purposes, teaching basic microbiology terminology needs to be explored in terms of relevant challenges.

There are different factors which should be considered when developing a program for teaching basic microbiology terminology in English to first year non-English speaking medical students. The lessons should be prepared to get students motivated, interested, and engaged while they learn basic microbiology terminology in English.

The lack of motivation and interest can often be explained by the fact that most non-English speaking background first year medical students consider medical terminology in general and basic microbiology terminology in particular as a requirement for their program and not by personal choice.

English teachers who teach General English are familiar with teaching methods and approaches in English. However, teaching English for Specific Purposes, Medical English, and basic Microbiology terminology is beyond teaching General English. This might create a considerable challenge in terms of teaching basic microbiology terminology in English to first year non-English speaking medical students. This can make the teachers of English for Specific Purposes, Medical teachers, and teachers of basic microbiology terminology be equipped with basic knowledge, skills, and experience in terms of Microbiology basics. Accordingly, they might contribute to fostering the students’ learning as much as possible. Besides, the teachers should be exposed to the necessary techniques and approaches in order to keep the students motivated, interested, and engaged regarding basic microbiology terminology.

Lastly, collaboration between an English teacher and Microbiology specialist seems to be an indispensable issue in terms of teaching basic microbiology terminology in English to first year non-English speaking medical students.

REFERENCES


Chapter 23

A Research on the Attitudes and the Opinions of Teachers about Self Compassion

Ayşegül PALTA
Assist. Prof. Dr.; Hakkari University, Faculty of Education, Educational Sciences, Hakkari, Turkey

INTRODUCTION

In the modern world, concept of education is changing day by day. In the new system, that teachers can give what they are expected to give requires teachers to have some personal characteristics. Having compassion along with being patient and thoughtful are the most important ones. Such characteristics make educational environment more positive in terms of both students and teachers. The responsibilities of teachers, professional challenges, stress, teachers’ attitude towards themselves in stressful situations, their perspectives and compassions are important factors that affect their mental health. Self compassion, one of these factors, which is defined as the sensitivity to one’s own self can make teachers feel better about themselves despite their professional challenges (Şahin, 2014). The definition of self-compassion is almost the same as the definition of sensitivity/compassion. Compassion means being open to other people's problems and helping to alleviate their burden (Wispe, 1991; cited by Öveç, 2007).

Self compassion is defined as approaching to one’s own failure, inadequacies and pain in an understanding attitude (Neff, 2003b). Self compassion consists of three basic components. Even though these are separate concepts and experienced differently, they interact and bring about one another (Neff, 2003a, Neff, 2003b). Self-kindness is defined as approaching oneself in compassion and understanding effort instead of approaching a critical and judgmental way against himself. When seeing a disliked aspect of one’s personality, the weakness is treated in supportive way instead of blaming himself because of this weakness (Neff, 2003b; Neff, 2009). Common humanity entails recognizing that nobody is perfect and everyone make mistakes (Neff, 2009). The third component of self-compassion is mindfulness. It involves being aware of current experience of suffering in a balanced and clear way so that neither overlooking nor thinking about negative aspects of one’s life (Neff & Costigan, 2014).

Conducting research about the attitudes and opinions of teachers about self compassion according to the results is important. Since self compassion is rather a new concept in our country, not so many studies has been found about it in the literature (Akın, 2009; Akkaya, 2011; Eker, 2011; Eraydın, 2010; Kuzu, 2011; Öveç, 2007; Soyer, 2010), and only one study has been found about self compassions of teachers (Şahin, 2014).

The problems were determined as below:
- Do attitudes of teachers about self compassion differ according to their gender, marital status, branch, seniority and the reason for choosing teaching profession?
- Do opinions of teachers about self compassion differ according to their gender, marital status, branch, seniority and the reason for choosing teaching profession?

**MATERIALS AND METHODS**

**Research Model:** Research design is mixed method. Mixed method is defined as collecting quantitative and qualitative data mixed method and analysing them mixed method (Creswell, 2006). Survey model and phenomenological design were preferred in this research. Survey model is used to identify people’s attitudes, beliefs, values, thoughts (Mcmillan and Schumacher, 2001). Phenomenological designs aims to investigate phenomenologies that we do not realize well in our mind (Yıldırım ve Şimşek, 2011).

**Population and Sample**

The accessible population of the study consists of teachers in İzmir and Mersin. The research was conducted with 289 teachers determined by convenience sampling. Sample units are selected from easily accessible due to the existing limitations of the money, time and workforce (Büyüköztürk et al., 2011).

**Table 1.** Demographic information of teachers participating in research

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td>Male</td>
<td>119</td>
<td>44,6</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>148</td>
<td>55,4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>267</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td>Married</td>
<td>230</td>
<td>86,1</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>37</td>
<td>13,9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>267</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>Branch</strong></td>
<td>Branch teacher</td>
<td>199</td>
<td>74,5</td>
</tr>
<tr>
<td></td>
<td>Class teacher</td>
<td>68</td>
<td>25,5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>267</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>Seniority</strong></td>
<td>1-5 years</td>
<td>25</td>
<td>9,4</td>
</tr>
<tr>
<td></td>
<td>6-10 years</td>
<td>58</td>
<td>21,7</td>
</tr>
<tr>
<td></td>
<td>11-15 years</td>
<td>70</td>
<td>26,2</td>
</tr>
<tr>
<td></td>
<td>16-20 years</td>
<td>75</td>
<td>28,1</td>
</tr>
<tr>
<td></td>
<td>21 years and over</td>
<td>39</td>
<td>14,6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>267</td>
<td>100,0</td>
</tr>
<tr>
<td><strong>The reason for choosing teaching profession</strong></td>
<td>parents request</td>
<td>31</td>
<td>11,6</td>
</tr>
<tr>
<td></td>
<td>My ideal</td>
<td>113</td>
<td>42,3</td>
</tr>
<tr>
<td></td>
<td>university entrance exam</td>
<td>80</td>
<td>30,0</td>
</tr>
<tr>
<td></td>
<td>coincidence</td>
<td>23</td>
<td>8,6</td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>2</td>
<td>0,7</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>18</td>
<td>6,7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>267</td>
<td>100,0</td>
</tr>
</tbody>
</table>
The frequencies and number are given according to the participants’ gender, marital status, branch, seniority and the reason for choosing teaching profession.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Gender</th>
<th>Marital status</th>
<th>Branch</th>
<th>Seniority</th>
<th>The reason for choosing teaching profession</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Female</td>
<td>Married</td>
<td>Branch</td>
<td>11-15 years</td>
<td>My ideal</td>
</tr>
<tr>
<td>P2</td>
<td>Female</td>
<td>Married</td>
<td>Branch</td>
<td>6-10 years</td>
<td>My ideal</td>
</tr>
<tr>
<td>P3</td>
<td>Female</td>
<td>Married</td>
<td>Class</td>
<td>6-10 years</td>
<td>My ideal</td>
</tr>
<tr>
<td>P4</td>
<td>Female</td>
<td>Married</td>
<td>Class</td>
<td>11-15 years</td>
<td>My ideal</td>
</tr>
<tr>
<td>P5</td>
<td>Female</td>
<td>Married</td>
<td>Branch</td>
<td>16-20 years</td>
<td>Parents request</td>
</tr>
<tr>
<td>P6</td>
<td>Female</td>
<td>Married</td>
<td>Branch</td>
<td>6-10 years</td>
<td>Parents request</td>
</tr>
<tr>
<td>P7</td>
<td>Female</td>
<td>Married</td>
<td>Branch</td>
<td>6-10 years</td>
<td>Parents request</td>
</tr>
<tr>
<td>P8</td>
<td>Female</td>
<td>Married</td>
<td>Branch</td>
<td>6-10 years</td>
<td>Parents request</td>
</tr>
<tr>
<td>P9</td>
<td>Female</td>
<td>Married</td>
<td>Branch</td>
<td>6-10 years</td>
<td>My ideal</td>
</tr>
<tr>
<td>P10</td>
<td>Male</td>
<td>Married</td>
<td>Branch</td>
<td>6-10 years</td>
<td>My ideal</td>
</tr>
<tr>
<td>P11</td>
<td>Male</td>
<td>Married</td>
<td>Branch</td>
<td>11-15 years</td>
<td>My ideal</td>
</tr>
<tr>
<td>P12</td>
<td>Male</td>
<td>Married</td>
<td>Branch</td>
<td>16-20 years</td>
<td>Parents request</td>
</tr>
<tr>
<td>P13</td>
<td>Male</td>
<td>Married</td>
<td>Class</td>
<td>6-10 years</td>
<td>My ideal</td>
</tr>
<tr>
<td>P14</td>
<td>Male</td>
<td>Married</td>
<td>Branch</td>
<td>11-15 years</td>
<td>Friends</td>
</tr>
<tr>
<td>P15</td>
<td>Male</td>
<td>Married</td>
<td>Branch</td>
<td>11-15 years</td>
<td>University entrance exam</td>
</tr>
<tr>
<td>P16</td>
<td>Male</td>
<td>Married</td>
<td>Class</td>
<td>16-20 years</td>
<td>Parents request</td>
</tr>
<tr>
<td>P17</td>
<td>Male</td>
<td>Married</td>
<td>Branch</td>
<td>11-15 years</td>
<td>My ideal</td>
</tr>
<tr>
<td>P18</td>
<td>Male</td>
<td>Married</td>
<td>Branch</td>
<td>11-15 years</td>
<td>Parents request</td>
</tr>
<tr>
<td>P19</td>
<td>Male</td>
<td>Married</td>
<td>Branch</td>
<td>6-10 years</td>
<td>Parents request</td>
</tr>
<tr>
<td>P20</td>
<td>Male</td>
<td>Married</td>
<td>Class</td>
<td>11-15 years</td>
<td>Parents request</td>
</tr>
<tr>
<td>P21</td>
<td>Male</td>
<td>Married</td>
<td>Class</td>
<td>11-15 years</td>
<td>Parents request</td>
</tr>
<tr>
<td>P22</td>
<td>Male</td>
<td>Married</td>
<td>Branch</td>
<td>21 years and over</td>
<td>Parents request</td>
</tr>
</tbody>
</table>

The list of teachers participated in qualitative part is given according to gender, class, education level of mother and education level of father in qualitative part of study.

**Instruments**

Self compassion Scale adopted by Akın, Akın & Abacı (2007) and Teacher Self Compassion Interview Form developed by researchers were used in order to investigate opinions and attitudes of teachers about self compassion.

**Self Compassion Scale**

Self compassion Scale adopted by Akın, Akın & Abacı (2007). It was seen that the tool had the structure of six dimension consisting of 26 items. In the analysis, the overall Cronbach alpha reliability coefficient of scale was calculated and the coefficient was found 0.94 by Akın, Akın & Abacı (2007). The overall Cronbach alpha reliability coefficient of scale was calculated and the coefficient was found 0.66 in this research. Responses given to items are rated as «1= never» to «5= always».
**Self Compassion Interview Form**

Demographic characteristics of the participants were asked in the first part and the following questions were asked to the participants in the second part of the form:

1. When you feel bad or you have an event that has upset you, how do you treat yourself? Why?
2. When you feel inadequate about something, how do you treat yourself? Why?
3. When you have an event that has upset you or make you feel bad, what kind of attitude do you show? Why?

**Analyses**

SPSS 17.00 program is used. Independent Samples T Test and Kruskal Wallis Test are used. Qualitative data is analyzed with content analysis. Content analysis reveals codes and categories from raw data (Patton, 2002). For validity and reliability, data analysis process is explained in detail (Ratcliff, 1995).

**RESULTS**

Data obtained from self compassion scale were analysed. Findings are as follows:

**Table 3. Independent Samples T Test Results of Self Compassion Attitude of Teachers According To Gender**

<table>
<thead>
<tr>
<th>Points</th>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>S.d.</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Compass</td>
<td>Male</td>
<td>119</td>
<td>71,9076</td>
<td>9,83421</td>
<td>-1,58</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>148</td>
<td>73,7027</td>
<td>8,34581</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Self compassion attitude of teachers do not differ according to gender (p>.05). Accordingly, it can be said that gender does not have a significant effect on self compassion attitude of teachers.

**Table 4. Independent Samples T Test Results of Self Compassion Attitude of Teachers According To Marital Status**

<table>
<thead>
<tr>
<th>Points</th>
<th>Marital status</th>
<th>N</th>
<th>M</th>
<th>S.d.</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Compass</td>
<td>Married</td>
<td>230</td>
<td>72,9913</td>
<td>9,16801</td>
<td>.40</td>
<td>.69</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>37</td>
<td>72,3514</td>
<td>8,50234</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Self compassion attitude of teachers do not differ according to marital status (p>.05).

**Table 5. Independent Samples T Test Results of Self Compassion Attitude of Teachers According To Branch**

<table>
<thead>
<tr>
<th>Points</th>
<th>Branch</th>
<th>N</th>
<th>M</th>
<th>S.d.</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Compass</td>
<td>Branch teacher</td>
<td>199</td>
<td>72,6231</td>
<td>9,04052</td>
<td>-.86</td>
<td>.39</td>
</tr>
<tr>
<td></td>
<td>Class teacher</td>
<td>68</td>
<td>73,7206</td>
<td>9,15838</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Self compassion attitude of teachers do not differ according to branch (p>.05).

Table 6. Kruskal Wallis Test Results of Self Compassion Attitude of Teachers According To Seniority

<table>
<thead>
<tr>
<th>Points</th>
<th>Seniority</th>
<th>N</th>
<th>Mean Rank</th>
<th>X²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self compassion</td>
<td>1-5 years</td>
<td>25</td>
<td>126,06</td>
<td>2,48</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td>6-10 years</td>
<td>58</td>
<td>144,22</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11-15 years</td>
<td>70</td>
<td>124,46</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16-20 years</td>
<td>75</td>
<td>135,75</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21 years and over</td>
<td>39</td>
<td>137,64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Self compassion attitude of teachers do not differ according to seniority (p>.05).

Table 7. Kruskal Wallis Test Results of Self compassion Attitude of Teachers According To The Reason For Choosing Teaching Profession

<table>
<thead>
<tr>
<th>Points</th>
<th>The reason for choosing teaching profession</th>
<th>N</th>
<th>Mean Rank</th>
<th>X²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self compassion</td>
<td>Parents request</td>
<td>31</td>
<td>161,16</td>
<td>6,27</td>
<td>.28</td>
</tr>
<tr>
<td></td>
<td>My ideal</td>
<td>113</td>
<td>129,03</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>University entrance exam</td>
<td>80</td>
<td>136,70</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coincidence</td>
<td>23</td>
<td>128,28</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>2</td>
<td>75,00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>18</td>
<td>120,31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Self compassion attitude of teachers do not differ according to the reason for choosing teaching profession (p>.05).

Data obtained from semi-structured interview form was analyzed and findings are as follows:

Table 8. Behaviors of Teachers to Themselves When They Feel Bad or They Have an Event That Has Upset Them

<table>
<thead>
<tr>
<th>No</th>
<th>Categories</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Being angry at yourself(p1,p6)</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Rewarding yourself (p7, p3,p4,p8,p14)</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Upsetting yourself (p8, p16,p18)</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>Calming (p9,p10,p19, p21,p22)</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Being alone (p11,p17)</td>
<td>2</td>
</tr>
<tr>
<td>6.</td>
<td>Removing yourself from the environment(p21,p22)</td>
<td>2</td>
</tr>
</tbody>
</table>

As shown in Table 8, behaviors of teachers to themselves when they feel bad or they have an event that has upset them were divided into six categories. The most commonly voiced categories were "rewarding yourself and calming". Other categories were expressed twice or three times. The statements of participants were as follows:
P1. I am constantly angry at myself. I have a lot of questions in my head but I remain composed.

P8. At first, I worry a lot. Then, I tell a person who quells my worries. I do things which will make me happy. I go about and go shopping.

Table 9. Behaviors of Teachers to Themselves When They Feel Inadequate about Something

<table>
<thead>
<tr>
<th>No</th>
<th>Categories</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Correcting the deficiencies (p15,p11,p10,p8,p4,p2,p21,p22)</td>
<td>8</td>
</tr>
<tr>
<td>2.</td>
<td>Developing yourself (p19,p16,p14,p10,p9,p7,p5,p3)</td>
<td>8</td>
</tr>
<tr>
<td>3.</td>
<td>Upsetting yourself (p17,p10,p4)</td>
<td>3</td>
</tr>
</tbody>
</table>

As shown in Table 9, behaviors of teachers to themselves when they feel inadequate about something were divided into three categories. The most commonly voiced categories were "correcting the deficiencies and developing yourself". The statements of participants were as follows:

P9. I try to improve myself about that. I do not easily accept failure.

P10. I worry but I try to cover up my deficiency. I need to improve myself so not to fall into the same situation.

P2. I think that nobody can have the necessary competence in everything. I focus on issues I feel inadequacy and try to cover up my deficiency.

Table 10. Attitudes That Teachers Show When They Feel Bad or They Have An Event That Has Upset Them

<table>
<thead>
<tr>
<th>No</th>
<th>Categories</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Crying (p1)</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Finding reasons (p2,p3,p10,p18,p20)</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Making yourself happy (p5,p7,p8,p14)</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Finding solutions (p6,p13,p15,p16,p20)</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Being away from the event source (p11)</td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>Calming (p19,p21)</td>
<td>2</td>
</tr>
</tbody>
</table>

As shown in Table 10, attitudes that teachers show when they feel bad or they have an event that has upset them were divided into six categories. The most commonly voiced categories were “finding reasons and finding solutions”. Making yourself happy is repeated four times. The statements of participants were as follows:

P20. I write the causes of adverse events in a bullet points in a paper. Then, I write how this affect people next to each bullet point. Later, I list the reasons why this situation saddens me. Now, I have the causes of the event, its effects on people and me. The rest is easy. I work on the causes, the effects and the people. Because I use this for years and I have not come across a situation I could not fix.

P21. I try to stay cold blooded in the face of an event that I feel bad. I think this is a situation that anyone can go through. I go away from the environment if possible. I always try to look strong. Because being calm and strong are effective in solving the problems.
DISCUSSION AND CONCLUSION

First of the findings in this study; self compassion attitude of teachers do not differ according to gender. Eker (2011) found that self compassions of university students did not differ according to gender. Şahin (2014) found that self compassions of teachers did not differ according to gender in his study with teachers. Soyer (2010) found that self compassions of university students did not differ according to gender. Yılmaz (2009) found that self compassions of university students did not differ according to gender. Kuzu (2010) found that self compassions of university students differed according to gender. There was a significant difference on self compassion according to gender in favour of male students. Erzen & Yurtçu (2013) found that there is no significant difference between female and male prospective teachers’ self-compassion levels.

Another finding is that self compassion attitude of teachers do not differ according to marital status. Şahin (2014) found that self compassions of teachers did not differ according to marital status. This is also found; self compassion attitude of teachers do not differ according to branch. Şahin (2014) found that self compassions of teachers did not differ according to branch. Erzen & Yurtçu (2013) found music prospective teachers have the highest level of selfcompassion. In this study, it was also saw; self compassion attitude of teachers do not differ according to seniority. Erzen & Yurtçu (2013) found that age variable has no relation with self-compassion total score. Studies on this issue confirm that self-compassion levels increase with the age (Neff, 2009). Final quantitative finding is that self compassion attitude of teachers do not differ according to the reason for choosing teaching profession.

Qualitative findings are similar. Behaviors of teachers to themselves when they feel bad or they have an event that has upset them were divided into six categories. The most commonly voiced categories were "rewarding yourself and calming". Other categories were expressed twice or three times. The opinions of teachers differ according to demographic variables. Behaviors of teachers to themselves when they feel inadequate about something were divided into three categories. The most commonly voiced categories were “correcting the deficiencies and developing yourself”. The opinions of teachers differ according to demographic variables. Attitudes that teachers show when they feel bad or they have an event that has upset them were divided into six categories. The most commonly voiced categories were "finding reasons and finding solutions". Making yourself happy is repeated four times. The opinions of teachers differ according to demographic variables. According to the results, following implications were made; studies aimed at increasing the level of self compassion of teachers might be carried out. A similar study with teacher candidates might be conducted and the results of the studies might be compared.
REFERENCES


Chapter 24

Problem Solving and Family in Early Childhood

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INTRODUCTION

Early childhood years are a critical in terms of the development of problem-solving skills of children as well as being the most critical period in terms of the cognitive development. Children in early childhood can experience various problems. Many of these problems help the children to assess their daily lives and in the process reach out to solving them as good observers. As children face similar problems, similar probing perceptions develop. This makes it easier for children to focus on different solutions.

Problem, can be defined as a mixed situation that individuals find themselves. It manifests itself in different forms in everyday life. A question asked by a friend, or an assignment given by the teacher may be a problem for a children (Gelbal, 1991). Problems are opportunities not to be missed for the children during the education and training process. Children’s self-esteem develops as they find alternative solutions to the problems (Duman, 2009). In order to improve the problem-solving skills of the child, it is often necessary for them to encounter with similar and different problems. The child who is experiencing the problems begins to produce alternative solutions and this increases the awareness of how to deal with others as well. The child who faces the same problem, increases his or her ability to solve the same problem (Oğuz and Köksal Akyol, 2012).

Problem solving is regarded as a process of defeating difficulties in reaching a goal. It is a skill that needs to be learned (Aksu, 1998; Bingham, 1983). The role of family is crucial in problem solving, as it creates life experiences that are necessary for the children. Solving the interpersonal problems between the mother, the father and the child in the family contributes to the development of the child's problem-solving skills. In case of a problem, it is very important for adults to accept the feelings of the children, even if they do not approve their behavior. Families should emphasize that they care about their children at every opportunity, since this would make their children more willing to solve problems. In early childhood, children whose problem-solving skills are not developed or supported are transformed into adults who can not solve their problems in their future lives. This situation causes adults to fail in their social relations.

In order for problems to be solved effectively, actively, correctly and logically; the problem should be perceived, felt, identified, ways of solution should be hypothesized, solution alternatives should be created and solutions should be realized (Duman, 2009). Learning to solve problems is related to the cognitive development. Therefore; parents should support their children's cognitive processes
during the early childhood period.

In early childhood, parents have important roles in helping their children in their education as well as guiding them in their development. A family whose problem-solving skills are highly developed have direct effects over the child's problem-solving skills in early childhood. Therefore; in this study, the importance of problem solving skills in early childhood, the development and the effect of family on problem solving skills were examined. In addition, suggestions were presented for the parents related to problem solving skills of their children based on case studies.

**PROBLEM SOLVING**

Problems often arise in uncertainty, or in situations where accuracy, and reality is not obvious. A problem is a situation that interferes with the person's mind, confuses it; as well as disturbs the individual, and needs to be solved (Adair, 2000; Bingham, 1983; Duman, 2009; Kalaycı, 2006). Each problem situation may differ from one another. In a given situation; a solution that gives a result in a particular time, location, person, or organization may not be a solution that gives results in another time, location, person, or organization in another situation. This shows that both problems and solutions can vary. This reveals the complexity of the problem-solving process. Variability and complexity of this situation shows how important it is for those who have to solve problems should have problem-solving skills (Konan, 2013).

Children are natural problem solvers and time is very important for them in solving the problems they encounter. Over time, children create opportunities by solving problems to achieve success while solving problems (Bullock, 1988). This ensures that the child has confidence in problem solving. Individual differences are effective in problem solving process (Arenofşky, 2001; Sardoğan, Karahan and Kaygusuz, 2006). At this point, the personality traits of the children also come to the forefront and the children solve their problems according to them (Oğuz and Köksal Akyol, 2015).

When children are given opportunities to solve their own problems, they develop cognitive abilities like observation, comparison, information editing, and evaluation (Goffin and Tull, 1993). When children start solving their problems, they also start to face with decisions, judgments, and evaluations of transactions, and things that are uncertain. These help children to develop curiosity, co-operation, discovery, self-respect and control over their surroundings. Children also need freedom to solve problems and in the discovery of available resources. This allows children to work on solutions (Dinçer, 1995). Thanks to the problem-solving skills, a child has the opportunity to improve himself or herself. Problem solving skills enable the child to develop his or her creative thinking, to approach the events with a different perspective, to be aware of himself or herself and to express his or her feelings more easily (Oğuz and Köksal Akyol, 2012).

When the literature is examined, it is seen that the phases of problem solving are similar and the problems reach to a solution through a certain processes. The steps that are common to the stages of the problem-solving process discussed in the
research are the following:

1. **Intuiting the difficulty or the problem:** The most important step to solve a problem is to recognize it. Realizing that there is a problem arises from not being satisfied with a situation.

2. **Identification of the problem:** It is the phase that transforms the understanding of the problem into action to solve the problem.

3. **Problem solving:** When the problem is solved, hypotheses can be revealed; there may be some temporary solutions that would allow a more systematic formula to be found.

4. ** Determination of possible solutions:** Identification or production of possible solution options to solve any problem is seen as a crucial part of the problem solving process.

5. **Deciding one of the possible solutions:** Selection of the most appropriate option from the produced solution, may affect the problem decoding process. The primary activity for decision making is to determine the selection criteria.

6. **Implementation of the decided solution:** Children who can to solve a problem should be able to feel, observe and act the solutions that they found for the problems.

7. **Assessing the application result:** A robust assessment of all possibilities should be made to achieve the solution scheme. Assessment is important since it helps to teach children how to evaluate how successful they solved (Adair, 2000; Bedoyere 1997; Bingham, 1983; Eskin, 2009; Kalaycı 2006; Stevens, 1998; Webster Stratton, 2006).

**THE EFFECT OF THE FAMILY**

The environment and experiences are major influences over the development of children. When it comes to the environment, the first element that comes to mind is families who are the first part of the child's life.

The family is very influential in the child's life during the early childhood. The family is very important when it comes to creating trust in the child, providing the child with the environment necessary for his or her social acceptance, providing a model for him or her, giving the child guidance for their behavior, contributing to the development of the child's problem-solving skills, helping to acquire oral and social habits to adapt to the environment and improving the child's abilities (Güney, 2006; Kitapçı Uysal, 2005). Children often learn new problem-solving strategies by observing other people's problem-solving examples (Crowley and Siegler, 1999).

In a survey conducted with preschool children, it was found that the aims and strategies that children are focused during problem solving were adopted consistently with the the social information processing patterns of parents and; particularly the patterns of social information processing by fathers (McDowell and Parke, 2002). In a research on problem solving skills of children attending kindergarten by Oguz and Köksal Akyol (2014), it was found that the number of children in the family did not affect children's problem solving skills. Independent of the number of children in the family, the families behave in a similar manner to each children. When different researches are examined; effect of the relationship
between the mother and the child have at home (Frankel and Bates, 1990; Freund, 1990), how a task given to children affects children (Thornton, 1999), the involvement of preschool children and children between the ages of six and eight (Davenport, Hegland and Melby, 2008) and parental behaviors in free play and problem solving interactions related to problem behaviors in preschool boys (Annevirta and Vauras, 2006) were identified as elements that affect children's social problem solving skills. Can-Akbaş (2005) found that children's social problem solving skills increased as their socio-economic level increased.

Children acquire their daily life skills by imitating their parents. Over time, the environment they are interacting expands and the children are faced with different behavioral models. So they come to the distinction of differences. Within this learning process, children need love, trust, belief in themselves, self-expression, free thought, and effective guidance. Democratic parental attitudes, the discipline understanding of the family, the form of communication and other human relations that are important in the family, and the possibilities that the family provides to the child are very significant. The main goal of the states in the twenty-first century is; to raise creative, entrepreneurial, productive, dynamic, self-confident individuals who are healthy in the physical, mental, emotional and social aspects, who are harmonious with its surroundings, who are able to cope with itself and its surroundings and has the power to solve problems. One of the most important of these properties which become universal values is to have problem solving skills (Şanlı, 2005).

Parents who face a problem affect their child's attitudes towards problem solving can affect related skills both positively and negatively. Constant counseling offered by parents may lead the child to run away from the problem; as well as also prevents them from learning by living. For this reason, parents who face a problem with their child should investigate alternative solutions to the problem and use the child's emotional and reflective listening. A child with a reflective listening ability can express his or her feelings more easily and be more rational about his or her own problems. Often, even the parents are actively listening to the child can contribute greatly to child’s own solution. If parents create an environment in which children can express themselves, they increase their confidence in themselves. Children that can communicate more easily with the environment, do not hesitate to talk in society, and can produce different solutions for problems. Among the mother, the father and the child; the person to find a solution to the problem must be the one that owns it. If the child is the one who needs to find a solution to the problem, then the child is given a sense of responsibility (Kalkınç, 2003; Ömeroğlu and Kandır, 2007).

Mothers and fathers can allow children to make choices about their own needs in order to improve their problem-solving skills. They can give them a chance to express their thoughts by making their participation in family decisions. They can take the opinions of their children in their own decisions. They can guide them in the solution of the children's problems. Children can show behaviors that will be an example to them as the right model. Leaving the child responsible for finding his or her own solution is the most effective way to help the child. All of these parental
attitudes enable the children to grow up self-sustaining, critical thinking and life-
management skills that enable them to carry on their lives in a healthy way, 
establish and maintain healthy relationships with others, produce solutions to their 
problems, and gain the skills of life management (Öğülmüş, 2006; Şanlı, 2005). In 
an authoritarian approach, children learn that they do not have the ability to solve 
problems on their own. Children need clear and safe bounding lines for their 
development. Adults should take into account the child's reasoning ability when 
they form those boundaries. If the child's reasoning ability is taken into account 
during the establishment of boundaries, this would support the problem solving 

Mothers are the ones who have influence on the development of children's 
problem solving skills just like in other developmental areas. Fathers, are also 
influential over their children's problem-solving skills. It has been determined that 
the democratic parental attitude has a high effect on the problem solving ability of 
the children (Arı and Şahin Seçer, 2003; Terzi Işık, 2000). When a boy identifies 
with his father, he does not only understand his attitudes, his roles, his mimics, his 
emotional reactions, but also imitates the language he use in his his problem-solving 
strategies, and his thinking processes. For this reason, especially the mental 
development of boys is affected by their relationship with their father (Güngörmüş 
Özkardeş, 2006).

When children develop problem solving skills, it is not correct for parents to 
solve the problem instead of letting the child solve it. Children who constantly 
resort to adult’s support in solving the problems with their peers end up with 
underdeveloped problem solving skills. Also; restoring to physical punishment, 
ignoring the child, displaying a repressive and authoritarian attitude and using a 
language of communication that humiliates the child are not the right attitudes. 
Psychological, physical and sexual violence cause cognitive retardation in the child 
and lead to tension in problem solving by adversely affecting the child's intellectual 
processes. 

CASE STUDY (1)

N. was a six-year-old girl. She was asked to identify the problem situation in a 
photo that had three children. There was a girl in the photo wearing a very big hat. 
The other two kids were laughing at this little girl. When asked about the problem 
in the photo N., replied by stating that “They are laughing”. When asked about the 
intention through “Why do they behave like that” question, she replied, “Because 
she's wearing something funny.” Then N. was asked “What do you think this little 
girl can do to produce a solution in this situation” N. proposed two solutions, "She 
can say 'It is not funny' and 'Don't laugh at me'”. "When asked, "What would you 
do if you were in the picture in this picture?” she replied, “I would say 'do not 
laugh'”. 

In the above example, N., a child in the age group of 6, showed an expected 
developmental characteristic in cognitively defining the problem. She interpreted 
the intention by stating that the girl in the picture wore “something funny”. She 
made a good observation by looking at the photo and made an assessment based on
the concrete situation in terms of her age group. The number of children in the 6-year-old group producing alternative solutions can be four or more. N. here has produced two solutions in relation to the problem case, and these solutions are solution oriented. When asked what she would do if she faced with a similar problem, the answer that she gives is still solution oriented. N. did not produce any authority-dependent, passive or aggressive solutions for the problem.

**CASE STUDY (2)**

Y. was a 5.5-year-old girl. When she was shown a picture of a child who is not accepted into a hand-holding game played by a group of children group of children playing a hand-holding game where a tried to participate in a game, she said, "They did not take the child to play." When she was asked, "Why did not they take the child to play?" she responded that “Because he is spoiling the game”, When asked to find a solution, she had two answers: "He needs to comply with the rules of the game" and “He might ask to join”. When she was asked "What would you do if you were at the spot in this photo?” she replied, “I would say 'I am not going to do that again my friend' and I would apologize”.

Y.’s answer to the identification of the intention behind the problem is “Because he is spoiling the game” - this is coming from the situations that are often encountered during early childhood games by children of this age group. Normally there is no clue about this in the photo. The child's intention to probing stems from observations in similar problem situations. The answer is "I am not going to do that again my friend again, I apologize" is coming from the idea that the child believes that he or sh has violated the game and should therefore apologize for it. In early childhood, many similar problems can occur in children's play environments. And children can approach similar problems with the same perception and solution.

**CASE STUDY (3)**

B. was a 6-year-old boy. He was asked what a child can do when his toy is taken away from him while playing without permission by a friend. He stated the following: “He can tell to his mother”, “He shouldn’t cry because this is his friend”, “I would tell with good intentions”, “I would go and tell to his [friend’s] mother”. When he was asked which of these solutions would help him to get back the toy, he stated that “He can get his toy back when the other child is gone”.

B. has produced four solutions for this problem. In early childhood, children are successful in creating alternative solutions. However, the solutions they produce include the situations that they learned from their parents; and if they received support from their parents in the past, the suggested solutions also include the involvement of the parents as well. The child resorted to an adult for the solution by stating that “He can tell him to his mother” and “I would go and tell to his [friend’s] mother”. Parental guidance is important in solving problems, but when cases are created where problems are solved instead of children, the child will want his or her mother or another adult to solve his or her own problem, as seen in this case study.

**CASE STUDY (4)**

E. was a 5.5-year-old girl. She was asked what can a child do when a page
from her story book got ripped while she is turning the pages. She gave the following responses: “She can paste the page”, “She can buy a new book”, “She can turn the pages more carefully” and “I would tell to my mother”.

This case study shows that if the child does not get results from her own solutions, she would turn to adults. It is important that parents support their children's problems in early childhood. E. was brought up with the knowledge that he can apply to adults when he has problems in his life. It has been taught to her by her parents that a problem can be solved primarily by herself; and she can reach out to her parents if this is not enough. In the problem-solving process, this is a very important approach.

**CONCLUSION**

The problem is defined as the obstacle that the child faces in reaching a goal. Problem solving is defined as the process of overcoming the obstacles. The child identifies the problem when encountered, generates alternative solutions, chooses one of the alternative solutions, applies the chosen solution, and makes a careful observation. The child leaves a solution that he or she can not get a result, and tries to solve the problem by producing an alternative solution again. In the problem-solving process, how children perceive the problem, their personality traits, their willingness to find a solution to the problem, their self-confidence, and how they are supported by the circles are very important. However, parents' attitudes towards their children are more influential on children's problem-solving abilities. Children who are supported by their parents can propose very different and diverse solutions to the problems that they face. Problem-solving skills of the children who are not supported by their parents may recede, and their desire for problem solving may decrease.

When children meet a new problem, they link it with the problems that they have experienced in the past and try to reach the solution. This process makes it easier for children to solve new problems they face. Children get to know themselves when solving their problems and develop creative thinking. Reflecting is a very important step in the process of recognizing and identifying the problem. For this reason, it is thought that it is important for children to be supported to reflect, solve, and use their cognitive abilities better in the face of various problem situations starting from the early childhood.

In the light of these results, the following suggestions can be made to the families: Helping children to gain the ability of asking questions may guide them in problem solving. When a child is confronted with a problem, it is important that the child has the opportunity and time to solve the problem. After solving the problem, regardless of the outcome, the child shouldn’t be held responsible and shouldn’t be judged. Families should give children opportunities to express their problems and they should listen to them. Children should be guided by their parents to solve their problems. Families can also get help from a specialist to solve their child's problems. The child should be given the opportunity to implement the solutions that they propose. When children are faced with a problem, parents should not solve the problem instead of the child. To solve the problems, the child should be asked to
take responsibility, and that responsibility should be given to the children. It should be noted that the basis of the problem solving skills is self-confidence.

REFERENCES


Chapter 25

The Impact of the Montessori Approach in Supporting Children's Self-Regulation Skills*

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INTRODUCTION

Self-regulation ability is expressed as the ability to voluntarily restrict some behaviours, to activate others and the ability to focus and shift attention as needed (Blair & Razza, 2007; Liew, 2012; Smith-Donald et al., 2007). While pre-school children have difficulties complying with kindergarten class routines and rules without having self-regulation skills (Rimm-Kaufman, et al., 2009), preschool years are considered as a very important period in the development of these skills (Kochanska et al., 2000; Murphy et al., 1999; Güler Yıldız et al., 2014). For this reason, the teacher has to familiarise the children to the rules, to the routines and to the behavioural expectations of the class (such as waiting for his/her turn, raising finger, participating in structured activities). Children without this support are having difficulties in regulating their behaviour both during pre-school and during primary school transition (Degol & Bachman, 2015). This is supported by research findings that show that children are able to develop appropriate behaviour in the classroom (Blair & Razza, 2007; Howse et al., 2003; Liew et al., 2010; Valiente et al., 2011; Valiente et al., 2010) and that their self-regulation ability is effective in loving school in a positive way and achieving social adaptation (Eisenberg et al., 2001; Olson et al., 2005; Valiente et al., 2007).

However, there is a lot of studies showing that the low self-regulation ability (Blair & Razza, 2007; McClelland et al., 2007; Miles & Stipek, 2006; Normandeau & Guay, 1998; Ponitz et al., 2009) of children who are in pre-school and primary school age and who have difficulties in regulating their feelings and behaviours, is effective in children's school maturity and academic achievement (McCabe et al., 2004; Blair, 2002; McClelland, et al., 2000).

When self-regulation skills that are seen as effective in children's academic achievement can be supported by teachers in preschool period (Denham et al., 2007; McClelland & Morrison, 2003; Degol & Bachman, 2015) and when teachers

* This study was presented at the 5th International Preschool Education Congress held in Ankara, on 18-21 October 2017.
intentionally make time for self-regulation behaviours, it is proved that there are significant social and emotional benefits for children (Domitrovich et al., 2007; Webster-Stratton et al., 2008).

In the light of this information, it can be said that the awareness of pre-school teachers about self-regulation of children and the support of it, is important for the future academic achievements of children. When the relevant literature is examined, it is seen that there are many theorists' views on the skill and support of self-regulation in little children.

Albert Bandura, the forerunner of self-regulation studies, defines self-regulation as learning to think about what he/she wants to learn, regulation of motivation and as the ability to self-taught of children (Bandura, 1994). Vygotsky's theory of development states that psychological processes, such as self-regulation, are the learning context in which children are developed through interaction with adults and peers (Stetsenko & Vianna, 2009), and that self-regulation teaches children to think independently about how to solve their problems (Vygotsky, 1978). Relating to Freud's psychoanalytic theory, the development of self-regulation is described as a natural consequence of emotional impulses and needs, and self-regulation is defined as the mechanism by which an individual control the arousal level and fulfils the requirements of the real world (Bronson, 2000).

Despite that Montessori does not use the term self-regulation, his texts about internal discipline or normalization are clearly related to this concept. According to Montessori, internal discipline is the ability of children to concentrate, their effort to keep on working, to fulfil the instructions, to respect others and the environment, to live in peace and happiness (Montessori, 1995). Montessori, who moots that children develop internal discipline and peace through permanent concentration at their self-chosen jobs, has called this process as normalization (NAMTA, 2005; Montessori, 1949). According to Montessori, a normalized child is a child who is able to make self-motivated, independent decisions and has the ability to act with conscious choice, not merely from an empty curiosity (O'Donnell, 2007). Discovering the connection between freedom and self-control that he defines as the two sides of the medallion, Montessori, advocates that when working with the materials of each liberated child, their self-discipline will be developed. For this reason, he sees normalization as the way to work freely in this environment (Montessori, 1967).

As a result of an extensive literature study, it can be said that the gaining of self-regulation skills in pre-school years is influential in children's future academic achievement and based on theoretical assumptions of teachers' self-regulation skills, training programs can be prepared for children to learn self-regulation. The Montessori classes, in which the views of Maria Montessori, who has theoretical assumptions about the support of self-regulation skills, are widely used in Turkey. It is believed that the determination of how effective Montessori's views on self-regulation is in Turkey in the classrooms where this approach is applied will be effective in increasing the qualification and quality of pre-school education in Turkey. For this reason, in this study, it was aimed to investigate the effect of the Montessori approach on self-regulation skills of children aged between 48-60
months. For this purpose, self-regulation skills of children who continue to Montessori class and continue in National Education pre-school classes are compared.

**MATERIAL AND METHODS**

**Sample of the Study:** The main purpose of this study is to investigate the effect of the Montessori approach on self-regulation skills of children aged between 48-60 months. It is tried to determine how effective Montessori Approach applications are by comparing them with traditional program and education, because it is a different program than the MEB (Ministry of National Education) Preschool Program. In order to be able to detect the existing situation in a controlled way, a trial model with "Pretest-Posttest control group" was used between the real trial models.

**Working Group:** The study group consists of children selected by neutral appointment, aged between 48-60 months and who were educated in the Province Konya, County Selçuklu, Selcuk University, Faculty of Health Sciences, İhsan Doğramacı Practice Kindergarten during the 2015-2016 academic years. A total of 28 children were included in the study group, including 14 children (8 boys, 6 girls) trained by the Montessori method in the experimental group and 14 children (6 boys, 8 girls) trained according to the MEB Pre-School Education Program in the control group.

**Data Collection Tool:** The Pre-school Self-Regulation Assessment adapted by Fındık Tanrıbuyurdu & Güler Yıldız (2014) includes 10 tasks that assess children's self-regulation performances. These tasks are; toy packaging, waiting for toys, candy storage and holding a candy on the tongue for children's pleasure procrastination levels; a balance board, towage and pen clicking to follow the instructions and collecting towers, allocating toy and returning toys for children's social adaptation skills. There is also a Practitioner Assessment Form on the scale, which provides the researcher with the opportunity to evaluate the child's emotions, the level of attention and behaviours. The Practitioner Assessment Form is a rubric-type measuring instrument consisting of the items scored from 0 to 3. In the Turkey Adaptations Study, it was determined that the scale also showed the same factors in Turkey as it was shown in the original. In addition, the reliability coefficient in the Attention/Impulse Control subscale was determined as (α) .88; the Positive Emotion in the sub-dimension was .80 and .83 all over the scale.

**Data Collection and Analysis:** The Pre-School Self-Regulatory Scale was administered to each child individually and the directives of the tasks in the scale are given to the child by the researchers to perform. The performance of the child was recorded during the implementation process. The assessment took 25 minutes on average for each child. After having completed the application, the researcher has recorded the overall performance of the child's attention, emotional and behavioural adjustment processes throughout the implementation period. Pre-test application works are carried out between 14-25 September 2015; post-test application works are carried out between 19-24 May 2016. During this period, the experimental group students were pre-schooled for 27 weeks using the Montessori
Approach by teachers who received 112 hours of Applied Montessori Education. The control group students were pre-schooled for 27 weeks by using the MEB Pre-School Education Program. In the study, data collected from data collection tools were analysed using the Mann Whitney-U Test and the Wilcoxon signed-Ranks Test using a data analysis package program for SPSS 16.0 social sciences. The Mann Whitney-U test was used to test whether the scores obtained from two unrelated groups differed significantly from each other and the Wilcoxon signed rank test was used to test the significance of the difference between the scores of the associated measuring set (Büyüköztürk, 2005). Descriptive statistics were also used in the study to calculate the arithmetic average and standard deviations of the groups. In the study, the significance of the difference between the averages of the points was tested at a level of significance of 0.05.

**RESULTS**

In order to test whether the pre-test averages of the pre-school self-regulation assessment of the experimental group and the control group constituting the study group were similar to each other, pre-school Self-Regulation Assessment averages of both groups before the test were analysed with the Mann Whitney U test. The values relating the comparison are given in Table 1.

**Table 1: Mann Whitney U Test Results for Comparison of Self-Regulation Pre-test Scores of the Groups**

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Items</th>
<th>n</th>
<th>X</th>
<th>Ss</th>
<th>ST</th>
<th>SO</th>
<th>U</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance Board</td>
<td>Test</td>
<td>14</td>
<td>6.92</td>
<td>6.55</td>
<td>16.82</td>
<td>235.5</td>
<td>65.5</td>
<td>-1.50</td>
<td>.13</td>
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<td>3.43</td>
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<td>.26</td>
<td>14.50</td>
<td>203.0</td>
<td>98.00</td>
<td>.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Control</td>
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<td>1.92</td>
<td>.26</td>
<td>14.50</td>
<td>203.0</td>
<td></td>
<td></td>
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</tr>
<tr>
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<td>-.89</td>
<td>.37</td>
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<td>45.39</td>
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<tr>
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<td>.00</td>
<td>14.00</td>
<td>196.0</td>
<td>91.0</td>
<td>-1.00</td>
<td>.31</td>
</tr>
</tbody>
</table>
As we can see after examination of Table 1, there was no statistically significant difference between the pre-test average scores in all activities of the Pre-School Self-Regulation Assessment (P > 0.05). According to this result, it can be considered that the groups are equal to each other. In other words, when independent variables that cannot be controlled in the same way are assumed to affect the experimental and control groups in the same way, it can be said that the differences in children's achievement of self-regulation skills can be attributed to the operations to be performed in the experimental and control groups.

**Table 2: Mann Whitney U Test Results for Comparison of Self-Regulation Post-test Scores of the Groups**

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>n</th>
<th>X</th>
<th>Ss</th>
<th>ST</th>
<th>SO</th>
<th>U</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance Board</td>
<td>Test</td>
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<td>10.14</td>
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<td>71.00</td>
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<td>8.58</td>
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<td></td>
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</tr>
<tr>
<td>Pn Ticking</td>
<td>Test</td>
<td>14</td>
<td>85.28</td>
<td>22.95</td>
<td>16.36</td>
<td>229.0</td>
<td>72.00</td>
<td>-1.26</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>14</td>
<td>69.85</td>
<td>35.93</td>
<td>12.64</td>
<td>177.0</td>
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</tr>
<tr>
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<td>Test</td>
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<td>2.00</td>
<td>.00</td>
<td>14.50</td>
<td>203.0</td>
<td>98.00</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Control</td>
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<td>2.00</td>
<td>.00</td>
<td>14.50</td>
<td>203.0</td>
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</tr>
<tr>
<td>Tower Collection</td>
<td>Test</td>
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<tr>
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<td>10.96</td>
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<td>48.50</td>
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</tr>
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<tr>
<td>Toy Packing</td>
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<tr>
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<td>Test</td>
<td>14</td>
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<td>1.79</td>
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<tr>
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<td>2.48</td>
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<td></td>
</tr>
</tbody>
</table>
After examining Table 2, it appears that there is a significant differentiation in favour of the experimental group in the average score of "hiding candy" and "holding a candy on the tongue" activities which are included in pleasure postpone events and "tower collection" and "toy separation" activities which are included in social gathering activities of the children in the experimental group participating in the training of the Montessori approach. There is no significant difference in the average scores of activities that are included in follow-up-executive activities such as balance board, tower making and pen ticking. This can be interpreted as the fact that self-regulation skills of children in a class in which the Montessori approach is applied are higher than self-regulation skills of children in the MEB program. According to this result, it can be said that the Montessori approach positively affects children's self-regulation skills.

**Table 3: Wilcoxon Test Results for Comparison of Self-Regulation Pre-Post Test Scores of the MEB Program**

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>n</th>
<th>X</th>
<th>Ss</th>
<th>ST</th>
<th>SO</th>
<th>Z</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance Board</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>231.0</td>
<td>70.00</td>
<td>-2.11</td>
</tr>
<tr>
<td>Control</td>
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<td>3.89</td>
<td>.18</td>
<td>12.50</td>
<td>175.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holding a Candy on the Tongue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test</td>
<td>14</td>
<td>40.21</td>
<td>2.93</td>
<td>16.68</td>
<td>233.5</td>
<td>67.50</td>
<td>-1.95</td>
</tr>
<tr>
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<td>14</td>
<td>30.21</td>
<td>16.34</td>
<td>12.32</td>
<td>172.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
After examining Table 3 we can see that there is no statistically significant difference in all activities between the pre-test and post-test average scores of the control group children participating in the education in which the MEB program is applied except for the "Returning a Toy" activity. It is expected that there will be a decrease in the time of returning the toy by the children to the researcher in the "Returning a Toy" activity. However, it is seen that the return time of the toy by children in the control group increased significantly in the post-test. This situation can be interpreted as the fact that the MEB program does not develop children's self-regulation skills.

**Table 4: Wilcoxon Test Results for Comparison of Self-Regulation Pre-Post Test Scores of the Montessori Approach**

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>n</th>
<th>X</th>
<th>Ss</th>
<th>ST</th>
<th>SO</th>
<th>Z</th>
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<tr>
<td>Returning a Toy</td>
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</tr>
<tr>
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<td>.006</td>
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<tr>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
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<tr>
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<td>16.34</td>
<td>4.25</td>
<td>25.50</td>
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</tr>
<tr>
<td>Balance Board</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>6.55</td>
<td>6.00</td>
<td>24.00</td>
<td>-1.50</td>
<td>.13</td>
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<td>Post-test</td>
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<td>7.96</td>
<td>7.44</td>
<td>67.00</td>
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<tr>
<td>Pen Ticking</td>
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</tr>
<tr>
<td>Pre-test</td>
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<td>Pre-test</td>
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<td>.26</td>
<td>.00</td>
<td>.00</td>
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<td>.31</td>
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<tr>
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<td>1.00</td>
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</tr>
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<td>Tower Collection</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>12.83</td>
<td>7.65</td>
<td>99.5</td>
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<td>5.15</td>
<td>5.50</td>
<td>5.50</td>
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</tr>
<tr>
<td>Toy Separation</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
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<td>111.21</td>
<td>49.07</td>
<td>7.71</td>
<td>92.50</td>
<td>-2.51</td>
<td>.01</td>
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<tr>
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<td>18.64</td>
<td>6.25</td>
<td>12.50</td>
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<td></td>
</tr>
<tr>
<td>Toy Packing</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>3.00</td>
<td>-2.12</td>
<td>.03</td>
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</table>
When Table 4 is examined we can see that there is a statistically significant difference between the pre-test and post-test average scores of test group children participating in the education in which the Montessori Approach is applied for follow-up-executive activities like "pen ticking" activities, pleasure delayer activities like "toy packing", "holding a candy on the tongue" activities and social gathering activities like "Tower Collection", "Returning a Toy" and "Toy Separation" activities. It can be interpreted as the Montessori Approach contributes significantly to the support of children's self-regulation skills. However, it is expected that there will be a decrease in the time of "Returning a Toy" by the children to the researcher. Nevertheless, it has been found that the toy-returning time of the test group children increased significantly in the post-test.

<table>
<thead>
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<th>Scale Items</th>
<th>n</th>
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<th>Post-test</th>
</tr>
</thead>
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<td>2.00</td>
</tr>
<tr>
<td>Hiding a Candy</td>
<td>14</td>
<td>3.83</td>
<td>4.00</td>
</tr>
<tr>
<td>Holding a Candy on the Tongue</td>
<td>14</td>
<td>30.14</td>
<td>40.21</td>
</tr>
</tbody>
</table>

In Table 5 it is seen that the self-regulation total score average of the test group children is 43.64, the total score average of the control group children is 40.71. Given that the highest possible score that can be taken from the entire scale is 48, it can be said that the self-regulation of the test group children is high. Nevertheless, it
appears that the self-regulation of children in the classroom in which the Montessori approach is applied is significantly better than the control group children.

In the subscale of children's attention/impulse control, it is seen that the average score of the children of the test group is 25.78 and that of the control group children is 23.50. Given that the highest possible score that can be taken in the Attention/Impulse Control subscale is 30, it can be stated that the children of the test and control group exhibit a high degree of self-regulation, as it is the case across the scale. Nevertheless, the attention impulse control skills of children who are in the classroom where the Montessori approach is applied, are significantly more advanced compared to the control group children.

In the positive emotional subscale of the children, it was determined that the average scores of the children of the test group were 17.85 and the average scores of the children of the control group were 17.21. Given that the highest possible score at this dimension is 18, it can be said that children perform consistently with all of the scale and the attention/impulse control subscale. There is also no significant difference between the test and control group children.

**DISCUSSION**

According to findings obtained from the research; It was determined that the children in the test group participating to the class where the Montessori approach is applied were significantly different in favour of the test group in the average scores of pleasure postponing activities including "hiding a candy" and " holding a candy on the tongue" activities and social gathering activities including "tower collection" and "toy separation" activities. In addition, there is no significant difference in the average of the points in the "balance board", "tower making" and "pen ticking" activities in the follow-up-executive functions activities. This can be interpreted as the fact that the self-regulation skills of the children in the class in which the Montessori Approach is applied are higher than the self-regulation skills of the children in the MEB program. According to this result, it can be said that the Montessori approach positively affects children's self-regulation skills. This can be explained by the unique qualities of the Montessori Approach, such as the basic philosophy of the Montessori Approach, the perspective of the approach to the child, the educational environment presented to the child in the approach and the nature of the educational material and the role of the teacher in the approach. The concept of environment that is prepared in the Montessori approach has an important place. This environment is child-centred, an environment that focuses on the development of the child, that suits the child's interests, which allows the child to progress on his own, an environment that focuses on the development of the child and in this environment, materials are given to the child, in a certain order and place according to their complexity and priority. In this way, children are allowed to reveal their own tendencies and meet their mental needs. In addition, freedom lies at the heart of this approach, in which children freely choose the material, person, place and duration they want to work with, and this freedom implies responsibility for the child. In this way, the child's independence initiatives are supported. Again in this approach, there is one of every material, the child keeps patience while
waiting for the selected child and in this way the child learns to wait, to be patient and again with this material, this/her decision on the desire to work is reassessed, in this way the child is helped in gaining a habit of thinking before making a choice. In the basic philosophy of this approach, the studies aimed to be developed in the child are provided by placing it in his daily life, which makes it easier to adopt and internalize the behaviour of the child. When all these qualities come together, it can be said that this has a positive influence on self-regulation skills of the children (Çakıroğlu Wilbrant, 2008; Çakıroğlu Wilbrant, 2009; Korkmaz, 2006; Tepeli, 2011; Mroczkowski, 2014).

When the Montessori approach is analysed (Tepeli & Yılmaz, 2012; Toran, 2011; Koçyiğit & Kayılı, 2008; Aral et al., 2015; Kuşçu et al., 2014; Dereli, 2017), it is determined that the Montessori approach has an effect on the social skills, social adaptation and the social problem solving skills of children, that these children were more likely to wait, take responsibility and finish work than children who were traditionally educated.

As a result of the study, there was no statistically significant difference between pre-test and post-test averages of the children of the control group participating in the education of the MEB program in all activities except for the "returning the toy" activity. It is expected that there will be a reduction in time of giving back the toy to the researcher in the "returning the toy" activity. However, it is seen that the toy returning time of the children in the control group increased significantly in the post-test. This can be interpreted as the fact that the MEB program has no effect on children's self-regulation skills. Although the 2013 Pre-School Education Program does not include individual purpose-oriented statements for children's self-regulation skills, it is seen that the principle "Education should ensure that the child respects and trusts himself; should give him self-control" (MEB, 2013, p.11) takes place for the development of these skills in children. In addition, the program emphasizes the need for the child to participate actively in the activities and the need for freedom to choose activities and things to play and choose the materials in educational environments. Again, when achievements and indicators related to the social and emotional areas are examined, although the attainment, "Motivates himself to accomplish a job or a task", which has an important place in terms of self-regulation skills of children, and as for it the indicator "Starts a business without adult guidance. Strives to finish the work on time that he/she started on time" pull the attention; this has not been effective in the development of children's self-regulation skills (MEB, 2013, p.29). This reveals the importance of besides the principles, achievements and indicators containing in the currently implemented program and both the educational environment and activity for the development of these skills of children and the importance of teachers' awareness of this issue.

Besides, in accordance with the findings obtained from the study, there was a statistically significant difference between the pre-test and post-test point averages of the test group children who were participating in the education in the class where the Montessori Approach is applied, in follow-up-executive functions activities including "pen ticking", pleasure postponing activities including "packing a toy", "
holding a candy on the tongue" activities and social gathering activities including "tower collection", "returning a toy" and "toy separation" activities. This can be interpreted as the Montessori Approach has an important contribution to the support of children's self-regulation skills. However, it is expected that there will be a decrease in the time of returning the toy by the children to the researcher in the "returning the toy" activity. However, it has been determined that the toy returning time of the test group children increased significantly in the post-test. In the development of self-regulation skills of children, there is a need for the presence of learning environments where they can construct their own learning events, influence their own learning processes, evaluate their own learning processes, make their own plans, give feedback and correct themselves (Üredi & Üredi, 2007). From this point of view, it can be said that the Montessori approach is effective in the development of children's self-regulation skills in terms of educational environment, materials, educational philosophy and other qualifications.

One of the remarkable results of this study is that while it was anticipated that there would be a decrease in the toy returning time of the children to the researcher in the classes where both programs are applied, there is a significant increase in the toy returning time of the children in both groups in the post-test. According to Montessori, children's working styles are different from adults; objects are tools that contribute to the formation of the personality, rather than objects in the outer world being a target to be reached for him. The process is more important in the job that is done, the child repeats his studies until it reaches internal satisfaction in this work, children are working to resolve their internal needs, by its very nature the child wants to excel and become independent. At this point, the absence of the reward and punishment system, which is the unique characteristic of the Montessori approach, prevents the child from disturbing his natural desire to work and also because of the error checking feature in the materials, he does not need anyone to approve the correctness of the work he has done, he becomes independent by checking his correctness (Çakıroğlu Wilbrant, 2009, who has transferred from Schumutzler, 1994). For this reason, there was a significant increase in the post-test in the classes where both programs are applied, while it was anticipated that there would be a decrease in the toy returning time of the children to the researcher; it can be said that there is an increase in the post-test scores due to the intrinsic fulfilment of the children's work and the desire to perfect in this job and the lack of learning needs related to the material in question.

Again as a result of the study, it was found that the total scores of self-regulating skills and attention impulse control skills of children who were educated in the class in which the Montessori approach were significantly higher than the control group children, there was no differentiation between the two groups in the positive emotional subscale. This result, obtained in terms of attention impulse control skills, the polarization of the attention, which is included in the basic philosophy of the Montessori Approach, is considered to be a result of the concentration principle. Montessori considers concentration skills as part of life, underscoring that children should never be disturbed during their work. Besides Montessori emphasized that an education, designed in particular in accordance with
the individual development of each child and containing free choices, will ensure the development of children's attention skills (Wilbrandt Çakıroğlu, 2008). It has been determined that the Montessori approach facilitates children's natural ability to concentrate in the studies on the effects of children on attention skills (Lloyd, 2008; Koçyiğit et al., 2010) and it was found to be effective in concentrating skills.

**CONCLUSIONS**

According to the findings obtained from the study, it has been determined that the self-regulation skills of the children in the class in which the Montessori Approach is applied are higher than the self-regulation skills of the children who continue to the classes in which the MEB preschool education program is applied. In accordance with the obtained findings, achievements, indicators and activities for the development of children's self-regulation skills can be added to the program in addition to the principles, achievements and indicators in the pre-school education program currently being applied. Programs can be organized for pre-school teachers on self-regulation skills, school preparation skills, adaptation to the school and the importance of academic achievement.

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Development of Sensory Awareness and Literacy Skills in Early Childhood Period

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INTRODUCTION

Children try to know, discover, understand and learn their environment through their senses. In order that learning is realized at children, it is necessary that all their sense organs do their tasks, transmit what they obtain to the brain and that this information be perceived by short term memory, made it meaningful and commented. Maturating and learning through their experiences in the process of growing and development, children could their capacity to the highest level. As children grow up, they become more experienced by means of their emotions and they come to the level where they can form mental symbols and images representing objects and relations when they maturate internally (Smith, 2007; Goodwin, 2008; Yazıcı, 2013; Yazıcı & Kandır, 2014). In this way, brain comments complex information flow coming from different senses and using the sensory information provides children with various experiences at the same time (Atkinson, Atkinson, Smith, Bem & Nolen, 2006).

Each experience children have in the early childhood period is of the basic preparation for a programmed learning they would start in the future (Madi, 2011). For that reason, early childhood period is a basically critical period in terms of the sensory development of children. Different parts of brain create perceptual experiences by stimulating the senses and combining the information gathered. These perceptual experiences make contributions to the development of such early literacy skills of children as reading, writing, understanding what is read, copying the symbol, increasing vocabulary, verbal fluency, matching the sounds starting/finishing with the same sound and separating the sounds starting/finishing with the same sound, finding the number of words in a sentence and the number of syllabuses in a word, recognizing rhythmic words, separating, adding and throwing sounds, drawing letters, defining letters in a group of letters, hearing the names of letters and repeating them aloud, reasoning, problem solving, and understanding various concepts (Dunn, 2007; Strickland & Riley-Ayers, 2007; Yazıcı, 2010).

From early ages onward, supporting the literacy skills of children is in line

* This study is an excerpt taken from the doctoral dissertation titled “The Effect of Sensory Education Program Supporting Reading and Writing Skills on the Preparation Skills of Children at the Age of 61-66 Months for Reading and Writing” completed by Elçin Yazıcı under the supervision of Prof. Dr. Adalet KANDIR.

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with their skills in visual, audial, cognitive, social and emotional development field and of importance in terms of their preparation for the primary school (Robinson, 2011). For that reason, it is necessary that the literacy skill levels of children be determined in early period, their educational environment of children that would support in this sense be arranged and their qualitative literacy programs be formed (Yazıcı, 2013).

Studying into the relation between the changes happening in the brain during the development of early literacy skills of children and the sensory experiences causing these changes are of vital importance while arranging educational environments and forming literacy programs, in terms of the holistic development of children (Goodwin, 2008; Willis, 2008). Depending on this point, the current study was carried out to determine the importance of sensory awareness skills (seeing, hearing, touching, smelling, tasting, multi sense) in the development of literacy skills in early period.

The Relation between Sensory Awareness and the Development of Literacy Skills

Each experience causes to form synapses at brain. These experiences are realized by using the senses. As the central nervous system develops, so does sensory system. Children start using their senses from very early ages onwards. Children recognize and interpret things by taking objects into their mouths, listening to sounds, touching, observing, shortly using their senses actively from the birth onwards (Cavanaugh – Todd, 2010; Robinson, 2011).

Children develop thoughts upon their sensory experiences and use symbols, language and reflections to obtain information. As children grow up, they experience about knowing directly and physically more and they are forced to exhibit fewer physical behaviours to know something as they maturate internally, becoming to form mental symbols and images (words, mathematical figures) which represent objects and relations (Goodwin, 2008; Yazıcı, 2013). For that reason, it is quite important for children to discover objects through their senses, experience them and get feedback for the process of attaining knowledge.

It is necessary that children in early childhood period study all the senses together in order that their potentials could reach the maximum level. In this period, it is required to stimulate the senses of children for the social, emotional, mental, physical and language development of them and that they find an opportunity of meeting the stimulants stimulating different channels of senses. Therefore, children have to coordinate all their senses in order to understand the world and behave effectively (Plotnik, 2009; Yazıcı & Kandır, 2014). One way of stimulating a brain developing with using senses in an active way is reading and another one is writing. The theories based on brain researches offer some strategies in a way to allow children to attain automaticity in skills related to literacy by building bridges between word awareness and understanding (Willis, 2008; Yazıcı, 2013).

Children must be supported by offering activities whereby they could make all their senses active from early childhood period onwards and develop their literacy skills in the most efficient way. For that reason, the supportive activities for the
literacy skills would give an opportunity to develop literacy skills and to form suitable conditions to attain such basic concepts as classification, ordering, comparing, making a cause and effect relation, problem solving and reasoning as they would allow children to use their five senses actively (Dunn, 2007; Madi, 2011; Yazıcı, 2013).

Planning an education, they will accelerate and support the basic literacy skills to create a learning wish and purpose at children would cause to increase the sensory awareness levels of them by stimulating different senses in different parts of the brain, which will play an important role on the literacy skills.

In this sense, the relation of sensory fields with literacy skills is given below separately:

**Visual Sense** undertakes the primary tool task in locating children themselves in the world. These tools investigate the relations between objects, events and cases structurally and with its absence, it is difficult to understand the abstract concepts even becomes impossible. For that reason, the function of seeing is necessary for conceptual development (Baines, 2008). It is necessary to benefit from the visual materials while making children attain concepts and skills, as visual materials are effective on both learning and creative thinking (Özkubat & Ulutaş, 2017).

Visual materials should be related to the concept to be taught and be used to strengthen important thoughts. Visual materials help a child spell, recall reality from his memory, make a relation between mathematical and spatial connections. It was determined that compared to only learning depending on a text obtained from a computer screen, using visual drawings with the text brings about understanding what is read better. No matter how abstract a concept to be learned is, there is a need for suitable visual drawings more as well. Visual materials indicate the importance of efficiency in transmitting abstract concepts and they play a significant role in learning (Baines, 2008), as adding pictures, graphics or supplementary information boxes to the text means an emphasis on important information for children. A successful communication depends on the visual on paper. It is thought that the more reality and experience is placed in memory, the better it is to grow children (Frey & Fisher, 2010; Yazıcı, 2013).

In addition, in order to make learning more active through visual stimulants, children should be asked to draw pictures related to the text they read. It is indicated that the best way to start experiencing regarding writing skills is the pictures that the child draws at the beginning of that activity. Children use words to tell and analyse the picture in this process. While talking about the pictures, children explain how well they understand the text (Baines, 2008).

Benefiting from pictures is a quite new method for the sake of presenting multiple experiences to the children and it activates mental processes. Asking children to draw pictures about the vocabulary which are not familiar to children means to transfer the learned thing to the long term memory after sending it to the short term memory. Children could forget about a definition but they can remember the visual related to it. For that reason, combining visuality with the literacy skills will help them be aware of their skills and powerful sides, understand, analyse and evaluate them (Frey & Fisher, 2010; Isbell & Isbell, 2007; Yazıcı, 2013; Özkubat &
Ulutaş, 2017).

*Audial system* is the sensory system which is made up of ears, hearing nerves and a part of brain, being able to perceive and comment the vibrational waves is called sound (Yazıcı, 2013). A proper functional audial system includes cognitive actions into the process and is of vital importance in verbal communication. Besides that, it provides forming awareness about being able to sing songs, listen to them and the sounds around. In other words, the ability to hear means loading meanings on sounds (Robinson, 2011).

In particular, children can hear and comment on a great many sounds around their ears at the same time thanks to audial experiences. Children are exposed to a great number of sounds such as vehicles, animals, humans and music around them and as music in particular is related to a lot of parts of brain like language skill, feelings and rhythm, it affects learning and attitudes to a great extent. When children pronounce the word they do not know accompanied by music, they learn both the pronunciation and the meaning of the word (Isbell & Isbell, 2007; Baines, 2008; Yazıcı, 2013). Music also improves such sensory and cognitive skills as developing listening habit, perceiving the relation between the part and the whole. In this way, children attain important skills in preparation for literacy such as hearing what is listened and understanding what is heard (Choi, 2007).

Songs, poems, rhymes, finger games and rhythmic words are of a significant place in the language skills of children (Jackman, 2001). They offer an opportunity for the correct application of different pronunciation of words, spelling of vowels, rhythmic flow of syllabuses and sounds. In addition, it helps children teach sound units, forming sound modular awareness, remembering and using word and sentence patterns, developing vocabulary and differentiating first-mid-last sounds (Yaman Baydar, 2012). Songs supporting audial awareness, rhymes, finger games, rhythmic words etc. could be used as a teaching method in literacy skills (Yazıcı, 2013). Neuroscience researches show that audial system is important in learning reading and losing this skill could put reading skill at risk (Walczyk & Griffith-Ross, 2007). For that reason, it is of crucial importance to combine literacy skills with audiality in terms of learning.

*Tactual sense* forms the first perceptions of children regarding the world. In addition, it helps to develop cognitive, motor and social-sensory skills. By means of tactual sense, children learn new words and language as well as mathematical and scientific concepts. At the same time, using tactual sense is a method for the education of children having problems with reading and spelling. It is likely to increase the levels of awareness of the children by making them feel the letters in special characteristics or follow the words by their fingers (Isbell & Isbell, 2007; Baines, 2008). Such features of objects as shape, dimension, hardness, softness, hot, cold, humid, wet, dry, heavy, light, rough, slippery, cornered, round, flat, curved, flexible, tight, active, stable, thick and thin could be differentiated by touching. Children differentiate the surfaces and limits of objects and learn to perceive the differences of shapes with their features. For that reason, touching is necessary for the discovery of the basic concepts with regard to literacy (Yazıcı, 2013).

It is important to use activities supporting the body awareness at children, as
body awareness do not only affect their level of skills in such big motor activities as catching the ball and running, but it also influences small motor skills like writing, cutting with scissors. Besides using such materials as finger painting, clay, foam or soap for painting activities, it is also possible to use some drawing activities such as writing on sandpaper with a chalk. Some structures could be added to writing tool or drawing surface. It will allow to use fingers more and send signals from fingers to brain more, which will improve tactual and motion sense (Isbell & Isbell, 2007; Yazıcı, 2013). In this way, while integrating literacy skills with sensory experiences particularly motion and tactual senses facilitates to make the skills attain, it will provide permanence at the same time (Robinson, 2008).

**Sense of smell**; nose transmits the message coming smell to brain in this process. Following that the brain solves this message and makes it understand by integrating the sense it belongs to and the memories (Topbaş, 2007). Thanks to that, perception of smell is realized. As any kind of smell is archived in the smell memory in the brain with a special code, just thinking some of them for a moment will make the children remember their memories related to that smell. In this sense, children do not only differentiate the smells, but they also make connections with those smells and exhibit behaviours consistent with them (Topbaş, 2007; Yazıcı, 2013).

Sense of smell happens in the part of brain where the brain affects memory and creativity. Thanks to sense of smell, the objects around are recognised with their dimension of smell. Smells are effective on health, belief, manner, behaviour and creativity. In particular, sense of smell is given more importance in Japan as it is expressed that a great many smells increase creativity and reduce stress (Baines, 2008). In a study, the details remembered by individuals after a reading passage read in company with smell were investigated. It was found that the individuals remembered the details of the character in the text in a correct way (Robinson, 2011).

In addition, smells support the vocabulary gains of children. It is indicated that there are more than 400,000 types of smells in the world. Physiologists formed various classification systems for smells (etheric, amber, animal, vegetable, unattractive smells etc.). Therefore, sense of smell is suitable for a large vocabulary gain (Morgan, 2009; Yazıcı, 2013). In this context, sense of smell like other senses is of importance for literacy skills.

**Sense of taste**; thanks to sense of taste, tastes are transmitted to the related parts of the brain with the help of bumps on the tongue and they are perceived. There are some basic tastes like sweet, salty, sour, bitter that are perceived by taste receptors on the tongue. As the other sensory organs come into play in the process of tasting, the visual, tactual, smelling areas are active as well. For that reason, the sense of taste does not only support the sense of smell but also other senses (Baines, 2008; Brynie, 2009).

Foods are important in the sense of taste and are effective on the academic success of children. Eating could disperse the attention of children in activities in different ways, particularly when they have stomach rumbling as a great many children have intensive reactions (sometimes emotional) for foods. Therefore, any
academic study carried out into foods must be purposed and well planned beforehand. Making a synchronization of swallowing with putting new things into mouth leads to both attaining eating skills and also running the necessary muscle structures to start talking with the inclusion of different chin and mouth movement in to this process (Robinson, 2011; Yazıcı, 2013).

In order to be aware of the power of sense of taste, it is necessary to be aware of the strong and symbolic features of foods and to prefer these dynamic senses to use the skills in creative and positive styles to facilitate the learning of children and support their skills of literacy (Baines, 2008; Isbell & Isbell, 2007). For that reason, the activities with regard to tasting are related to literacy skills.

**Multi-sensory** is a teaching way activating all the senses of children (visual, audial, smelling, tasting, motion, tactual, thinking, intuitional, and enjoying) (Fu, 2009). Using more than one sense in multi-sensory does not only attract attention to the concepts but it also increases the attention and encourages learning (Bromfield–Lee, 2009).

As multi-sensory offers children different learning styles, it shows that being exposed to multiple senses leads to more superior awareness compared to being exposed to only one sense (Bromfield-Lee, 2009). It is recommended to use multi-sensory approaches in the attainment of awareness regarding literacy skills. These approaches are made up of such works as seeing a word, moving on the letters with fingers and spelling the word by using the sound in the alphabet (Baines, 2008; Yazıcı, 2013). In the related studies, it was tried to make children attain reading, spelling and writing skills using multi-sensory steps. In this sense, it was pointed out that the studies based on multi-sensory learning approaches applied on children are effective on the reading skills of children (Campbell, Helf & Cooke, 2008).

Literacy skills defined as a complex process made up of various functions of brain such as seeing, perceiving, vocalizing, understanding, structuring in the brain require a good running between senses, motivational maturity, self-control and muscle control. In this sense, when visual clues (written word), audial stimulants (pronouncing a word) and kinaesthetic activities (following letters with fingers) come together, children attain necessary skills for literacy (Baines, 2008; Yazıcı, 2013). For that reason, it is important to support literacy skills with multi-sensory which means using more than one sense at the same time.

As a conclusion, supporting activities in the process of attaining literacy skills with the stimulants stimulating the channel and with such stimulants as seeing, hearing, touching, smelling and tasting provide children with controlling their senses, increase their sensory awareness levels and facilitate basic concepts and skills attainments regarding literacy skills. This case reveals the relation between sensory awareness and development of literacy skills.

Depending on these results, the following recommendations were given:

- In order to increase knowledge regarding sensory awareness and development of literacy skill, adults could be given seminars, conferences etc. about the studies they can do to support their children in this way.
- In the acquisition of literacy skills, sensory awareness (visual, audial, tactual, smelling, tasting, multi-sensory) which is aimed to be attained
through sensory experiences is of great importance. In this sense, it is likely to deal with studies investigating the relation of each senses with literacy skills.

- Depending on the strong relation between brain and senses in the development of literacy skills, some studies could be carried out between different disciplines.

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Chapter 27

The Malta Protestant College and Its Importance in Anglo-Saxon Missionary Movement in the Ottoman Empire

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INTRODUCTION

Turks are among the most decisive elements in Martin Luther's approach to Islamism which he describes as the will of God upon the corruption of Catholics and "a birch rod sent to us to correct our sins" (Fischer-Galati, 1959, p. 30). Yet, according to him; Turks, who reached Belgrade, conquered Hungary, arose triumphant in the Battle of Mohács, besieged Vienna and threatened the German principalities that had not been united then, are the biggest problem. While on one hand, the kings were putting up a political-diplomatic fight against them-it was not right to give a religious meaning to this battle-on the other hand, the church should initiate a greater fight. However, the church must not take the sword in this battle as the Pope once did, but gird on with other weapons and put up a fight on other fronts. And this war must not be confused with the war of the emperors or the princes. In this battle, instead of armies, evangelists must confront Turks (Warneck, 1906, p.11). In other words, the welfare and hope of mankind relies on the mission of spreading the sacred message to the whole world (Warneck, 1906, p. 19; Fischer-Galati, 1959, pp. 43-47). Although the methods they used in this direction have been met with doubt for centuries because of their close relations with politics, showing how missionaries who also continue their activities today tried to realize their plans in the age of colonialism through education and examining the fields they studied and their educational background should enlighten us to understand the present of missionary discussions which has been /will always be a topic of the discussion agenda. The functions of missionaries who negotiated how to Christianize the world in large congresses they held regularly in the late 19th and early 20th centuries have not come to an end, and given the fact that the number of communities sending missionaries beyond national borders since 1997 increased to 600 (Barrett, 1997, pp. 24-25), it appears that they continue to maintain their importance. This basic problem situations of this study are the ideological infrastructure and curriculum of the the Malta Protestant College which included the Ottoman Empire within the countries which they aimed to "resurrect" through their graduates as well as the activities of Samuel Gobat who was among the founding principles of the school, and Theodore Frederick Woltersone, a student who had worked for many years in the Anatolian mission.

The purpose of this study is to show the importance of Malta Protestant College in the missionary activities supported by British missionaries affiliated to
the Anglican Church in England during the last century of the Ottoman Empire when plans were made on its legacy as well as the effects on the missionaries assigned to the Ottoman geography and the methods by which they used education as an instrument in their missionary activities. The problem sentence of the study is "what is the significance of the Malta Protestant College that follows a program aimed at achieving full commitment and absolute obedience to the Protestant law and understanding in the Anglo-Saxon mission in the Ottoman Empire?". The sub-problems addressed in line with the purpose of the study, the problem situation and the problem sentence are; (i) What was the purpose of founding The Malta Protestant College? (ii) What is the context and scope of the curriculum that was followed in The Malta Protestant College? (iii) What is the effect of Samuel Gobat, one of the founding principals of The Malta Protestant College, on the Anglo-Saxon mission in the Ottoman Empire? (iv) "What is the level of activity of Theodore Frederic Wolters, a graduate of the school, in Anatolia under the auspices of Church Missionary Society?"

**MATERIALS AND METHODS**

The missionaries of the Anglican Church not only helped raise awareness on the education of people and widespread prosperity in the empire, but also helped to develop political, economic and commercial interests of England. In this context, the lack of a work in which Anglo-Saxon missionary movement in the Ottoman Empire was evaluated using the archives of the societies causes a great gap in studies on educational history. This research, conducted on a subject* in relation to

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which only a single article in Turkish could be found (Aksu, 2016, pp. 57-109) has been realized in the context of documents that were found in an archive which is rich in terms of letters, reports, minutes of congresses, atlas, etc., written by missionaries members of the British Anglican Church. However, the lack of a document on the subject in the Prime Ministry Ottoman Archive has led to the evaluation of the subject only using foreign archive resources. On the other hand, the fact that the activities in the Ottoman Empire of Pastor Gobat a founding principal of The Malta Protestant College and Pastor Wolters, who was a trained missionary have been addressed in this study can be described as the distinctive feature of this research.

The basic assumptions of the study are that it will be better to justify the factors in the determination, change and improvement of the strategies to be used to help the state acquire a western-Christian identity both by forming a Protestant community and by making direct contact with the public, by not only the unique features of the imperial geography but also by the experience knowledge and

perspectives of the missionaries which they originally possessed. This research, which addresses The Malta Protestant College that raised some of the missionaries working at the Ottoman Empire in the 19th century and on two missionaries associated with the institution, has been prepared by interpreting the original correspondences, plans and projects of the missionaries, on the one hand, and the relevant literature within its own terms on the other hand, using the historical method and historical research design.

The research is limited to the means and methods of data collection, and limited to the 19th century during when the activities of the Anglican Church started and reached a climax in the Ottoman Empire, as in various parts of the world. In addition, it is limited to the Malta Protestant College, which is one of the examples of instrumentalization of education in missionary movements, and which is important in terms of the missionaries whom the Anglican Church trained and commissioned for the activities in the Ottoman Empire, and Pastor Gobat, who was the principal of the school for a short period of time, and Pastor Wolters, who was a graduate of the school.

In the background of this study, we will try to analyze the beginning, purpose and scope of the Anglo-Saxon missionary movement and the understanding / assertion to Westernize and modernize a non-western society, one of the most motivating elements of the missionary idea.

RESULTS

The primary aim of the Malta Protestant College, which began its educational activities in 1846, to give support to Protestant missionary communities acting in the entire Mediterranean region with missionaries, course books, propaganda etc. and to train fifteen to twenty missionaries each year to serve in the stations. The opening of the College was congratulated by the Grand Vizier Mustafa Reshid Pasha and Lord Stratford de Redcliffe, the British Ambassador to Istanbul (Journal of Deputation [JoD], P. II, 1855, pp. xiii, xiv, xvii-xviii).

In the missionary activities in the Ottoman Empire, it can be argued that the efforts of Catholic missionaries, particularly the Jesuits; were the most important factor in ensuring that Protestant communities such as the American Board of Commissioners for Foreign Missions, the Church Missionary Society, the Jews' Society, and the British and Foreign Bible Society are acted in co-operation. Within this competition, ABCFM's budget increases every passing year. In fact, in the early 1850s, 15,000 shillings were assigned annually for missionaries in the Mediterranean mission. This amount is more than the budget of all the societies as well as occupies the first place in terms of the number of missionaries that the society employed (JoD., 1855, P. II, p. 730). In this process, Britain, that has taken Malta from France in 1814, unclosed its intention of moving one step further than the others by establishing a Protestant college in Malta. The aim of the college, which was opened on February 3rd, 1846 was to "Train local missionaries on site for the enlightenment of the East". In line with this purpose, the objectives of the school were:

(i) Indiscriminatingly providing missionary, holy bible ministry and school
management/administration and teacher's education for Eastern children including children from Southeast Asia and China. In addition, the school promised to provide human resource to all Protestant societies, and serve as a kindergarten and warehouse. For this purpose, 40 shillings which was the annual costs for every student who should be at least eight years old - twice this cost was needed for the same level of education in England - would be allocated regularly. Those who donated 100 shillings to the school would be entitled to two years of language and theology education in the adult section. It was planned that the school would be free of charge. This was due both to the insufficient level of socio-economic income of the students and also the unwillingness of wealthy families to allocate a budget for missionary education.

(ii) School administrators needed to remember that the communities residing in the neighboring regions of the Mediterranean were in a very critical and sensitive position due to the dominance of Islam on the one side, and influence of vulgar Christianity on the other side.

In this context, it is understood that the college was particularly involved in the liberation of Britain from the state of apathy and assumed the responsibility to show the obligations that the country should undertake to overcome the current crisis.

Malta Protestant College that could be characterized as a small campus; was composed of a school, which was for boys that attained the school age and a college where science, literature and theology lessons were taught to adults. The fact that the college was familiar with the tongues, customs and traditions in the East owing to student population, increased its capacity and willingness to make staff assistance for all societies. Students were collected from provinces of Greece, Rumelia and Anatolia and various regions of Syria, Arabia, Iran, Southeast Asia, China, Egypt and Africa. Within this framework, after an average of six years of education, the College aimed to send 15 to 20 graduates to the field each year. It was planned to assign these graduates firstly to primary schools opened in the regions inhabited by Europeans. Yet, the families complained that they could not find a sufficient school in the East for their children until they reached the age when they could be sent to Europe. This situation caused children to spend the most efficient first eight to ten years in vain. Moreover, in some cases, Protestant westerners had to send their children to the Catholic schools, which was worse than ignorance. Therefore, meeting this need was primarily the responsibility of the Malta Protestant College. However, in order to be able to do this, the school must be able to collect 4,000 shillings of donation each year. The increase in the number of primary schools for graduates of college to serve was important for the children of the craftsmen residing in provinces such as Istanbul, Alexandria where they needed a practical training rather than higher education and could not allocate high budgets for education. Also in these schools both teaching of practical information and

† College officials showed those who were sent to school at the age of eight, ten or even sixteen by such families and were not able to speak and write in English properly as a grave consequence of such situation (JoD, Part II, 1855, s. 828).
religious-ethical indoctrination, though at the basic level, could be completed (JoD., P. II, 1855, p. 868).

In the school where boys between the ages of eight and seventeen attended, in addition to bible-orientated religion and morality courses, English, Latin, Greek, German, French, Italian, Modern Greek, Arabic, Turkish and Armenian and also writing, arithmetic, bookkeeping, linear drawing, geography, history, modern science, algebra, biology, botany and chemistry were taught. In the college section, theology, moral philosophy, classical Latin and Greek, Hebrew, English, German, French, Italian and other Eastern languages and their literature, history, economics, politics, mathematics, astronomy, cosmology and teaching methods were taught. Also mandatory music lessons and painting lessons were also taught for additional payments and upon requests of the families. Students were required to attend the church services. In the school where the training started on the 1st of October, the tuition fees were collected at the beginning of the semester and it was requested to inform the administration in advance if the student was to leave. Ten weeks of holiday was found to be sufficient in each year, from July 15 to October 1, December 24 to January 2, including also the Easter holiday either in April or May. The student was allowed to stay at the school for a certain fee (JoD., p. II, 1855, p. 868).

Graduates were asked to distribute the brochures printed in various languages, in the areas they walk around and advertise that Oriental, intelligent and well-behaved students could receive education gratuitously at the school. Also, in the regions they are on duty, they were also expected to remind that Christians in England are willing to give a highly qualified education to improve the living conditions of the Eastern nations and that they do not want anything more than the sacrifice to work for the spiritual reverence of themselves and their entourage to the bitter end (JoD., P. II, 1855, p. 869).

At least eight students in the boys’ school \footnote{It was allowed to stay up to the age of 17 at this level. (JoD., P. II, 1855, p. 867).} and at least fifteen in the college students have also received paid education at the institution where they have studied. Among boarding students, those under the age of eleven must pay 35 shillings, students over that age must pay 45 shillings and in college, 60 shillings per year must be paid annually. Ten shillings were requested from the students in the day-time school per year. A 10% discount was applied to each of the siblings. In addition, significant privileges in terms of payment were provided for missionaries' children (JoD., P. II, 1855, p 867). In return, for the parents to obtain all kinds of information related to the institution and to increase the number of fee-paying students, even if it's a small amount to be paid, for the parents, a clause has been added to the school's direction to search solutions (JoD., P. II, 1855, p. 869). The school council has determined the students with a free tuition quota of 100, in accordance with the results of the talent and character test. The council consists of school principal, assistant principal and headmaster.

The questions in the entrance exam for students who want to study free of charge at Malta Protestant College give important clues about the course schedule. 

\footnote{It was allowed to stay up to the age of 17 at this level. (JoD., P. II, 1855, p. 867).}
at school:

Firstly, a superior intelligence and morally advanced character have been accepted as prerequisites. In addition to this; 1. It was required from the candidate to express his identity, his family, his religion and (if any) his occupation. 2. Whether his or her family is still alive or not and their identity information, religion and professional information should be written. 3. The candidate to give information about his/her educational background, to which schools and for how long s/he studied should be added in detail. In addition to these: 4. Which languages can the candidate speak? Which languages can s/he read and write unerringly? 5. Which of the classical languages has s/he got instructed before? What are the other sciences that he studied? 6. Is the general knowledge of the candidate above average? (This article is obligatory to have an education free of charge) 7. Does s/he has any special ability? If so, what is it and in which level? 8. Were there any investigations that he has good morals, are there any witnesses? 9. Are there any differences in attitude and behavior? If so, please explain. 10. What is the object of entering the institution? 11. What are his/her opinions on the truths on the Bible? 12. Who are his references?

In addition to these questions, it is desired to add information about the candidate's qualifications or confirmed information about his past. It is also necessary for candidates to be provided with some preliminary information about the institution before taken to the exam. There is an obligation to study at least two years to become a bible-reader or catechist. Religious education is the base and center of the curriculum. They will also study writing classes, basic algebra, history and geography so that they can teach in elementary schools. All these lessons will be taught in their mother tongue. Mostly, it is expected for candidates to form a definite opinion that they will devote their lives to the missionary profession and to the religious affairs. On the other hand, missionary candidates for the Pastorhood will be subject to an education period covering advanced literature and science courses for at least four to six years. At this level, while continuing to study religion and ethics courses, it is necessary to complete the education of classical languages along with living Eastern languages, mathematics, astronomy, cosmology, and theology (JoD., P. II, 1855, p. 870).

The requested written contract voucher to be signed by complimentarily accepted students is; "A student with the name ..... is enrolled in the Malta Protestant College to study tuition free and accepts the following conditions: He should continue his education in college for at least four years. He must accept to pay 10 shillings each year in remuneration for clothing and personal expenses. He is responsible for following the courses set for him by the teaching staff of the College. He must obey all disciplinary rules of the College. He must accept to work in the neighboring regions of the Mediterranean or any other country in the East to raise the living standards of the people there, especially in order to increase their spiritual values in particular without asking for reimbursement from the institution. It is ordered as Signature, Name of Witness Missionary, Date."

The college executive committee requests that the form to be completed by the missionary proposing his nomination, if the candidate is of an age that can not write
his name. The signature of his father or his parent must be in the signature section. The amount stated in the form can be deducted according to the situation of the missionary candidate and his family. Once again, if needed, the form is translated into the local language by the missionary. In addition, the missionary, who nominates a candidate student to the college will receive bequest from the student and will keep it with the form (JoD., P. II, 1855, p. 870-871).

Before going into details of The Malta Protestant College curriculum, it will be to good to provide information about the institution's general rules. First of all, it is necessary to point out that a complex curriculum has not been applied since the goal is to provide accurate information in basic principles than teaching superficial information in various fields. Students were subjected to a public examination at the end of the year as well as examinations they took every week. The award ceremony was held for those who succeeded. For the students whose mother tongue is not English, -and that is most of the students- in the first year it was strived to grasp this language perfectly. Greek and other related local languages were taught by a teacher familiar with that language. Although the first form signed to the student says that the learning period is four years, it is possible to extend the learning period to six years according to the age, wishes and needs of the student. Although it was considered appropriate for the last two years to see the intensive lessons on the local language, one or two hours of reading lessons, it could be done in the first year in order to eliminate the possibility of forgetting their mother tongue according to the student's request. Although the students are free to continue their worships in their own church, they are obliged to attend the classes accordingly to Protestant principles every day planned by the director of the institution and students must participate in open rites that also their parents are invited, every morning and evening. In addition, taking into account the health hazards of sleeping late in the summer, it was understood that sleeping at ten o'clock the latest in the evening was the right method for both students and teachers. Thus, the energy was also saved.

The table below shows the curriculum of the institution's college section (JoD., P. II, 1855, p. 872):

<table>
<thead>
<tr>
<th>Year</th>
<th>Fourth Class</th>
<th>Third Class</th>
<th>Second Class</th>
<th>First Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fourth First</td>
<td>Third Second</td>
<td>Second Third</td>
<td>First Fourth</td>
</tr>
<tr>
<td>English</td>
<td>Read the standard Works in Prose &amp; Poetry. Practise Original Composition &amp; Letter writing. Study the idioms and peculiarities of construction.</td>
<td>Translate from one language to the other two good Prose Authors, such as Markham’s English History, Telemaque, Esempj in Prosa. Acquire elegance and fluency in conversation.</td>
<td>Translate from one language to the other two good Prose Authors, such as Pinnock’s British Biography, Lamé Fleury’s Histories, Porquet’s Italian Reading Book. Become quick and ready in</td>
<td>Practise Reading. Study Grammar. Learn easy words and phrases. Write exercises</td>
</tr>
<tr>
<td>French</td>
<td></td>
<td></td>
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<td></td>
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<td>Italian</td>
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<td>Subject</td>
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</tr>
<tr>
<td>Mathematics</td>
<td>Six boks of Euclid. Higher Branches of Algebra, Plane Trigonometry</td>
<td>Euclid’s First and Second Books. Algebra, to Quadratic Equations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arithmetic</td>
<td>Mental Arithmetic and higher branches, such as Mensuration, &amp;c.</td>
<td>Fractions and Roots. Mental Arithmetic</td>
<td>Reduction, Proportion. Pratice. Interest. Fractions mental Arithmetic</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>Ancient and Universal History</td>
<td>Modern History (especially English)</td>
<td>Outlines of English History and Scripture History.</td>
<td>Easy Biography and Scripture History</td>
</tr>
<tr>
<td>Geography</td>
<td>Ancient and Biblical Geography</td>
<td>Modern and Ancient Geography</td>
<td>Modern Geography</td>
<td>Modern Geography (particularly Europe and England)</td>
</tr>
<tr>
<td>Sciences</td>
<td>Mental and Physical Sciences (especially Teaching and Chemistry)</td>
<td>Moral and Physical Sciences</td>
<td>Elements of Moral Science</td>
<td></td>
</tr>
</tbody>
</table>
The syllabus of Theological and Missionary Department for training Missionaries, Scripture-Readers, and School-Masters:

First Year: Theology (Bible), Writing, Arithmetic, English History, Geography, Elements of Moral Science, English and Latin Languages.

Second Year: Theology (Bible, Evidences of Christianity), Mathematics, General History, Intellectual, Moral, and Physical Sciences (that of teaching especially), English Composition, Latin, Greek, commence the study of modern European Languages.

Third Year: Theology (Bible, Ecclesiastical History, Theory and Practise of the Pastoral Office, including Exercises in expounding the Scriptures, and in the composition and delivery of Sermons), Mathematics, Intellectual, Moral, and Physical Sciences (that of teaching especially), higher Greek and Latin Authors, Hebrew, continue the study of modern European Languages and begin that of the Oriental Languages.

Fourth Year: Perfecting the previous studies, and obtaining some knowledge of Medicine (JoD., P. II, 1855, p. 874).

The syllabus of the Department of General Literature and Science for training merchants, physicians, lawyers, interpreters;

First Year: Writing, Commercial Arithmetic, English History, Geography, Elements of Moral Science, English and Latin Languages.

Second Year: Mathematics, General History, Moral and Physical Sciences (Political Economy, Jurisprudence, Chemistry, Botany, &c., with a special view to their respective ulterior destinations), English Composition, Latin, commence the study of modern European Languages, according to proficiency and requirements.

Third Year: Mathematics, Contemporaneous History and General Literature, Moral and Physical Sciences, as before, Composition in English and other Languages, and begin the study of the Oriental Languages.

Fourth Year: Perfecting previous studies.

Also daily Scriptural instruction is given to the pupils in this Department (JoD., P. II, 1855, pp. 873-875).

The educational principles of the school were prepared entirely in line with the teachings of the Old and New Testament and the English Anglican Church. In this context, in the center of all the lessons, religious teachings, the privileged complexions/ theologians of the Anglican Church took place. In order to ensure a full commitment and absolute obedience to the law and understanding of Protestantism, the other churches, and in particular the Catholic Church the mistakes of the decisions declared by Pope Pious IV will be repeated frequently. Especially sacred writings will come through revelation, and no doubt or dissent will be propound that the rules of faith and worship are based on revelation and inspiration, or that the baptismal ritual is a fundamental ritual for reaching the world and the hereafter (JoD., P. II, 1855, p. 875).

For candidates who are too far away to be able to come to the written examinations, questions were sent to their addresses in writing and they could participate in the interview if their answers were sufficient. The costs of traveling were covered by the institution. On the other hand, the boarder to sign the
commitment contract to stay in the institution for at least four years was determined as one of the conditions for enrollment in the school.

Figure 1: Countries for whose regeneration an Oriental Missionary Agency is gratuitously trained in the Malta Protestant College

The costs to increase the number of students in the school and advertising costs have been met by the financial officer of the mission in Malta. The education of children of European families and wealthy Maltese families are subjected to a fee. By this way, some of the expenses were planned to be met. Also, it is anticipated that the educational level that will be rendered in the East will rise relatively thanks
to the education provided in the college and that the families will not have to send their children to Europe for educational purposes. Following the general education at the secondary school level in the college, an intensive religious education will be followed, the students to be trained for being a teacher and talented students will be sent to Europe to complete their assessments.

Thus, the graduates will be primarily engaged in missionary work, bible readership, interpreting, as well as being successful in public duties, as a doctor, lawyer, in trade etc. 825–829; The Missionary Herald, June 1850, p. 209).

With the closure of the Coptic institute established by the Church Missionary Society in Cairo, the most important missionary community of England in the Ottoman Empire, the missionaries were interrupted to realize their goal of training Coptic religious leaders in the direction of Protestant principles (CMS Archive, Lieder to the Secs. of the CMS, 27 January 1849, CM/O48/124). Nonetheless, even though they were few in number, qualified clergymen who have been trained regularly could be placed in the Coptic Church (CMS Archive, Protestant Mission Schools in Egypt, CM/O48/126). Some of them have received teaching and preaching education at CMS's Malta Protestant College (CMS Archive, Lieder to the Secs. of the CMS, 25 February 1850, CM/O48/125). A Copt along that were educated in Malta, has become the Metropolitan Bishop of Abyssinia (CMS Archive, CMS Record, Vol. XX, 1849, pp. 107, 155-156; Miss. Reg., August 1841, p. 380; Church Missionary Record, Vol. XII, No. 8, August 1841, p. 182), and the other started a major reform movement in the Coptic Church (Butcher, Vol I, 1897, pp. 396-397).

**DISCUSSION**

**Two Missionaries from College: Samuel Gobat and John Theodore Wolters**

The Church Missionary Society, the largest missionary organization affiliated to the Anglican Church, founded the Mediterranean Mission in 1815, centered on Malta for its geopolitical position (Jowett, 1822, pp. 13-17). Between the hundreds of missionaries assigned in the mission area within the borders of the Ottoman Empire (Stock, Vol. 1, 1899, pp. 219-222), Pastors named Samuel Gobat and Theodore Frederick Wolters who were among the leading figures in the training activities, served for more than thirty years in Arabic provinces with Anatolian, Egyptian and Mediterranean stations. Pastor Gobat, along with his contribution to the foundation of The Malta Protestant College, he was assigned to vice presidency (CMS in Palestine, 1891, p. 11). After completing his education in The Malta Protestant College, Pastor Wolters acted as a missionary in İzmir between the years 1842-1877 (Register of Missionaries, Clerical, Lay, and Female, and Native Clergy from 1804 to 1904 [Clerical, Lay and Female], P. I, n.d., p. 122).

Samuel Gobat (1799-1879) who was born in Canton of Bern, Switzerland, completed his missionary education in Basel Institute of Mission and the missionary college in Islington Church of Missionary Society (CMS), (van der Leest, 2010, p. 68) has learned English, Latin, Greek, Hebrew, Amharic and Arabic. During the period in Abyssinia (1825-1833) where he was appointed as a Missionary by CMS,
the journal that he wrote up about the region, was the deciding factor in his election to the bishop of Anglo-Germen in Jerusalem, which began in January 1842. Pastor Gobat was sent to Malta in 1839 by the CMS to for the printing house that England opened in Malta to function effectively and to contribute to the development of the missionary literature. After the reconstruction of the Malta station in 1845, this time, the responsibility of the Protestant College was given. The first vice principal of the school which was opened on the 3rd of February 1846 was Samuel Gobat. However, following a training program aimed at protesting the students, Gobat's post in the college came to an end within a few weeks. The Prince of Prussia Frederick William the 4th has the opinion of the new name of Jerusalem Protestant Eparchy should be Gobat (Hechler, 1883, pp. 45-46). Gobat, who continued his missionary work in Malta during the bishopric proposal of the prince, within the CMS, has the experience of missionary that he maintained in the Arabian provinces of Ottoman Empire, in Abyssinia among the Muslims, Greeks, Latins, Armenians, Yakubis, etc. for many years.

Among the Muslim, Protestant, Jewish, Greek, Nestorian, Catholic, Abyss, Egyptian, Syrian and Iranian students studied at the school; Theodore Frederick Wolters, who was assigned to the region in 1842, the date on which Izmir was again designated as an "investment area" by the community, was also present. Wolters, who started his activities by distributing Armenian, Greek, Turkish Bibles to the Christians in Anatolia by himself until 1860, he indicated that he has established "A positive impression that God's will is a revelation in both faithful and practical, both among the congregation of the Eastern Churches, and in other parts of the Protestant sect, within the Christian belief system." (CMS Archive, May 1875, CM/O5-8/101). On the other hand, in response to his influence on the community, Wolters, in front of congregational leaders and church leaders, pointed out that there is zone for agreement on the point of "Protestantism to be the divine kalam" or the scope and definition of "freedom of religion" (CMS Archive, May 1875, CM/O5-8/101). In addition, according to Wolters, both the importance of the region in terms of missionary importance, and according to the number of American missionaries in Anatolia, the assignments of CMS in Izmir very few. Hence, until 1860, Theodore Wolters by himself, then, at first with his son, Pastor John T. Wolters, and then with the involvement of Pastor R.H. Weakley's, who was transferred from Istanbul in 1869 for health reasons, continued their propaganda activities through two people. For the community to triple the number of missionary did not originated from a need to expand the number of missionaries or to expand the mission area. On the contrary, the missions that CMS got into the act (Stock, Vol. I-III, 1899), Izmir is a region in which at least progress is recorded and all the steps towards extension of the domain of influence are encountered with serious difficulties as well as a region which does not have the conditions suitable for raising qualified missionaries and does not great white hope for the future point (CMS Archive, May 1875, CM/O5-8/101).

According to Pastor Frederick Wolters, the missionary action plan for Izmir
must have been as follows: Traveler book sale with a center of a bookstore, should be supported by the idea that Muslims will see a curtain to prevent their reaction to missionary activities (CMS Archive, May 1875, CM/O5-8/101). **They also found the bookstore to be functional with the development of a long-term relationship with visitors. Both in this shop and through a hawker, it will be possible to sell a large number of work that makes propaganda for Protestantism in various regions of the province, markets, and bazaars. A significant portion of them will be received by Muslims in the opinion of Wolters.

According to Pastor Wolters; the ongoing rituals and meetings held by the missionaries among the Greek community are indispensable elements in the formation of an adequate Protestant community in terms of quality and quantity. The most important subsidiaries of this community are local missionaries. In addition, the use of Turkish along with Greek as a rite language is important in terms of ensuring the involvement of Muslim community among listeners.

Missionary tours are also an important method to make an impact on low socio-economic areas, particularly in villages and rural areas. In this context, it is a must for the missionaries who will be assigned to the mission to have the qualifications that they can be sufficient in all methods. The Pastor determined that the volunteer population in the mission of Izmir, especially to carry out the evangelization movement towards the Muslims, were the Greeks. The nation who opposes the Islamic belief system the most or those who want the publications that compare Islam and Christianity are the Greeks. It is necessary to nurture the Greeks' enthusiasm in this direction by opening missionary schools (CMS Archive, 30 October 1875, CM/O5-8/101).

Wolters argued that the since it was not right to say that they had no desire for "truthful faith", Muslims were indifferent to missionary activities because of their perception of predestinarianism. As a matter of fact, the recent crisis of political, military, and financial instability has led to the disgrace of the pride that they have developed about their religion, and has brought a crew ready to listen to Jesus Christ's message. Moreover, the spread of the Protestantism has inspired a curiosity about this belief system and its members. However, the attitude of the government to these activities is the most important problem for the missionaries to reach Muslims. The permanent influence of the Protestant doctrine on Muslim interlocutors is hampered by the "fear" motive. Although the recent legislative acts have abolished sanctions for changing religion, the "spirit of punishment / conviction / persecution" still subsists. Again in the direction of "tolerance politics" adopted by the Ottoman Empire, the nations were not intervened in religious matters, but this does not mean that there was a freedom of religion and conscience. It is yet to be argued that despite the ban on the publication and dissemination of the Turkish Bibles and the exclusion of those who change religions with the 1856 Hatt-i Humayun, it is early to say that there is a concrete change in the attitude of the

** Pastor Weakley believed that portable book sellers familiar with local languages at the level of speaking in religious matters, who have the ability to explain sacred writings, to preach and propagate, should have been active in all Anatolian geography.
community. However, people are aware that they are on the verge of a major change. The duty of the missionaries, is to wait until the storm is over and the sun's rays rise again (CMS Archive, 30 October 1875, CM/O5-8/101).

On the other hand, in the eyes of Pastor Wolters, the "Christian governments" who abstain and do not use their power to feed off the founding of the Kingdom of Jesus sin. But missionaries have gained familiarity with politics from past to present, so they have learned to keep their expectations at a minimum level. Nevertheless Pastor believes that, because of the belief system of Islam in Turkey, the fear / indifference of Muslims to the mission movement arising from religious and intellectual tradition originating in Christianity, will come to an end with the help of the God.

Pastor Wolters is not convinced that the Izmir mission, which was opened to deliver the message of the Bible to the Christian churches in Anatolia and the Christianization of Muslims is not entirely unsuccessful. Since the date that CMS focused on this region, attentions of both the Muslim people, and the minorities, especially members of the Eastern Church have been attracted to the Protestant teachings. However, Christianization activities for Muslims have not yielded results despite the fact that for a period of fifteen years considering the number of those who accepted the Protestantism. At this point the Pastor believes that these questions should be answered. “Is it necessary to assess the impact of a mission only by looking at the number of returns? Isn't there any point in the impassability of the difficulties that missionaries got into in the field on this issue? Despite the seemingly impenetrable obstacles, the opposition to missionary is supposed to be resolved, prejudices eliminated, an unfriendly attitude gained, and the spread of the Protestant Biblical values does not have a worth? ” (CMS Archive, 30 October 1875, CM/O5-8/101). However, the general assembly of the community has not assessed the situation of the Izmir mission area in the context of the questions and left the efforts of the missionaries unsupported. According to Wolters, the CMS has three options about this issue: (i) to preserve the mission region as it is, (ii) Closing the İzmir mission and (iii) to strengthen and reinforce the Mission in every sense. The first of these is seems to be an undesirable alternative in terms of missionaries in the field because of some reasons. The reasons for that; a) The need for local missionaries is the most serious obstacle for penetrating the mission area, b) The fact that the efforts of the Western missionaries in this direction did not give a result in İzmir province, c) The fact that the powers of the missionaries in the field are not sufficient to support sectarian changers, to constitute a sufficient Protestant community in terms of quality and quantity, and to provide missionary education.

††Pastor Weakley's proposal on this subject is to send some of the talented students in day school to the German Evangelic School in Izmir for missionary education. Thus the subvention to be reserved for this work will be reduced and the cost of a student will be limited to £ 32 (The Pastor stated that he divided the school into two sections, general and private, because no information was found in the Ottoman records about the school also see. CMS Archive, 1875, “Rev. Weakley’s Proposals to the Improvement of the Smryna Mission”, CM/O5-8/101).
d) The seeds that the community missionaries planted could not grow by the influence of the American missionary in the region (CMS Archive, 30 October 1875, CM/O5-8/101).

The issue of closure of the mission area is based on the main two points in accordance with the Pastor: (i) all members of the general assembly to come to an agreement with the idea to put an end to the missionary activities on the Muslims in Anatolia and (ii) the CMS missionaries to work with Board Missionaries is to be more accurate. If İzmir mission will be decided to continue, three precautions must be taken immediately: a) Close monitoring of the activities of American missionaries, asking for help from Stepan Varjabed who became Protestant by the missionaries to be a teacher in Bible classes and in schools to be opened in the name of the community, to preach in Armenian, b) Ensuring that the ritual language of the community continues in Turkish, and in this way ensuring the participation of Muslims even in a small number, c) Opening missionary schools everywhere possible. A plan should be prepared by starting from Kasaba to Alaşehir, Kula, Denizli, Aydın etc. on the line. The biggest issue with this subject is; the problem of the recruitment of qualified school principals / teachers.‡‡ Despite the fact that they do not accept the Protestantism directly, it seems to be the most rational solution to benefit from the Greeks. Inspection and control of schools must be in the hands of a European missionary who has transformed the home he resides into a boarding school that trains missionaries. It is true that Buca is kept as the center of the İzmir mission and but one of the villages in the inner parts of the country to be designated for missionary training stations. In this context, Isparta and Burdur were evaluated as places where local missionaries could use as a base. In order to be able to realize such suggestions, Wolters stated that £ 120 per year -£ 250-260 with the schools-must be allocated on behalf of the mission (CMS Archive, 30 October 1875, CM/O5-8/101).

The report that Pastor Wolters wrote up on 11th of March 1875 about the activities of CMS in Anatolian geography is profoundly enlightening. Wolters has reserved the first chapter of the report to İzmir, organized as five chapters. Referring to the fact that the bookstore in İzmir benefits from sales as well as being a meeting place with the Greek and Muslim community, the Pastor has drawn attention to the importance of presence of this place in terms of people hesitant to come to another place. He stated his opinions "I don't know what would we do if there wasn't a place like this. Bible sales have declined compared to the past, but not because of the public's growing reaction to missionaries, but also, the American missionaries and associations such as the London Jews Society and the Church of

‡‡ Pastor Weakley also believes that in an education program in which the Bible is centered, a secular education in a basic quality in Turkish and Greek languages must be provided. The annual salary of a teacher who has these qualifications must be £72. The school will cost around £ 100 a year for the fellowship. However, this expense will decrease after the first year as a result of fees collected from the students. According to Weakley, Muslims and Greeks are eager to send their children to a school with these qualities (CMS Archive, 1875, “Rev. Weakley’s Proposals to the Improvement of the Smryna Mission”, CM/O5-8/101).
Scotland have opened similar shops. Moreover, the increase in demand for religious books contrary to the sales of bible is also remarkable”

Referring to the fact that activities for making the Greeks Protestant followed an unstable course, Pastor Wolters stated that the community did not gain a permanent character. Persons who have been observed to have participated in sermons have left the community after a while due to the feeling of fatigue or the lack of professional gain. Pastor Wolters, who continued his propaganda activities in Izmir by preaching sermons in Greek and Turkish, complains that the attempts in the town are not effective: *The intellectuals among the Greeks do not hesitate to talk with Montesanto in religious matters, so that they speak of the mistakes of their churches and admit that the Protestants are true/right, but everything remains unfulfilled. There is no sign of severity, sincerity”* he expressed his disappointment with those words. Pastor Wolters, who came to Town to teach about Christianity for ten days; developed a positive attitude towards the effects of the future as he learned that the Greeks did not hesitate to send their children to the Protestant school during his conversations with Montesanto.

In the third article of the report devoted to activities in Aydın, Pastor Wolters noted that; Belisario communicates with Muslims, that they are curious about Protestantism, but there was no such effect that would raise doubts on the community at the point of faith. Also, Belisario gives Bible lectures to some Greeks in the mission room on Saturdays (CMS Archive, May 1875, CM/O5-8/101).

In the fourth article, titled "Generally"; Pastor Wolters noted the period in which they lived as a process that showed the most conservative attitude towards foreign intervention. The Greeks, who believed that their missionary activities damaged the church structure and the church hierarchy, were gradually becoming more ready to reform their political and addictive traditions. The basic indicator of being ready is that the Protestant mission becomes increasingly prevalent in the south-western part of Anatolia.

The Pastor also included the attitude of the sublime porte (Babiali) towards them; noted that he took the reaction normally against the "hostile" attitude of the government, and mentioned that an intelligence was obtained that from the capital to the provinces, directions were sent to prevent the missionary activities. Speaking of the fact that there is no concrete evidence in this regard, Wolters noted that "it is difficult to understand what people really think in this repressive environment ", but that they have not established friendly relations with the missionaries. Pastor Wolters, stated that they met with two kinds of reactions when they wanted to sell the Bible and religious publications to the Muslims who came to their bookstores; the first of these was "We already have information about these books; we know all the questions and answers that can be asked "and that the second one was a state of indifference that can be defined as neither friendly nor hostile. The Pastor argues that religious publications were wondered in places where Protestant missionaries reached, including Aydın, that the active opposition of the government has a fascinating effect on this curiosity, and that the affirmative consequences are received. On the other hand, the given curiosity is extremely superficial and temporary. Wolters stated that Muslims believe in the existence of four holy books,
Torah, Psalms, Bible, and Qur'an, for them, the Bible heralds the Islam and the Qur'an covers all books. The Pastor who said that "Muslims are actually wonder whether or not these beliefs are true, but when they start to notice the truth, they break off their relations with the Bible", pointed out the importance to get into the act "quietly and deeply" on this "target group". Drawing attention to the importance of religious publications, in particular the comparison of Islam and Christianity, Wolters emphasized the need to focus on personal face-to-face relations (CMS Archive, May 1875, CM/O5-8/101).

In the fifth section of the report, which emphasizes the importance of missionary activities in Anatolia, as distinct from the Palestinian mission area, Pastor Wolters put the weakness of CMS in Anatolia into words as "We neither have a church, nor a regular community and a strong organization in Anatolia. Essentially there is nothing else in our hands beyond our hopes. From time to time I find myself asking what I am working for. Will I be able to lead a congregation consists of fifty, one hundred or one hundred and fifty people in this land? Or, isn’t it the most important thing for me to show the right way even to a single sinner who was deviated from the path of Jesus? Then these questions, focuses on how I can best reach the target in question. I wonder whether the right way is to ask people to listen to our sermons by not caring about a permanent community structure? Or is this the way that people try to attract people with various elements by establishing schools and bringing them aggregately into a community? Until today the first path was followed. Until now, we have never resorted to a specially designed method to attract anyone who wants to be a Protestant. However, a small amount of financial aid or patronage could have made it possible for a large number of people to transfer to the records as a Protestant. But our belief in the need for people to be connected to the Protestantism not just for material and earthly reasons but for heart and aethereal reasons withheld us from this path. In such a case, only a quantitative increase could have been recorded. This would have been an obstacle involving grief and shame instead of a help for the mission to reach their goals. Believing the importance of making the Muslim community a priority target mass, the Pastor stated that there is a consensus among the missionaries that the best way to reach Muslims is through the non-Muslim community and "Perhaps this may not be valid due to the difference in language spoken in Izmir, but in the inner parts of Anatolia, where the non-Muslim and Muslim communities speak the same language, it will be possible to reach Muslims if we bring light and the new life to the Christians who are open to communication, innovation and development. The mission will be surely successful, especially if we can raise protestant missionaries from the local community. In this context, the Greeks are as promising as at least the Armenians. The Armenians are yarer to accept the New Testament because of the activities of American missionaries. The Greeks refrained until now but they have started to show signs of their awakening. Moreover, it is understood that the Greeks that we developed a more successful connection, considering that they are more respectful and proper than Armenians, it is understood that we will be more successful over the nation"

Pastor Wolters has the following suggestions to the CMS General Assembly,
about the mission area of Izmir, "Even though Izmir is a very important center, the society has neglected it. The different places where we can find 'enlightened people' are much easier to reach from here than anywhere else. But for now, we do not need missionary schools in Izmir. The main requirement is to open centers that can be effective in the inner parts of Anatolia and to establish day schools for the Turkish speaking Greeks. First of all, we have to employ qualified director and managers. The number of students we have accumulated so far and the presence of those who want to study at advanced level make this requirement compulsory. We can train the most successful ones along the mentioned students as missionaries by allocating them with Protestant families. However, in order to implement this plan, it is imperative to appoint a missionary only in charge of educational affairs in the region. The preparatory phase for missionary education should be given at the home that your reside in and should be kept under continuous control and supervision of this missionary. In fact, there is a missionary that you can benefit from is available for this purpose. My brother-in-law Weber, who visited the region couple of years ago, is a teacher in various schools in Izmir with the desire to work as a missionary, so he has the experience that the mission requires. A while ago, when I talked about this idea with him, he responded me 'If I'll do this, I will understand why God sent me to this country'. I also learned that he was ready to work in Kasaba, Aydin or any other place suitable. If someone would be assigned in my place, I can also gladly get into the act in inner parts of Anatolia."(CMS Archive, May 1875, CM/O5-8/101).

The table of the association recorded in the report of Wolters concerning the situation in İzmir mission during the period of 1869-1874 is as follows (CMS Archive, May 1875, CM/O5-8/101):

<table>
<thead>
<tr>
<th>Year</th>
<th>Missionaries</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>European</td>
<td>Local</td>
</tr>
<tr>
<td>11869-1870</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11873-1874</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

From the establishment of the Anglican bishopric and the appointment of Gobat, in the report of Pastor Wolters, who found that there was a general consensus that for the Levant mission area, Jerusalem was of great importance to Malta; Bishop Gobat's written statement about the Palestinian mission area in 1872 was included. From 1847, Bishop Gobat drew attention to a formation of a Protestant community of Jew origin and the construction of a hospital for the Jews continued as a result of the activities Pastor Nicolayson, Bishop Alexander and Dr. Ewald performed in the region. Again the foundation of the Protestant church was laid, and a chapel was built for the rites and worships until the construction process was complete. Also on 1 October 1872 a Protestant church was opened in Nazareth.
with the participation of four hundred people. In addition, Gobat noted that Bishop Alexander attempted to open a school but failed because of the difficulties he faced in providing the teacher and mentioned the effectiveness of American missionary activities in the region (CMS Archive, May 1875, CM/O5-8/101). Pastor Wolters also finalized the report by drawing attention to the importance of Arabic making an impact from Palestine to Central Asia, from India to Africa, and the importance of Western missionaries' acquaintance with this language. (CMS Archive, May 1875, CM/O5-8/101).

CONCLUSION

"Are you ready to give your life for the spiritual salvation of the people on one side of the world?" (Clossey, 2008, p. 115). The Christian churches agreed that the point of origin of missionary depends on a positive response to this problem. Both the Malta Protestant College and the prevailing understanding of the missionaries that this school raised, based on the necessity of educating people to achieve idealistic goals and validate Protestant morality. For instance, even though the belief to be supported on intellectual basis is limited, it is a vital necessity, especially when the apostasy is concerned. Because knowledge without wisdom is impossible, faith without knowledge is out of the question. As a matter of fact, it was not enough to acknowledge the Protestantism on its own and it was deemed necessary to believe and explain the difference and superiority of it rather than other belief systems. Otherwise, it was thought that the change of religion will only be the danger of being a artificial process that wouldn't last which takes place only for political, economic and social reasons.

Missionary schools, perceived as the largest Crusade organized against Islam, are universal because they are the institutions that were opened by all the missionary societies at the cost of many material and spiritual difficulties. The method is unique for both Catholics, Orthodox and Protestants. The missionaries who were sent to the field needed to primarily gain the confidence of the community- by visits, supports to the needy people, processes as such. These first relationships were first converted into regular meetings, following the granting of Protestantism training due to a certain program under the name of Sunday schools-Bible classes, etc., gave the grounds for opening schools that provide education for the children of Christian families. In all fields where missionaries were in charge, they were administrators at least in the level of primary school or administrator for a few village schools, and their spouses were their pillar of support.

With the boys and girls' schools that Bishop Gobat opened, who had served as the founding director of Malta Protestant College, in the provinces where the Arabs were in the majority, it is possible to say that they were as effective as modern state schools operating in the same period, much more advanced in terms of their influence and prevalence in the revival of westernization movements in the region. However, with the concern that the training provided by the missionaries contributed to Arab nationalism, the sublime porte (Babıali) opened modern education institutions on one side and warned local administrators to take measures against the development of foreign schooling on the other side.
The activities in Izmir, which can be regarded as the beginning of the British missionary schooling, were supported by the consul Francis Werry, saying: "... I celebrate and appreciate you to start regular education in a community which is socio-economically underdeveloped, and in the areas where one per five hundred people can read" (CMS Archive, 4th of March 1826, Letter from Werry to Hinde, CM/O8/11). Despite the missionary activities carried out in Izmir for thirty-three years, the CMS decided to close this mission in 1877 but with the annexation of Egypt, the Ottoman geographical undertakings were revived this time mainly in the Arab provinces. In the records kept by the missionaries, the schools opened in Izmir mission area, especially at the basic education level for the Greeks, while there were limited information in the subjects program, method and assessment, in the second period, in the schools especially in the Arabian provinces that Pastor Gobat established, it was possible to reach information from philosophy of education to operation, process and results. However, the Pastor Wolters defended his opposition to the closing of the Izmir mission; based on the ever-increasing "hostile attitudes of the Turkish rulers" towards the Protestant missions in the region and acting in a manner not far from the sincerity of the people, claimed that the society could not show their real feelings for fear of pressure.

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Chapter 28

The Classification of the Scores of Teachers' Digital Learning Material Development Adoption According to the Teachers' Individual Innovative Profiles

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INTRODUCTION

The reforms which started within democratising of the education after the World War 1, have faced to mass education to get benefit from national opportunities, and in the information process, this anticipation has moved to a global area in the light of technological developments. In all these constructional changes, it is seen that the schools and school facilities have been designed according to the learning layout to massification and then to a global change. Especially for the last 25 years, the global actors have organized educational system in the direction of needs and the innovation factor has been seen to take part in the foreground.

Relation of Innovation and Teacher Competencies

Considering the technological supported educational systems as innovation; how the innovation should be used, problems possible to face during the spreading process and emphasizing on the fact that what kind of precautions should be taken have been a significant subject. The most important mission for raising Innovator individuals also necessary in the information society falls to the teachers who have been the basis of education (Yurdabakan, 2002). Teachers have a significant role and responsibility in the endeavours of improvement and development of education given at schools (Seferoğlu, 2015). The best reflections to this have been seen in the revisions that the international organizations have performed in teacher competencies. One of which, (ISTE) International Society for Technology in Education) went into a revision about teacher competencies in 2009 and in the frame of teacher standards, basic objectives have been determined as to develop the area providing the teachers and candidate teachers to have effective skills on learning, teaching and leading to a digital era and to improve their innovation tendencies (ISTE, 2009). In parallel with the teacher competencies prepared by ISTE, also UNESCO and AECT went into a similar revision in teacher competencies. One of the most significant reasons for this revision is to provide expansion and effective use of ICT in educational areas.
Why should teachers use and create digital learning material?

The reflection of ICT to education is essential in terms of a better educational system, developing creative opinions, providing permanent learnings (Chou, Hsiao, Shen and Chen, 2010) and in terms of offering students to choose the information they need by taking them into the centre and presenting them a free learning environment (Aktay, 2014). These developments in ICT have caused bringing innovations to education after technology has entered into the educational fields (Göktaş, 2011; Taşçi, Yaman and Soran, 2010). One of the significant components to materialize the use of ICT in education and to transfer this to environments in and out of the classroom is digital learning materials. In the studies performed, it is determined that digital learning materials have provided more effective and faster recalling in comparison with static learning materials in terms of gathering and directing students’ attention (Bacon and Egeth, 1997; Schwier et al., 2000), have assisted to configure information (Chiou, Huang and Hsieh, 2004; Huang et al, 2012), have developed learning outcomes (Huang et al, 2012; Lee and Baylor, 2006; Tamim, Bernard, Borokhovski, Abrami and Schmid, 2011), have provided the capability of increasing students’ motivation by giving controlling opportunity more in their learning experiences (Condi et al, 2007; Passey et al., 2003), have provided cognitive support (Schmid et al., 2014) and has a significant influence quantity after taking part in education (Tamim et al, 2011). However, in the studies, it is observed that educational software used for realizing teaching objectives and which lacks quality makes learning difficult instead of increasing achievements (Squires and McDougall, 1994; Bayram, 2007; Baz, 2010). One of the most significant reasons of this is that the software engineers and the personnel who has technical background are inadequate in developing educational content and experts in the area don’t have the technical background. Even though the learning materials have been developed by team work for preparing educational content, there has been a difficulty in fulfilling the need of each teacher and student. The authorship which is developed to bring a solution to this problem enables teachers to develop their own teaching materials and a teacher who has basic computer knowledge can create own materials using these programs. Programming is performed only by “drag and drop” without grammar requirements and all the operations are performed by menus and icons without coding commands. For instance, a teacher adds an educational material by choosing an element (photo, video, animation, drill activities, screen design item etc.) from a list on the screen to the material s/he is going to create.

In the integration of technology to the learning and teaching process, the important fact is not how intense the technology is used but effectively gathering the content proper pedagogical approach with content and technology (Roblyer, 2006). On the other hand, resolving the context of each learning activity in itself which has a unique structure, appropriate technologies should be used as a whole with the strategies special to content and pedagogy (Mishra and Koehler, 2006; Koehler and Mishra, 2008). Popularizing this innovation based formation will be possible with adding teachers’ technological skills to their professional competencies. However, the biggest issue here is about which path to follow to
popularize this innovation among teachers.

**Technology, teacher and Individual innovativeness**

While education improves the learners’ Innovator skills and their attitude to innovation, innovation constitutes new and more effective educational methods, technologies and approaches (Öztürk and Summak, 2014). When considered from this point of view, uttering that the education and the innovation are in reciprocally interaction and related with each other will be the correct tendency (Yılmaz, Öztürk and Summak, 2014). Rogers (2003) has separated the innovation profiles to adopters in several categories as a result of his studies about innovation. He entitled the first adopting individuals as “Innovators”, the following ones just after the innovators in the pace of adopting as “Early Adaptors”, the ones who accept the innovations after several time periods as “Early Majority”, the ones who accept the innovations after an average individual as “Late Majority” and the ones who accepted the innovation lastly as “Laggards”.

It is seen that the studies on individual innovation are performed on candidate teachers mostly. For instance, it is determined that in the study done by Özgür (2013) there is a positive and intermediate relationship between critical thinking tendencies and Individual Innovativeness profiles of candidate teachers, in the study done by Çuhadar, Bülbül and Ilgaz (2013) the individual innovation characteristics of candidate teachers have gathered in “Early Majority”, in the studies performed by Rogers (2003), Rogers and Wallace (2011) Individual Innovativeness profiles doesn’t vary by gender, in the study of Jamieson, Finger and Albion (2010) there is a meaningful relationship between e-content and Individual Innovativeness profiles, and in the studies performed by Adıgüzel (2012), Korucu and Olpak (2015) the Individual Innovativeness characteristics of candidate teachers have gathered in “Early Majority” category. Although studies on individual innovation have been performed, studies on teachers’ Individual Innovativeness profiles which has a significant role in popularizing of ICT and studies on ICT are minute amount.

Sustainability issues on ICT haven’t been solved in educational areas properly especially because of the dynamic structure of innovation. Especially in the schools enriched with hardware, the use and the popularization issue have started to take an inextricable position. Competencies of the teachers who are in the role of applicator should be increased by in-service training courses before and during their profession for ICT to coincide with education components (Korucu and Olpak, 2015; Çuhadar, Bülbül and Ilgaz, 2012; Özgür, 2013). However, in the integration of ICT which is an innovation based formation the adoption speed and time of each teacher may vary. While popularizing these innovation based applications among teachers, adding the lack of information and skills to this, it should be considered that the popularization would be quite slow (Usluel and Aşkar, 2015). The more significant the Individual Innovativeness profiles that the individuals have in a social classroom in the innovation popularization, the more significant it should be to determine the effect of Individual Innovativeness profiles in popularization of ICT which has an importance for education. Because although the role of digital learning materials has been proved by the studies, many performed studies have
been showing the lack of materials (Banoğlu et al., 2014; Akıncı, Kurtoğlu and Seferoğlu, 2012; Özkan and Deniz, 2014; Ekici and Yılmaz, 2013; Ayvacı, Bakırcı and Başak, 2014). Teachers’ developing and popularizing the digital learning materials which is an Innovator based application may be affected by the communication of teacher who take place in the same social system. When considering that the teachers’ Innovator profiles have a significant effect on adopting and popularizing too, adopting the development of digital learning material may be a significant variant.

In this study, it was aimed to reveal the meaningful differences and classification percentages of the scores obtained from the Digital Learning Material Development Adoption Scale according to the teachers’ individual innovative profiles. Thus, it can be possible to determine the Individual Innovativeness profile of the teachers who have and haven’t adopted to develop digital learning materials. This information is significant in terms of forming in-service training courses, determining the teachers in the leader role and giving active missions to these teachers at popularizing ICT and determining low scored teachers at digital learning material development to provide some data to policy makers by investigating the reasons and solutions in the upcoming process. In accordance with this general purpose, below are the sub goals to find answers to.

1. Does the teachers’ score of Digital learning material Development Adoption show a meaningful difference in terms of Innovator profile categories?
2. In which verification level do the scores obtained from The Digital Learning Material Development Adoption Scale categorize the teachers in terms of Individual Innovativeness profiles?

MATERIALS AND METHODS

The Research Model: In the study, survey model has been preferred for the aim of testing the meaningfulness of variance between scores of teachers’ Digital Learning Material Development Adoption and their Innovator profiles.

Study Group: Data is collected from teachers to determine whether the scores from the developed scale differs meaningfully according to the Innovator profiles or not and to reveal the Innovator profiles percentile rank of the scale. There are 79 teachers from 22 different department in the research group. The distributions of the teachers on the basis of department are indicated below.

Of the scale which was applied on a volunteer basis 21,52 % of the teachers in the second group are Primary School, 13,92% of them are English Language, 6,3 % are Maths, 5,06 % are Guidance, 5,06% are Literature, 5,06% are Turkish Language, 3,8% are German Language, 3,8 % are Religious Culture and Moral Knowledge, 3,8 % are Science and Technology, 2,53 % are Computer and Software, 2,53 % are Biology, 2,53 % are Physics, 2,53 % are French Language, 2,53% are Music, 2,53% are Assessment and Evaluation, 2,53% are Social Sciences, 2,53% are History, 1,27% are Geography, 1,27% are Philosophy, 1,27% are Spanish Language and 1,27% are Chemistry Teachers.
### Table 1: Distribution of Second Group Participants in terms of Branches

<table>
<thead>
<tr>
<th>Branches</th>
<th>n</th>
<th>%</th>
<th>Branches</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary School Teaching</td>
<td>17</td>
<td>21,52</td>
<td>Biology Teaching</td>
<td>2</td>
<td>2,53</td>
</tr>
<tr>
<td>English Language Teaching</td>
<td>11</td>
<td>13,92</td>
<td>Physics Teaching</td>
<td>2</td>
<td>2,53</td>
</tr>
<tr>
<td>Maths Teaching</td>
<td>5</td>
<td>6,33</td>
<td>French Language Teaching</td>
<td>2</td>
<td>2,53</td>
</tr>
<tr>
<td>Guidance Teaching</td>
<td>5</td>
<td>6,33</td>
<td>Music Teaching</td>
<td>2</td>
<td>2,53</td>
</tr>
<tr>
<td>Physical Education Teaching</td>
<td>4</td>
<td>5,06</td>
<td>Assessment and Evaluation</td>
<td>2</td>
<td>2,53</td>
</tr>
<tr>
<td>Literature Teaching</td>
<td>4</td>
<td>5,06</td>
<td>Social Sciences Teaching</td>
<td>2</td>
<td>2,53</td>
</tr>
<tr>
<td>Turkish Language Teaching</td>
<td>4</td>
<td>5,06</td>
<td>History Teaching</td>
<td>2</td>
<td>2,53</td>
</tr>
<tr>
<td>German Language Teaching</td>
<td>3</td>
<td>3,8</td>
<td>Geography Teaching</td>
<td>1</td>
<td>1,27</td>
</tr>
<tr>
<td>Religious Culture and Moral Knowledge Teaching</td>
<td>3</td>
<td>3,8</td>
<td>Philosophy Teaching</td>
<td>1</td>
<td>1,27</td>
</tr>
<tr>
<td>Science and Technology Teaching</td>
<td>3</td>
<td>3,8</td>
<td>Spanish Language Teaching</td>
<td>1</td>
<td>1,27</td>
</tr>
<tr>
<td>Computer and Software Teaching</td>
<td>2</td>
<td>2,53</td>
<td>Chemistry Teaching</td>
<td>1</td>
<td>1,27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>79</strong></td>
<td><strong>100</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Individual innovation scale has been applied to the teachers in the group as a first step and by using the gained data, total scores of the candidate teachers have been calculated via the formula in the scale (the formula of the score determination has been mentioned while giving information about the scale). Teachers have been formed into groups based upon taking the boundaries in the scale again according to the determined scores. The groups and the numbers which are determined after the measurement are indicated below.

### Table 2: Individual Innovation Frequency Distribution of Teachers

<table>
<thead>
<tr>
<th>Individual Innovativeness Profiles</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laggards</td>
<td>8</td>
<td>10,13</td>
</tr>
<tr>
<td>Late Majority</td>
<td>15</td>
<td>18,99</td>
</tr>
<tr>
<td>Early Majority</td>
<td>28</td>
<td>35,44</td>
</tr>
<tr>
<td>Early Adaptors</td>
<td>19</td>
<td>24,05</td>
</tr>
<tr>
<td>Innovators</td>
<td>9</td>
<td>11,39</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>79</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

IIS (Individual Innovativeness Scale) has been applied to 79 teachers in total. Examining the table 3, it is determined that 10,13% of the teachers who have participated in the study have taken part in Laggards, 18,99% of them in Late Majority, 35,33% in Early Majority, 24,02% in Early Adaptors and 11,39% of the teachers have taken part in Innovators Category.

**Data Collection Tools**

*Individual Innovativeness Profile Scale* has been developed to evaluate the
Innovativeness of the individuals in general. The scale of which original was developed by Hurt, Joseph and Cook (1977), has been adopted to the Turkish Culture by Kılıçer and Odabaşı (2010). Scale consists of 5 point Likert Type as “Certainly Disagree” and “Certainly Agree” and 20 items to determine the Individual Innovativeness Profiles of University Students. 12 of the scale items are positive (1, 2, 3, 5, 8, 9, 11, 12, 14, 16, 18th and 19th items) 8 of the items are negative (4, 6, 7, 10, 13, 15, 17th and 20th items). With the help of the scale, the innovation score is calculated by adding 42 points to the score which is gained by subtracting the total points of the negative items from the total points of the positive items. Through the scale, the lowest obtainable point is 14 and the highest obtainable point is 94. In terms of the points calculated through the scale, individuals can be categorized in the innovation concept. According to this; if the calculated score is over 80 individuals are interpreted as Innovator, if the score is between 69 and 80 Early Adopter, if the score is between 57 and 68 Early Majority, and if the score is below 46 points they are interpreted as Laggard. Besides, according to the score calculated through the scale, an interpretation can be made about the innovation level of the individuals. Accordingly, while individuals who get over 68 points are interpreted as “quite Innovator”, individuals who get below 64 are interpreted as “low Innovator”. Individual Innovativeness Scale (IIS) consists of 4 factors as “Resistance to Change”, “Opinion Leadership”, “Openness to Experience” and “Risk-taking” and these four factors explain 52.52% of the total variance of the scale. The Total Item Correlation Value of the all factors partaking in the scale differs between .27 and .51 and factor load values differ from .360 and .787. Internal consistency coefficient related to the whole scale has been determined as 0.82 and test-retest consistency coefficient has been determined as .87 (Kılıçer and Odabaşı, 2010). In this study, the internal consistency coefficient has been determined as .80 related to the whole scale.

The Scale of Digital Learning Material Development Adoption (DLMA): The scale was developed by Karademir (2018) to determine teachers’ level of digital learning materials adaptation based on Diffusion Of Innovation Theory. The data was gathered from 264 teachers from 21 different departments. Data was subjected to exploratory factor analysis and as a result of the analysis, it is determined that the scale gathers under the five factors as relative advantage, compatibility, complexity, trialability, observability and five factors explain %73.328 of the total variance. In addition, the Cronbach’s alpha value for the overall scale has been calculated as .791

Data Analysis
Firstly, to the teachers taking part in the study group, the scale of digital learning material development adoption and individual innovation profile scale has been applied on a volunteer basis (The groups that the teachers have been separated into as the result of individual innovation profile scale and the number of teachers taking part in each category are indicated under the study group title). As the result of Kolmogrow-Smirnow significance test to determine if the data has provided

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normality hypothesis in the application or not, it has been concluded that the scale conducted in each category (Laggard, Late Majority, Early Majority, Early Adaptor and Innovator) shows normality in terms of total score and sub-factor scores (p>.05). Single Factor Analysis of Variance has been conducted to reveal the existence of significant difference between the data that is showing normality hypothesis. Since the Single Factor Analysis of Variance results as significant, Discriminant Analysis has been applied to determine whether the DLMA Scale has correctly classified innovation categories or not. The reason for deciding on discriminant analysis after the single factor analysis of variance is that the scores which are gained from the scale have shown difference for each innovation category and that this result also may be successful in scale’s classifying the innovation categories. To supply the hypothesis that is necessary for the discriminant analysis, firstly extreme values have been checked and after calculating Mahalanobis Distance, the data showing extreme values have been omitted. After the result of Box’s M test (p=.073) performed to test the homogeneity of covariance matrices, the results have come out as covariant matrices are homogenous, CI value is at the desired level (7,847) and the data doesn’t have a linear-by-linear association, VIF value (1000) is below 10 and there isn’t a multicollinearity problem between data and lastly with the correlation value .297 data are lowly related. Based on all these values, this result has come out that data are appropriate to do the discriminant analysis. The results of analysis are indicated in the findings section.

RESULTS

Teachers’ Scores of Digital Learning Material Development Adoption and Innovator Profiles Single Factor Variance Analysis Results

The results of single factor variance analysis performed to test whether teachers’ scores from the Adopting Digital Material Development Scale show significant difference according to Individual Innovativeness profiles or not are indicated below.

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>sd</th>
<th>Mean of Squares</th>
<th>F</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intergroups</td>
<td>4151,343</td>
<td>5</td>
<td>1037,836</td>
<td>3,706</td>
<td>.008</td>
<td>Laggard- Early Majority,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Laggard- Early Adaptor,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Laggard- Innovator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Late Majority- Early Majority,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Late Majority- Early Adaptor,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Late Majority- Innovator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Early Adaptor-Innovator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Early Majority- Early Adaptor</td>
</tr>
</tbody>
</table>

At the end of the analysis, the results have come out in a way that the scores which teachers have got from the Digital Learning Material Development Adoption Scale shows significant difference according to their Individual Innovativeness
profiles $F(5,74)=3,706$, $p<.05$. In other terms, teachers’ adopting digital learning materials development differs according to their Innovator profiles and this difference is significant. At the end of the Tukey test performed to find interdivisional differences, the result has come out as all categories have differed (third sub-goal has been proved). According to Tukey test results, the category with lowest average score among all the categories belong to Laggards ($X=46,6$). After the Laggards, the sequence is as follows from lowest to highest: Late Majority ($X=57,9$), Early Majorities ($X=67,90$), prioneers ($X=73,03$) and innovators ($X=78$).

**Classification Percent of the Scores Obtained From the Digital Learning Materials Adoption Scale According To Individual Innovativeness Profiles**

At the end of the single factor variance analysis, the fact that the total scores of the scale and Individual Innovativeness categories are significant, brings the probability of scale categorizing teachers into question in terms of innovation. In terms of diffusion of innovation, discriminant analysis has been performed to determine the probability of scale’s categorizing teachers according to their innovation tendencies. The primary analyses performed to determine the convenience of data to the discriminant analysis take place under the “data analyses” title.

**Table 4: Group Statistics**

<table>
<thead>
<tr>
<th>Innovation Categories</th>
<th>X</th>
<th>S</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laggard</td>
<td>46,66</td>
<td>23,02</td>
<td>3</td>
</tr>
<tr>
<td>Late Majority</td>
<td>57,91</td>
<td>18,60</td>
<td>12</td>
</tr>
<tr>
<td>Early Majority</td>
<td>67,92</td>
<td>20,13</td>
<td>28</td>
</tr>
<tr>
<td>Early Adaptor</td>
<td>73,03</td>
<td>11,63</td>
<td>27</td>
</tr>
<tr>
<td>Innovator</td>
<td>78,00</td>
<td>13,17</td>
<td>9</td>
</tr>
</tbody>
</table>

After analysing the group statistics presented in table 8, the average scores of teachers’ adopting scale results as $X=46,66$ for Laggards, $X=57,91$ for Late Majority, $X=67,92$ for Early Majorities, $X=73,03$ for Early Adaptors and $X=78$ for innovators. Comparing the average scores, it is seen that the average scores of innovators are the highest and sequentially follows as Early Adaptors, Early Majorities, Late Majority and Laggards.

**Table 5: Eigenvalues and Wilks’s Lambda Values**

<table>
<thead>
<tr>
<th>Function</th>
<th>Eigenvalues</th>
<th>Canonical Correlation</th>
<th>Wilks’ Lambda</th>
<th>Chi-Square</th>
<th>sd</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.700</td>
<td>.409</td>
<td>.68</td>
<td>13,69</td>
<td>4</td>
<td>.008</td>
</tr>
</tbody>
</table>

Kalaycı (2005), without a certain limit, states that eigenvalues above, 40 can be accepted as “good”. Analysing table 5, the result has come out that the eigenvalue of the function in the research is .700 and canonical correlation is .409 besides according to Wilk’s Lambda Statistics the chi-square value for this function is significant [$X^2(4)= 13,69; p<.01$]. This finding can be interpreted as function is efficient at a good level in discriminating groups. Starting from this point of view, it
can be uttered that the scale of digital learning material adoption is the significant predictor of teachers’ individual innovation profiles. However, this finding doesn’t show which sub-factor has more contribution to the prediction. The values showing factors’ contributions to the individual innovation profiles separately are given in Table 6.

Table 6: Standardized Coefficients Related to Discriminant Function

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laggard</td>
<td>-.771</td>
</tr>
<tr>
<td>Late Majority</td>
<td>-.632</td>
</tr>
<tr>
<td>Early Majority</td>
<td>-.034</td>
</tr>
<tr>
<td>Early Adaptor</td>
<td>.271</td>
</tr>
<tr>
<td>Innovator</td>
<td>.568</td>
</tr>
</tbody>
</table>

After analysing table 6, it is seen that the highest contribution of the teachers’ adopting digital learning material scale for discriminating categories takes place in Early Adaptor, Late Majority, Laggard and Innovator categories among the predictive variables. The lowest contribution belongs to the Early Majorities. However, the effect of Laggardists and Late Majorities to the function is in the negative direction. This is an expected case. Because it is predicted that the Innovators and Early Adaptors would increase the scores of teachers’ digital learning material adopting scale where Laggards and Late Majorities would decrease the scores in the scale. The reason for this is that the Laggards and Late Majorities are more conservative based on their characteristic features and Innovators and Early Adaptors are more modern as mentioned in the literature. The table which indicates information about the percentile rank of the gained data is given below.

Table 7: The Correct Percentile Rank of Variables

<table>
<thead>
<tr>
<th>Innovation Categories</th>
<th>Laggard</th>
<th>Late Majority</th>
<th>Interrogative</th>
<th>Early Adaptor</th>
<th>Innovator</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Total Score</td>
<td>6</td>
<td>75</td>
<td>8</td>
<td>53.3</td>
<td>17</td>
<td>60.7</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>63.1</td>
<td>5</td>
<td>55.6</td>
<td>79</td>
<td>100</td>
</tr>
<tr>
<td>Total Correct Percentile Rank</td>
<td>%61,55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

After analysing the results of categorizing presented in table 11, the results have come out as the digital learning material adoption scale has correctly categorized 6 of 8 teachers in other words 75% of Laggards, 8 of 15 teachers in other words 53.3% of Late Majorities, 17 of 28 teachers in other words 60.7% of Early Majorities, 12 of 19 teachers in other words 63.15% of Early Adaptors, 5 of 9 teachers in other words 55.6% of innovators and total correct percentile rank is 61,55%. The fact that this value is above 50% indicates the categorization accuracy is above the chance criteria in other words correct categorization is done.

Taking the characteristics of the profiles into account, it is expected that
teachers in the Laggard profile would adopt innovation in the lowest level, individuals in the Innovator category would adopt innovation in the highest level. It is seen that, when considered in categorical basis, the developed scale makes a similar categorization. This situation indicates that to provide the popularization of digital learning material among teachers, teachers from Innovator and Early Adaptor category would be assigned to leader positions for adopting. Considering all these data, it can be uttered that the structure of the scale exactly reflects the innovation theory.

DISCUSSION AND CONCLUSION

In the rapid direction changes and the dynamic structure of the technological developments, individuals who make this adaptation perpetual are needed. In every social category, there are individuals to facilitate adapting this change and these individuals have been presented as leader/hero or Innovator.

The reflection of the technological developments to education also similarly makes the main factor of education-teachers key factor in adopting and popularizing technology. Because teacher isn’t an outsider looking in the technological changes, but in a leader position who is joining, bringing the innovation to school environment and who is informing oneself or students about this innovation process. For this reason, it is necessary that teachers should improve their knowledge, skills and attitudes and they should use sources and contemporary tools to bring the content learning in the context to the highest level, they should design, develop and evaluate authentic teaching experiences. Teachers are expected to provide professional applications consistently, develop and support lifelong learning, and to take the lead to show the efficient use of digital tools and technological resources to their colleagues (UNESCO, 2008).

Studies conducted on diffusion of innovation mention the importance of individuals’ psychologic and demographic features in acceptance of innovation (Örün et al. 2015). Also in this study, it has been endeavoured to determine whether the adopting development of digital learning materials by teachers which forms a dimension of the use of ICT in education differs according to Innovator profiles or not. Besides, it has been tried to determine how correctly the scale, which has been developed in the concept of the study, has categorized teachers according to their levels of adopting digital learning materials.

The social system is the system which is in the endeavour of problem solving jointly to reach a common goal and which the related units form. In the education environment, the popularization of ICT can be possible with the communication of teachers who constitute the social system. But in this popularization, effecting the system positively or negatively changes according to teachers’ Individual Innovativeness profiles. In this study, a significant difference has been encountered between the Individual Innovativeness profiles and digital learning material development adoption levels of teachers. When comparing average scores, it is noticed that the “innovators” have the highest adoption score and Early Adaptors, Early Majorities, Late Majorities and Laggards follow in a sequence. The results of the research can be uttered as expected taking Roger’s profile definitions into
consideration. Because innovators are individuals who try an innovation firstly in a society and sociable, educated, who trust scientific knowledge, forceful in using technology and whose thinking skills are high level and their coping skills with the uncertainty about innovation (Yılmaz, Öztürk and Summak, 2014). Starting from this point, the teachers taking place in this profile are expected to have high average about adopting. As a result of the research, it is determined that the teachers in the innovation category have the highest adopting score. Early Adopters have a state of accepting innovations earlier, giving information about innovations to the other members of the society and having an advisor side where Early Majoritys are staid about innovations and reluctant in risk taking (Yılmaz, Öztürk and Summak, 2014). This situation delivers the expectation that secondary competency belongs to Early Adopters and third competency belongs to Early Majoritys in digital learning material development adoption. The results of the research are in the direction of supporting this expectation. Late Majoritys are in a suspicious and timid attitude towards innovations where Laggards are prejudiced and they live by imitating the previous generations (Yılmaz, Öztürk and Summak, 2014). It is seen that Late Majoritys and Laggards have the lowest average in adopting digital learning material development.

The fact that the data gained from the scale is significant brings along a question that what the scale’s degree of accuracy about categorizing teachers is. In the results of the analyses performed, the “digital learning material development adoption” scale has the 61.55% degree of accuracy in categorizing teachers according to their Innovator profiles. This means that latter applicators of this scale can use the scale for categorizing the teachers also. Starting from all these results, for popularizing digital learning materials in the schools where they are regarded as a social system and for providing teachers develop digital learning materials by themselves, Innovator and Early Adaptor teachers can be used. Because concerning both study data and the characteristics taking place in the literature, it can be uttered that these teachers can lead other teachers and contribute to diffusion. Accordingly, these teachers can be kept in a leader role in in-service training and group and project studies.

In conclusion, innovators and Early Adopters, who have a strong profile in diffusion of innovation in the school culture, can be in the front line for popularizing DLMAS in schools also. In the following studies, it can be determined that what tendencies the teachers have in practical and whether their adopting levels and practical skills are alike or not by using the developed scale. Besides the gained data can provide benefit for policy makers in configuring in-service training and teacher training.

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Chapter 29

Didactic Power of the Shadow: Geography with Karagöz Plays

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INTRODUCTION

Turkish Shadow Play in which Karagöz and Hacivat types form pivot characters, becomes one of the most important art that reflects traditional Turkish culture for centuries. It was seen that performed plays and written works mention social problems with humorous understanding as well as carry a didactic mission containing important messages.

“Karagöz is a shadow play that stands on dual conversation of shadows of two dimensional imageries reflected on a curtain” (Öncü, 2011: 111). In other words shadow play is described as a reflection of shadow or projection of any two or three dimensional object on anywhere by using a source of light. Although there are hesitations that images seen in Karagöz that is played behind translucent curtain by using two dimensional images in Turkish culture, are not shadows but themselves (www.karagoz.net), Yüce (2004) put an end to these opinions. According to Yüce, the shadows in the play can be black as far as we know and if image materials are colorful and have luminous transmittance property, the vision (shadow) can also be colorful.

İvgin (2000) mentions that Turkish shadow play had been given names before as “Zill-i Hayal” or “Hayal-i Zill” meaning “shadow ghosts”. According to the researcher this art that has been taken names such as “Curtain Play”, “Dream Tent” later, is known as “Karagöz Play” today.

Karagöz masters are artists that observe traditions, customs, life style, beliefs, ethics and sense of humour of the society they live in; reflect social, political and economical problems, malfunctions and disorders to curtain with a humoristic style and affect people with this way, educate and giving messages while entertaining (Çiblak, 2007). Shadow play that was caused to be loved by these successful Karagöz masters with their (imaginary or dreamy) art, was transferred to different geographies via intercultural relations and became a folkloric symbol showing apparent characteristics of different countries ingratiate.

Although not yet certain in the light of documents and data today, shadow play was born in Asia (Java, India or China) and spread to the West (Öncü, 2011). Sakaoğlu (2003) mentioned in his work “Turkish Shadow Play Karagöz” that shadow play has been seen through history and today in three large geography of Asia and ordered the from East to the West as follows: Far-east Asian Countries (Notably China, then Taiwan and Japan), South-east Asian Countries (Thailand,
Cambodia, Laos, Malaysia, Indonesia-Java and Bali) and South Asia (India).

The first reference about shadow puppetry is encountered in Thiruvavasagam that is a great literary classic of South Indian philosophy and religion system written in Tamil in 8th - 9th century A.C. The first puppets came to front by urge of creating figures moving lively, later were turned to theatre and collected all art elements in itself. However, during this period puppeteers have not stayed just to entertain as an art form but also transmitted meaningful and beneficial messages (Blackburn, 1996; Parmar, 1994; Rangarajan, 2017).

Although there were not any certain data about when and how it came to Anatolia, the most common opinion adopted by researchers was that Karagöz came from Egypt from the 16th century. However, the imagination of Turkish folk prefers to see Karagöz and Hacivat as two construction foremen living in Bursa (Sönmez, 2000). Based on this, today there is Karagöz Museum in Bursa Osmangazi that was founded by municipality (Figure 1 and 2). In the museum besides puppets of shadow play typages, there are traditional theatre samples of different countries, caricatures taken from Ottoman Turkish newspapers and collections of portrayal mentors. According to rumours between the folk and Karagöz supporters, during Sultan Orhan period Karagöz was working as a blacksmith and Hacivat was working as a brickmason in a mosque construction in Bursa. Every day the workers gathered around and were listening humoristic conversations between them so the construction could not progress. Sultan Orhan who heard about this, got Karagöz and Hacivat killed but after it he felt great regret. Sheik Küşteri who wants to obtund this, set up a curtain and consoled sultan by repeating their jokes while exhibiting images of Hacivat and Karagöz made of leather behind a curtain (Kudret, 1992). This legend became almost believable as a historical data (Sönmez, 2000). Öncü (2011) narrates that the word “Şuşter/Şuştar” instead of “Küşter in Britannica General Culture Encyclopedia (1994) was used for the name of Sheik and Şuşter (Şuştar/Shushtar) is a city of Hûzistan state in the southwest of Iran.

![Figure 1: Karagöz Monument (Osmangazi, Bursa)](image)

As the images in Karagöz were formed with the lines in figurative understanding based on abstraction, the colour red in Karagöz and the colour green in Hacivat was dominant. The folding of clothes, the texture of fabric and their
different outlook were done by knife delicately. Depending on esthetics of description maker, traditional motives in Turkish ornamentation such as tulip, flower, hatai and rumi patterns are used in clothes (Tekerek, 2001; Koç & Koca, 2006). There are important connections between the clothes and the culture and the period they represent.

The typages in Karagöz plays are extremely attractive with their colourful outlooks and caharacter, their music and their sense of humour. According to Öğüt Eker humour concept (2009) is in a terminologic complexity in which intersecting words such as irony, ridicule, comedy, humour, joke, wit that cannot be well distinguished from each other. As Kirca (1996) describes humour as “the gun of oppressed against oppressor, weak against strong”, Çeviker (1997) says a foreigner caricaturist considers humour as “smiling side of culture”. Even though it makes person smile, humour is the most popular opposition type not with praising social realities but with its development of social criticism and making problems visible (Köse, 2011).

Humour was used as anesthesia in surgical interventions in the 13\textsuperscript{th} century (Yardımcı, 2010), during centuries humour has been used in psychological treatments of patients and obtained that humour has positive effects in reducing pain in fighting against diseases (Yazıcı, 2017). Besides individual benefit of smiling to human body, it has also got social effects. For example since humour addresses to senses of person before his knowledge, it makes gaining of many affective properties easier such as understanding others, making empathy or being consistent in himself (Aşılıoğlu, 2013). According to Lippert (2001) humour provides to form a successful dialogue and encourages the development of interpersonal communication. Hill (1988) and Berk (1998) think that using humour in class helps to form more positive learning environment by annihilating communication obstacles between teacher and student. Although some educators feel anxious about using humour may shake their authority (Savaş, 2014), dulness in class may annihilate intellectual interest and enthusiasm of students also causes another problem (Deiter, 2000).

In recent years there was a change in attitudes towards adopting more comfortable class environment and the importance of making learning more entertaining is started to be emphasized (Martin, 2007). Bekelja Wanzer and Bainbridge Frymier (1999) that studied on how humour affects class environment and if it makes the relation between teacher and student more positive or not, they apply scale on 314 students registered to Introduction to Communication lesson. The researchers found out that the teachers having higher humour orientation points and socio-communicative scale scores are in significant and more positive relation with their students and students learn more things from the teachers using humour.

The sources that can be used in company with modern attitudes in education should be given at suitable dose, suitable level, suitable style and without move away from the axis of subject. At this point the humour of society and parents were also stepped in. As culturally and intellectually developed, the jokes that were laughed and the bar of subjects will be increased to a certain level. Instead of laughing at slang words or for example laughing at person stepped on a banana.

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peel, a tendency towards elegant jokes will be occurred.

In Paris in the 32nd General Conference, United Nations Education, Science and Culture Organization known as UNESCO accepted “Protection of Intangible Cultural Heritage” agreement in 17 October 2003 (www.unesco.org.tr). In the web site of UNESCO 470 cultural value from 117 countries have been listed since 2017. Being a party to agreement period of Turkey completed in 27 March 2006. Intangible Cultural Heritage Lists that were formed according to the 16th, 17th and 18th items of agreement, exist in 3 different categories:

Item 16: Symbolic list of Intangible Cultural Heritage of humanity
Item 17: Immediate Protection Needed Intangible Cultural Heritage List
Item 18: The Best Application Examples List

In Symbolic list of Intangible Cultural Heritage of Humanity Turkey has 15 heritages since December 2017. Karagöz that is in this group, was added to the list in 2009. In 12 values entered according to 16th item Turkey is alone while in other 3, it takes part with other countries.

In Immediate Protection Needed Intangible Cultural Heritage List of Item 17. “Whistling Tongue” was added in 2017. For this moment we do not have any heritage entity belonging to the 18th item.

In introduction page of Turkish Republic Culture and Tourism Ministry Directorate General of Research and Training, it was said that the aim is to provide consciousness about the importance of agreement and intangible cultural heritage as well as supporting dialogue in respect to cultural variety. In order to introduce our traditional cultural values inland and abroad as well as transfer them to the future, geography educators have important tasks to create awareness and conscious.

Figure 2: Karagöz Museum (Osmangazi, Bursa)

There encountered some researches in literature for using Karagöz plays in education. Şişman (2009) in his study dealing “Updating of subjects and copies of Karagöz plays”, emphasized that Karagöz tradition that is tried to be sustained as a nostalgia mostly in Ramadan, circumcision feasts and schools today, can also be benefitted in education. The researcher thinks that new miniature human
descriptions are needed for new subject plays.

Ghani (2011), moved the puppet of shadow play Wayang Kulit Kelantan of Malaysia that was taken to Intangible Cultural Heritage list of UNESCO in 2003 by using computer graphic images and compared method and techniques of obtained graphic images with traditional Wayang Kulit Kelantan. As a result of questionnaire applied to adults between the age of 21-45, it was seen that Malays preferred traditional Wayang Kulit Kelantan produced with normal fabric and handcraft to 3D puppet formed with computer graphic images. In addition approximately 45.6% of participants did not support digitalization of traditional art and stated to be more realistic in application of 3D animation in puppet modelling.

Demir and Özdemir (2013) aimed to present an anthology for using Hacivat and Karagöz plays in education of language and value/character. In the study starting from the values given in Primary School Social Sciences (4th-8th grades) Curriculum and Guideline, there made an experiment regarding value transfer by using shadow plays in Turkish lesson. As a result of research it was obtained that shadow plays shows a very rich source in value teaching and transfer in Turkish lesson.

Öcal (2014) examined the effect of plays on permanency of knowledge and attitudes of students as a result of drama, puppet and Turkish Shadow Play Karagöz-Hacivat applications done in the frame of “Body Systems” unit in 6th grade Science and Technology lesson. Also opinions of students were asked about the effect of these activities on interest and motivation. The research was conducted with two classes as an experiment group and a control group. As a result of study there observed a significant difference in favour of an experiment group that treats “Body Systems” unit with drama, puppet and Karagöz-Hacivat techniques and provided more interest and motivation compared to control group that treats the subject with method and techniques curriculum requires.

Bulut (2014) thinks that the importance of Karagöz play that has an important place in education primarily with language and culture transfer as well as with its many dimensions such as reflecting Turkish amusement art in most original way, is preserved by young and old alike however it is not functionally evaluated in education as it deserves. Starting from this, the researcher dealt social and cultural values shadow play involves in terms of educational way in Turkish teaching.

Öcal and Doğan (2015) examined the effect of using Karagöz-Hacivat dialogues in “Circulation System” in 6th grade Science and technology lesson on academical success of students and researched opinions of students about this subject. The study showed that using Karagöz-Hacivat dialogues in Science and Technology lessons can be a supportive source in creation of an effective learning.

Aydeniz (2017) researched how much student-centered approaches such as constructivism, learner centeredness and multiple intelligence are given place in secondary school Education of Religion and Ethics lesson. The researcher made an interview with related teachers in five different secondary schools at different success levels and 10 students. During observation in one of the schools, an effective example towards making students active is lesson, was applied and students made a lesson presentation with “Hacivat and Karagöz” play. In addition to
discussed subject “Hz. Muhammed Love in our culture”, the students mentioned about old Ramadans and old clothes and used their own speech texts and materials. Aydeniz observed all the students watched this lesson with great interest. Apart from this single example, in the study it was obtained that methods and techniques are hardly used in Education of Religion and Ethics lesson and many principles, methods and techniques that are ordered in curriculum, just stay on paper.

**MATERIALS AND METHODS**

Since it makes people think while laughing, touching social problems, benefitting from many multinational and regional factors (typages, clothes, different geographical and historical places, accents, musics etc.) as well as introducing our intangible cultural values, Turkish Shadow Play is thought to be used in secondary school geography lessons.

There are many reflections of geography in our shadow play that eternise the life of populations in Anatolian territories, step of culture and civilization due to its geographical location, on curtain and entertain young and old alike for centuries. Although geographical elements in Karagöz were presented with some simple terms, they sometimes confront as an important themes in somewhere. In many texts or plays, subjects such as climate, natural disasters, tourism, agriculture, country life were held. The characteristics, accents, clothing, their territories of little shadows on curtain, songs, folk songs, odes, rhymes of these territories are also vital points of cultural geography. Especially in plays written after proclamation of the Republic environmental pollution that becomes a global problem today, is also mentioned. In the light of these realities it is thought that using Karagöz and Hacivat dialogues in suitable learning fields and subjects of Geography lesson curriculum updated in 2018, can motivate students. Besides attractiveness of Karagöz in geography lessons, due to its presence in Intangible Cultural Heritage Symbolic List of UNESCO, it has got a different importance of create awareness in continuing Turkish traditions.

In material requirement list of MEB (Ministry of National Education) Department of Research and Development of Education (2009) for club activities of secondary schools Karagöz and Hacivat puppet for theatre club took place. In this context, it is understood that shadow plays are watched with interest by all age groups and was suggested by MEB.

Karagöz and his team can be evaluated as quite dynamic education equipment that provides motivation since it attracts attention, makes lesson entertaining and can be discussed in peaceful atmosphere. It can play role in education of values as well as creation of cultural awareness. In development of social values such as honesty, equality, tolerance, solidarity, responsibility, respect, love, helpfulness, objectivity and providing to be an effective citizen Karagöz plays carry a serious potential.

In this study since Karagöz and Hacivat which have been in UNESCO Intangible Cultural Heritage Symbolic List of Humanity since 2009, are thought to be used as a source in secondary school Geography lesson, it was aimed to emphasize geographical reflections in chosen Karagöz texts and associate with
Problem: Is it provided to use Karagöz and Hacivat plays with cultural properties of Turkish Shadow Play and dialogues in some chosen texts in teaching some subjects of secondary school Geography lesson by associating it with 2018 Secondary School Geography Lesson Curriculum?

The research was designed by document examination method that is one of qualitative research method. This method is used to reach sources regarding the aim of research and identify obtained data (Çepni, 2007). In document examination method intended facts that will be researched and written materials that can provide information about concepts, are analysed (Yıldırım & Şimşek, 2006). It is used to determine the existence of specific words or concepts in a group consisted of a text or texts (Büyüköztürk et al., 2008). According to Bowen (2009) this method is a qualitative research method that is done around an evaluation subject by researcher to give idea and meaning to documents. Karasar (2008) on the other hand explained it as a qualitative research method that is used to analyse works that carries the marks of the past such as photo, film etc. as well as some written materials such as book, magazine etc. that were published regarding facts. O’Leary (2014) says that a researcher can use many texts for his research but the most common one probably is a written document. Bowen (2009) orders the advantages of document examination as they can stay unchanged and can be read and reviewed many times since they are consistent data sources.

In this study the characteristics of Karagöz plays and various works of art involving dialogues (Balaban, 1938; Republican People’s Party, 1941; Kudret, 1968, 1969, 1970 vand 1992; Culture and Tourism Ministry National Folklore Research Department, 1987; Oral, 1992; Lav, 1996) were examined, usability of geographical parts in the texts in education were evaluated in terms of general aims, units, subjects, acquisitions, acquisition explanations and values in 2018 updated version of Geography Lesson Curriculum. By this means, descriptive analysis of data obtained by document examination that was thought to be the most suitable method, were done.

The processes done during analysis of data in the research are as follows:
* First of all geographical elements were obtained by reading texts and dialogues about Turkish Shadow Play.
* The obtained geographical elements were compared with 2018 updated version of Geography Lesson Curriculum for 9th, 10th, 11th and 12th grades and overlapping data were marked.
* The quotations were taken directly from the shadow play texts that can be used during lesson. They were anaysed and interpret within the scope of curriculum.

RESULTS
Intended for obtained problem as a result of examinations conducted in the direction the finding below were obtained:

MEB Secondary School Geography Lesson Curriculum (2018) is consisted of unit, acquisition, acquisition explanation, values and geographical abilities
belonging to 9th, 10th, 11th and 12th grades. The curriculum was regulated in 11th and 12th grades for both 2 and 4 lesson hours and in the evaluations in this study 4 lesson hour containing planning was based on since period and gaining number is more.

In Terms of Location

Prosperous Location on Karagöz Curtain: Sheik Küşterî Square

The memory of Sheik Küşterî that is belived to apply old shadow plays for the first time, was adopted as “Sheik Küşterî’ Square” where Karagöz and his friends enlivened. According to the tradition, the name of Sheik Küşterî that is considered as the establisher of Karagöz plays, is frequently mentioned in the odes of curtain (Kudret, 1992). For example it is possible to see the example of it in Grocery play:


According to Sönmez (2000) Sheick Küşterî Square is a mirror that reflects İstanbul with its all types, customs and traditions. Göktaş (1986) is also of the same opinion. In plays here represents any square or street of İstanbul. According to And (1969) although it seems like a neighborhood with its outlook Küşterî Square is not a tangible, specific place but a fictional place. It became Amasya in Ferhad and Şirin play. It was a forest in Forest play. In Boat play it was a water crossing over by boat. For each play the square is an abstracted place that the audience accepted it to be. The narration of Kudret that finds square “assumed” in some plays coincides with interpretation of And: “For example “Bloody Popplar” said to be between Serez and Salonika, rose in front of the house of Karagöz one day. During play we saw it both in front of the house and also thought of it on Serez-Salonika road. The Apple Mountain of Ferhad, the desert of Mecnun in Arabia are both in Amasya, Arabia and in front of house of Karagöz” (Kudret, 1992: 35-36). So by taking audience from place to place Küşterî Square wraps itself up in touristic and cultural identity.

When play titles are examined, sometimes names of places are encountered. In one of the works of Sakaoğlu (2003) we see those names: Beyoğlu Enjoyement of Karagöz, Karagöz in Çırpıci Meadow, Karagöz Beaten up in Kâğıthane, Karagöz in Kuşdili (conversation-dialogue), Fenerbahçe Entertainment of Karagöz (dialogue), What Karagöz saw in Üsküdar, Karagöz in London, Karagöz in Belgrade, Karagöz in England, Karagöz in Iran, Karagöz in Caucasus, Karagöz in Egypt, What Karagöz saw in the Balkans, Karagöz in Beyoğlu, Karagöz in Bulgaria, Karagöz in Russia, Karagöz in Greece, Florya trip of Karagöz, Karagöz in Ankara, Yalova Enjoyment. As it is understood from these names not only inland but also abroad trips for Karagöz were also written.

The 4th acquisition of 9th grade Human Sciences unit of MEB Secondary school Geography Lesson Curriculum (2018) is “it distinguishes locations in Turkey according to administrative functions”. Existing Karagöz plays can be used in exemplifying of village and city administrative fields in the basis of central and country districts that forms cities in today’s administrative partition system that Özçağlar (2005) emphasizes importantly for identifying and bordering of them. In presenting of different places, resident cities in Turkey can be emphasized on by
forming new Karagöz plays. In this movement in which increase life quality in cities, prevent to get monotonous, create regional, territorial and cultural awareness, emphasize original values of environment were aimed, Turkey is the country that the most resident cities exist after Italy, Poland and Germany by March 2017 (Bahtiyar Karadeniz, 2014; Savaş Yavuzcehre & Donat, 2017). Again 9th grade of Global Setting: in the 3rd acquisition of Regions and Countries unit is to lead students to classify countries in regions identified with various geographical criterias by using a map. According to this, abroad trips written for Karagöz can be quite suitable activity in introduction of countries.

12nd grade Global Setting: in the 2nd acquisition of Regions and Countries unit, evaluation of regional and global effects of location of countries, in the 5th acquisition, explaining historical and cultural ties between Turkish cultural regions and Turkey, the trips of Karagöz especially to Balkans, neighbor countries and Caucasia seems to be matched up. In texts of Shadow play our cultural and historical interactions with these countries can be given place.

Maps are primary equipment that distribution principal of Geography bases on. In the plays humorous expressions about maps are encountered. In fasil part of Big Wedding play that mother-in-law informs what she wants from Karagöz for wedding meal via Hacivat:

_Hacivat_: Hundred oka saffron for dessert.

_Karagöz_: Will we colour Mediterranean and Black Sea to yellow? Does she want anything more, I want to know? (Kudret, 1992: 321).

Again Karagöz Becoming a Bride and in Reputation conversation we met an ironic addressing:

_Karagöz_: Welcome, you wiped out fire place face! (Kudret, 1970: 484).

In Terms of Culture Folks Living in Sheik Küsterî Square

In Ottoman period in cities folk societies talking with İstanbul accent and the ones talking with different accents in country, Muslims and nonmuslim groups, different social classes such as majorities and minorities were reflected to shadow-show screen; small curtain that was equipped with cultural motives belonging to these folk groups turned to a big world.

Impersonation of the ones living in İstanbul and are belonging to different religion, language, nationality and culture on screen, is defined by Karagöz supporters as “imitation” (Sakaoğlu, 2003). The number of these imitations that miniaturized different social classes, increased in time. “After the conquest of İstanbul, capital city of Ottoman Empire was taken to this city and after this various social communities such as Albanian, Arab, Cherkess, Jew, Greek, Armenian, Kurd started to walk side by side in İstanbul streets. It can be said a rich source for fantasy gamer in terms of imitation and character was started to be born. As the borders of empire started to enlarge, it is certain that the imitations on shadow screen started to enlarge and vary” (Bozok, 1939; Narr. Sönmez, 2000: 138). In parallel to this Siyavuşgil (1941: 89) summarizes the social fabric of capital of period like this: “İstanbul resembles a live ethnography museum in terms of its historical and geographical situation.”
Karagöz and Hacivat are pivots of the play. The other well-known characters of shadow play such as Çelebi, Tuzsuz Deli Bekir, Tiryaki, Beberuhi, Zenne and apart from them images belonging to imitations representing cultural variety of Ottoman geography make a parade in Sheik Küşterî Square. As Ahmet Kabaklı (1994) told about the most seen images in shadow play, he classifies the major “race types” as Jew, Greek, Frankish, Arab, Iranian and Albanian mostly recognised by their accents and clothing whereas he classifies “regional types” as Turkish types coming from countryside to İstanbul for a job or settled here. The reasons of these addressings seem to arise from surpassing of Karagöz to the types of other races and regions with his intelligence and humour, great wealth and fortune difference between ethical classes living in İstanbul as well as religion, belief and ethics disagreements. Kabaklı narrates that poor community takes revenge with satires and ironies of Karagöz from foreigners that holds commerce, becomes rich by tax evasion as well as scorn themselves by depending both his Money and European supporters.

Some of the plays in which continuously updated events of period are presented, bad and good sides of Ottoman Street atmosphere is brought to Küşterî Square and some of our traditions reflecting Turkish society life taken as theme, were exampled in the study of Sönmez (2000). According to the author, selling and buying slave and odalisque in slave bazaars is treated in Being an Aga, fabulous weeding of İstanbul in Big Wedding, folk beliefs to spell in Witches and until very recently minstrels and their dialogues in coffeehouses in Tavukpazarı is treated in Poets. It will be suitable to give few more example to these plays from Siyavuşgil (1941: 104-105): “In the play Circumcision, on the occasion of circumcircise of Karagöz instead of his son, all specialties of this religious-national tradition is shown and on the curtain with dancers, musicians and jugglers the son of Hacivat and the son of Karagöz are in conversation at one of the corner of curtain. In Awarded or Wrestlers wrestling tradition is shown. The play Wrestlers mentioned by Siyavuşgil can be used to explain and create awareness of Kırkpınar Grease Wrestling Festival that entered UNESCO Intangible Cultural Heritage Symbolic List in 2010 and its importance to students.

Some typages in the plays identified with regional properties. Sakaoğlu (2003) expresses that a person from Bolu, is immediately always presented as a cook. “Iranian is sometimes a carpet seller, Lâz is mostly a boatman or a fisherman. Armenian is a jeweler, Black is seen as a male servant. The Jew that making trade is so stingy that he exaggerated to pretend to be dead not to pay the fee of swing he rode on in the play Swing. The jobs for the man from Kayseri who boast of his cunningness can be grocery (The play Grocery, Kudret, 1968: 215-257) and pastrami dealer. The typage from Kastamonu is a tall descriptions of Karagöz curtain and in some plays he is mentioned as Turk. For example in the play Tap when this bulky Turk comes to the curtain, Karagöz says like this: “We did not call a man, we invited Galata Tower!” (Kudret, 1969: 29). In fact according to the text, Karagöz later went home and got a ladder, set it against Turk and continued talking with him like this. Arab comes from around “Beirut, Damascus, Aleppo”. “Among their jobs there is Coffe pounding, roasted chestnut selling and raising camel”
Although Zeibek is presented by some authors as someone from Aydın or İzmir, in the play of Kudret’in (1969: 341) Bloody Nigar, Hacivat said about Zeibek like this: “This man is called Blond Zeibek from Bursa.” Apart from this, in his study Sevilen (1986: 7) exemplified characteristics of persons like this: “Albanian’s fanaticism and boasting, Jew’s Money and wealth addiction, Laz’s outburst cahracter and fast talking as well as the likes of are the specialities that cannot be escaped from the intelligence of anonymous folk.”

Typages in Karagöz sometimes give a music, song, folk music, game or a dance feat from their own territory. “The music starts before the person appears on the curtain and when the music comes to the half the shape appears on the curtain” (Sevin, 1968: 68). “Iranian sings his introductory folk song with Azerbaijan Turkish and Laz generally appears with a kemanca in his hand playing horon” (Sakaoglu, 2003). Frank appears by singing polka (For example in Karagöz book of Kudret in the play The Cook. The typage known as Greek, Albanian or Rumelian come with sirto, Kurd with bar and the one from Kayseri comes to Kusteri Square with his famous spoons.

As it is seen, Karagöz plays intersect different cultures on the same curtain. 11th grade Global Setting according to the 2nd acquisition of Regions and Country, as the factors that effect on spreading of different cultural regions on World are explained, it was aimed to give place to factors consisting culture as well as culture-place relation. Via typages in Turkish Shadow Play, the necessity of respecting different cultures by giving examples regarding the importance of cultural variety.

With the republic in new written play text new types different from traditional plays, are seen. For example in the play “Karagöz in Ankara” Chaplin, Mickey Mouse, Tarzan, Greta Garbo, Nurullah Ataç, Münir Hayri Egeli and in the play “Business is a Business” Hans and Helga typages take place as a tourist” (Sakaoglu, 2003: 217). We can say that Karagöz carries the properties of his own culture to the curtain not only with the guests from Europe but also with the guests coming from the New World across the ocean.

In Terms of Comparison of City-Country and Immigration

As it is evaluated on the basis of subject, the play Village Mukhtarship of Karagöz written by Ismail Hakkı Baltacıoğlu (Republican People’s Party, 1941) was basically based on geographical elements; population, geographical formations that the village locates and the properties of economical conditions due to this, were discussed. Çikla (2007) summarizes the subject of this play like this: “In this play Karagöz was chosen as a Mukhtar in wrack and ruin Anatolian village (p. 62)... He learnt the problems of village from a 100 years old villager. According to this, diseases decrease the number of population. So it is necessary to fight against diseases. That is why the swamp in the village must be dried. After that fly invasion in the village has to be stopped. Plantation of village, bringing radio to the village, closing drains, maintenance of village cemetery are other important services that has to be done. In solving these problems Karagöz could not get any help from Hacivat, Zirzop, Geveze and Ezberci. On top of it they scorn villagers and do not want to be close with the villagers. At the end what the teacher that came from
In Humanities unit of 12th grade, the analysis of the effect of dominant economical activity type in a region on social and cultural life, was given place (1st acquisition). In the programme, it is suggested to focus on the effects of economical activities such as agriculture, industry, service on social and cultural life. The play Village Mukhtanship of Karagöz seems to be very suitable in giving this acquisition.

In the play of Rahmet Balaban (1938: 15) City, never again! City and village life were compared, immigration fact was focused on and the sufferings of immigrants from village to the city were emphasized. The lines of Karagöz about this were given below:

Karagöz: Son, the best job for the one born and grown up in village is to go into plow wholeheartedly. In the village you breathe mountain weather whereas in city you breathe smoke instead of it. In city you become lazy and get old. However in village you relax in mountains and plains. In village while you work, you sweat. Your body stiffens but in city it becomes paralyzed. Don’t ever tell me “city” again!

The acquisitions in various units of the 9th, 10th and 12th grades about country and city life can be provided by the plays given above. The findings such as in the 9th grade explanations about effective factors in formation of location fabric and types (Human sciences, 2nd acquisition); in the 10th the effect of erosion in Turkish lands and the necessity of protecting of our lands to leave a more livable country for the next generations (Natural systems, 14th acquisition); again in the 10th grade evaluation of immigrations in Turkey in terms of reason and result (Humanities, 9th acquisition), explaining locational effects of immigration with the examples from Turkey (Humanities, 10th acquisition), recognising economic activities according to their basic properties (Humanities, 11th acquisition); in the 12th grade interpretation of urbanization, immigration and industrialization in terms of social effects (Humanities, 2nd acquisition) are among them. The subjects such as properties of country and city life, its positive and negative sides, contributions to economic-social and cultural life, the reasons and results of immigration from country to city can be taught from the colourful characters of Turkish Shadow Play.

In Terms of Natural Disasters and Water Resources

In the play Karagöz in the Moor written by Ercümund Behzad Lav (1996) in 1940, Hacivat, Karagöz and Tepegöz, the son of Karagöz went to Anatolia: İzmir Fair, Nazilli, Karabük... During voyage Tepegöz who wanted to climb up a tower, said these about the importance of planes:

Tepegöz: Today planes become very important. The enemies are repelled, seeds are spread with them. They destroy grasshopper swarm that harm crop with poisonous gas bombs. Forest fires are damped down with them.

Karagöz: I understood all of them but what does a plane do to a forest fire? Doesn’t it splash water, does it?

Hacivat: It drops a bomb, sir. It blocks the fire. Until gathering peasants and
gendarmes from the village two hours far... (Lav, 1996: 521-522).

Forests of the country are very important for national wealth. Again the efforts of agricultural population go to waste sometimes with draught, sometimes with hail fail or sometimes with grasshopper invasion. In the play Karagöz in the Moor some biological disasters that cause serious problems in terms of economical geography are mentioned and attracted attention.

In the following of the play these three people come to Nazilli and see weaving mill there.

Tepegöz: There is also similar of it in Kayseri (Lav, 1996: 524).

The voyage after from here is to Karabük, iron city of young republic. We are listening the comment from Hacivat:

Hacivat: My dear sir, here the iron necessary for our iron industry, will be processed (Lav, 1996: 527).

The 13th acquisition of 11th grade Humanities unit is on evaluation of locational effects of economical policies applied in Turkey. In curriculum as this acquisition is given, it is also suggested to consider applications and projects towards reducing locational difference in economical policies applied from Republic up today.

The geography lesson of our heroes continues:

Tepegöz: What are you saying, Uncle Hacivat? In your time Anatolia was parching, the peasants were going to rain prayer, everybody was suffering from drought. Look, now we collect water by the help of dams.

Karagöz: Dam... dam...? What does it mean? What kind of a name is it?

Hacivat: My dear sir, as you understand it is a …. Modern cistern.

Karagöz: Ok... You took it up! Is it possible to make a cisten in the sky?

Hacivat: Not that kind sir, that is ...

Tepegöz: That is ... We build big sets to collect the water of rivers and lakes ... (Lav, 1996: 528).

After this, he says the water is send to villages through iron pipes so dry soil is watered, naked mountains are afforested, swamps causes malaria are dried and soon the whole country will have electricity with big electric power-plants.

According to the 10th acquisition of 10th grade natural Systems unit, it is aimed for the students to explain general properties and distributions of water resources and show their distribution on map. Here our rivers and damps built on them can be emphasized. Again in the 11th acquisition economical, social and cultural effects of using water resources effectively, will be evaluated. The responsibility of individuals in sustainable usage of resources can be transmitted from the mouths of Karagöz or Hacivat and provide them to learn with fun.

We can benefit from the texts given above in teaching nature and human interaction, the importance of sensibility people have to show towards nature (9th grade Natural Systems, 1st acquisition) and how people should use nature and environment (9th grade Environment and Population, 1st acquisition). Apart from damps that is an artifact and need big investments, the examples given in curriculum such as Blacksea Coastal Road, Maltepe Beach Park, Eurasia Tunnel, Osman Gazi Bridge, Ordu-Giresun Airport, Marmaray and BAE-Dubai Palm Tree
can be taught with new Karagöz texts.

Another emphasis on drought and lack of water is seen in the play *Ferhad and Şirin*:

Şirin’s Mother: “Look Hacivat, there is lack of water in our city, Amasya. It is necessary to dig Elma Mountain across and bring water to the city” (Kudret, 1969: 131).

In the 9th grade Environment and Population unit, there is acquisition that evaluates changes occurred by human effect in natural environment (2nd acquisition). Here starting from sample events it will be emphasized to be sensible to nature by focusing on the effects of human on atmosphere, lithosphere, hydrosphere and biosphere. It is clear that the mentioned Karagöz plays are quite suitable for this theme. These plays in which disasters such as forest fire and drought are held, can be used for the 1st acquisition of 10th grade Environment and Population unit given as “explaining formation reasons of disasters and their properties”. Turkish Shadow Play can provide important contributions to the subjects in the 2nd acquisition of the same unit that is associating distribution of disasters and their affects, in the 3rd acquisition of the same unit that is associating distribution of disasters and their affects, in the 4th acquisition of the same unit that is create awareness about explaining protection methods from disasters.

The 1st acquisition of Natural Systems of 12th grade is on explaining extreme conditions and effects of natural events. Again in the 2nd acquisition of the same unit students are expected to make future predictions about changes in natural system. Especially it was aimed to emphasize possible effects of changes on future of life of living creatures and protections need to be taken against drought. The plays *Karagöz in the Mood ve Ferhad and Şirin* are quite suitable for the subjects of this unit.

**In Terms of Climate**

In some plays there are small conversations about climate. For example in the play *Live by the sword die by the sword* written by Halil İbrahim in the book “Karagöz Play Texts” of Culture and Tourism Ministry National Folklore Research Department (1987: 75), there is a small conversation on the wind between the main actors of shadow play:

Hacivat: Which wind brings you here?

Karagöz: A Northwest wind Hacivat! The very rough one.

Hacivat: Why don’t you come with mild and sweet breezes, my Karagöz?

Karagöz: From now on I make my cruises with wild North winds Hacivat! I blow, tyrannize but do not fall even one single drop!

In the play *Boat* Hacivat asks Karagöz if he knows something about weather and wind after that he tells the names of the winds seen in Turkey.


In the conversation part of the play *Medical science* Karagöz and Hacivat talked about the weather after a snowy, muddy day:

Karagöz: Tradesfolk are waiting in front of doors. The weather becomes a little
bit nice. Southwester came, southwester, southwester.

Hacivat: Yes, sir. When southwester comes, the snow melts (Kudret, 1969: 242).

In the play Partners;

Hacivat: However the sea was very rough that day. Southwester blew so hard that it was difficult to get on a boat. The waves were rising as the height of a man (Kudret, 1969: 545).

As it is known Natural Systems unit in Geography Curriculum aims to make mutual interaction between properties of physical World and human, comprehend. The 11th acquisition in Natural Systems in 9th grade is on formation and distribution of climate elements. In dialogues of all the plays Live by the sword die by the sword, the Boat and Partners given above, information about the wind that is among the elements of climate, is given. Accordingly it will be possible to give examples about the effects of climate elements on daily life will be given via Shadow theatre.

In Terms of Environmental Problems

Some authors are in search of new subjects to update shadow play and introduce it to the new generation. Çıblak (2007: 181) in his study states that Hayali Cinas is writing new play texts suitable to life conditions of today and summarizes his play Alien like this: “Hacivat who could not sleep that night, went his house and woke up Karagöz. After talking a little while with Hacivat, Karagöz wanted to get into his house. However as he could not make himself heard by his wife, he had to sleep outside. At night an alien took blood sample from the head of Karagöz and passed on him disease, On this event the head of Karagöz became very big and is alienated from others. The alien came again. After giving warnings about keeping the World clean and taking precautions against wars, he recovered Karagöz.” In this play space, life in other planets, pollution problem of the World were brought together as an important subjects of geography.

Environmental sensibility was also handled in the play Karagöz Park Warden written by Ünver Oral (1992). A turist with a camera in his hand came to the park where Karagöz keeps watch and wanted to rest there. He showed the rubbish around and asked “Is here a park or a dumpsite?” (p. 42). The answer given to the introduction of park as a resting place of garbage men told by Hacivat is rather condemnatory.

Tourist: Noo, telling a lie is bad! I wandered other parks and people are again throwing rubbish around …(p. 43)

In the rest of the play Karagöz and Keloğlan cleaned the park together. After they have finished their work, we heard those words full of compliment and aspiration from Keloğlan:

Keloğlan: ...I remembered our village. Everywhere is just like this park. But everywhere is more beautiful. The wind of my village smells thyme, its water flows very clean... (p. 57).

In this text the tourist heard about the reputation of Karagöz and Hacivat as shadow play character. He took their photos and said that he wanted to watch a
Karagöz play. Hacivat offered to exhibit a play by gathering the children of neighborhood and hosted the tourist in his own clean garden with nice meals and Turkish coffee. Here Oral dealt with tourist concept in various aspects. With the tourist typages in the play used as description, it was emphasized that we should give importance to tourists in Turkey and host them worthily. Also in the play it was reminded the importance of shadow play in terms of tourism and this cultural heritage should be preserved and transferred to new generations. Furthermore “Turkish coffee and its tradition” was involved UNESCO Intangible Cultural Heritage of Humanity Symbolic List in 2013 so its introduction can be used in education.

We can benefit from the dialogues mentioned above in Environment and Population units of 11th and 12th grades and Humanities units of 12th grades. In Environment and Population unit of 11th grades, for the classification of environmental problems according to formation reasons (1st acquisition), analysis of formation and spreading periods of environmental problems in terms of global effects (6th acquisition) and evaluation of sustainable usage of natural sources in terms of recycling strategies (7th acquisition) the play Karagöz Park Warden has important advantages.

In the 14th acquisition of Humanities unit of 12th grades that is “it explains the relation of natural and cultural symbols in Turkey with the location”, the effect of natural and cultural symbols of symbol to location perception, Karagöz himself is one of the cultural values in Intangible Cultural Heritage List and the explanations of giving examples from Turkey took place. The 15th acquisition of same unit is for explaining assets and potential of tourism of Turkey. In Environment and Population unit of 12th grade aims to associate concepts such as limited source, exhaustibility, over pressure, environment problem and progress compatible with nature by starting from the limitation of natural environment (1st acquisition). As it is seen in the play Karagöz Park Warden there given place the responsibility of mankind to prevent environment problems and again in the 4th acquisition of Environment and Population unit, the importance of being sensible to natural and cultural heritage was emphasized.

**DISCUSSION AND CONCLUSIONS**

Geography is a science that integrates natural and humanities in location axis, has a great importance in gaining individuals a national identity and engraining patriotism in company with historical and cultural codes. In order to provide this geography lesson should be taught more entertaining. The usage of Turkish Shadow Play is thought to be a way that can both attract the attention of students and keep our intangible cultural heritage alive.

Karagöz and Hacivat that is among elements reflecting traditional culture of our geography involving primarily İstanbul and then Anatolia, have gained the love of people for centuries, addressed to every class. Unfortunately firstly television, then in computer and internet age of today, Turkish Shadow Play seems to be forgotten. Özertem (1994) states as being one of the colourful character of our cultural past Karagöz that is just come down to Ramadan, waits to be recreated with
a loud cry. Siyavuşgil (1959) similarly emphasizes that the power of one person is not enough to recreate Karagöz and 59 years ago gave the message of if we lose him today we will lose language, the other day history and literature, shortly we will lose what we have in the name of national culture. Çolakoğlu (2006) on the other hand says it is normal that what we do not protect will be protected by others by reminding puppet characters such as Aragöz in Egypt, Caraghis in Romania, Karaghiozis and Hatziaivatis in Greece. Şişman (2009) suggests to organize Karagöz text writing contest by the cooperation of MEB; Culture and Tourism Ministry and Turkish National Centre of UNIMA to remind Karagöz tradition.

Without being distant from scientific point of view in teaching of secondary school geography subjects, by benefitting from Turkish Shadow Play, it is possible to provide development of upper level thinking skills of students such as creative thinking, criticism, analysing, synthesizing, interpretation, problem solving, researching, taking decision as well as participating within class discussions, effective communication, gaining intellectual point of view and humour.

Today even in universities “Values Education” lesson is obligatory. In this scope as it is looked in terms of values education, one or more than one of “basic values” that are in education programmes such as justice, friendship, self-control, patience, respect, love, responsibility, patriotism, helpfulness (MEB Secondary school Geography Lesson Curriculum, 2018) forms the basis of all Karagöz plays. Apart from everything, Karagöz and Hacivat are good friends, their argument ends with absolute peace. Hacivat is mostly known with his patience whereas Karagöz is known with his honesty. So in each play values education is held in various aspects. Çamur (2007: 6-7) summarizes that the typages in the plays represent different ethical origins in Ottoman period like this: “Karagöz is unemployed and uneducated person whereas Hacivat has little education, more suitable to the order however a cunning person. Hacivat finds Karagöz a job and exploits him at the same time. In Karagöz plays illegality, thefts, amoral behaviours are criticised by presenting them on the curtain.” Karagöz plays that have quite delicate structure, have sometimes given place to ironies, sarcasm, exaggeration and adornments, in society and especially among educators there occurs an impression that they are suitable for children, this impression has to be changed. Miracı Ümit (2014) informs that in his life over five hundred years, Karagöz addresses to different audiences in different places with his political and social satires and sometimes filthy adult plays, educative and entertaining child plays, sufiistic plays and courtly plays that please sultans. Similarly Koç and Koca (2006) think that Karagöz plays should not be considered just as Ramadan entertainment or a child play. Menek (2011) as well gives the same message in his post graduate thesis and states that adults and teenagers can be reached and given suitable messages with Karagöz plays.

In the light of all these datas it is thought that according to the quality and gainings of subjets in secondary school Geography lessons by identifying or forming suitable themes in didactic means, it can be possible to benefit from Karagöz and his team efficiently. Since there is no data about using shadow play in teaching of Geography subjects in literature scanning, this study can guide students and teachers in planning units. During plays students can take notes, if a record is
shown it can be watched twice and can be stopped by teacher to make emphasis. In future scientific studies application results of Karagöz plays for complete and entertaining learning, can be evaluated and opinions of students and teachers in terms of both affective and cognitive, can be taken. Also not only its contribution to learning is quested also its effects on reflective thinking, critical thinking, creative thinking skills as well as attitudes of students towards Geography lesson can be researched.

It should not be considered as a shadow play in the shade of today’s cinema, television, computer and internet technology. Karagöz should be protected and given importance to its cultural and touristic introduction both inland and abroad.

The population mosaic that forms Karagöz audience has formed strong bonds within itself during history. Examplified each nation typage welcome each other’s weak and strong sides, mockings and criticism with tolerance; they make the curtain which they appear in their colourful costumes, a special geographical place. Sheik Küşterî Square that reflects social structure of Ottoman period successfully, feels proud with the gainings of Republic, is and will always be a cultural meeting point with its eternal staff.

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Chapter 30

An Analysis of Self-Regulation Skills of 48 Months and Over Children in Terms of Various Variabilities

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3Researcher, Gazi University, Institute of Educational Sciences, Ankara, Turkey.

INTRODUCTION

Pre-school education is defined as a development and education process lasting from the birth of the child to the day of basic education, that covers the period from 0 to 6 years and is also called "early childhood", a very important place in children's later life, in which personality, psychomotor, social-emotional, mental and language development are largely completed and accordingly the personality is developed (Aral et al., 2002).

Pre-school period is the period when the child is trying to research and identify the environment, to communicate with his or her environment and peers, to inquire about his/her curiosity and try to get various answers, to learn the cultures and values of the place where s/he lived and to start to act accordingly (Çeliköz & Erişen, 2013).

The pre-school period is of great importance because the child has acquired new experiences, learns to think creatively, develops self-regulation, learns to cope with problems, and supports different areas of intelligence.

Self-regulation refers to adjusting and reacting appropriately to the stimuli in the environment, adjusting behaviors, thoughts and emotions moderately by self-controlling (Social Emotional Learning Academy, 2015).

Achieving self-regulation skills is of utmost importance in the pre-school period. It is important for the child identifies himself / herself, determines feelings, thoughts and behaviors and controls and acts accordingly. Children not developing self-regulation skills may experience behavior, attitude, and adaptation problems in their lives and environment (Ergin, 2014).

Self-regulation is a multi-faceted action that involves emotion, behavior, and attention regulation. Emotion regulation is awareness of emotions, anger control and reacting correctly. Behavior regulation is motor controls and controlling behavioral impulses. Attention regulation is collecting attention, preventing distraction, turning attention away if necessary (Ertürk, 2013).

Individuals with self-regulation skills are both aware of their emotions and have the ability to control their impulses. No child is born as having self-regulation. It starts with the games and communication from the first months. These early
experiences influence our social, emotional and mental structures in the coming years. Then we turn into individuals who can plan, regulate emotions and thoughts, and control our behavior. The former experiments revealed that children with high self-regulation have higher school achievement and stronger social communication (Social Emotional Learning Academy, 2015).

Self-regulation consists of determining the behavior and movements of children, empathy, cooperation and their relationship with the environment. These skills have a profound effect on the behavior, attitude and communication of the child in the future. The child who hasn’t developed self-regulation skills may have some communication problems with his/her peers, affecting academic achievement, and creating a negative view of the school (Aras, 2015).

This research was conducted in order to examine the self-regulation skills of 48 months and over children in pre-school education in terms of various variables. For this purpose, the following questions were sought:

**Sub-purposes**

- Do self-regulation skills of children show a significant difference according to the age and education of mother?
- Do self-regulation skills of children show a significant difference according to gender and birth order?

**MATERIALS AND METHODS**

**Research Design**

This research model is a descriptive model in which self-regulation skills of 48 months and over children of pre-school education are examined in terms of various variables. When considering the analysis of data, the research requires both cross-group comparisons and correlational analyzes as well as descriptive techniques. For this reason, the research has the feature of relational survey model of general screening models (Karasar, 2012, p. 77).

**Population and sampling**

The population of the study is comprised of 48 months and over children attending pre-school education in the schools affiliated to the Ministry of National Education and located in the province of Suruç, which is affiliated to Şanlıurfa province in 2017-2018 academic year and their mothers. In 2017-2018 academic year, the total number of children (48 months and over) attending kindergartens and pre-schools of Suruc district center is 1104. Using the sampling formula (N: 1621) from the population, the minimum sample volume was calculated as 91 via the formula. The total sample volume was distributed in the ratio of stratified weights (Çingi, 1990). At least 91 subjects were determined by simple random sampling method and the sampling of the research comprised of 103 children and their mothers reached.

**Data Collection Tool**

To collect data in the survey; "Personal Information Form" prepared to obtain demographic information of children and their mothers and "Pre-School Self-
Regulation Scale” with the aim to measure children's self-regulation skills were used.

“The personal information form” contains questions intended to learn about the child's gender, birth order, mother's age, and educational status.

Pre-school self-regulatory scale: The 'Pre-School Self-Regulation Scale' was used to quantify the self-regulatory skills of children in the quantitative aspect of the research. The Pre-School Self-Regulation Scale developed by Smith-Donald et al. (2007) is a measurement tool that enables performance-based assessment. The practitioner evaluation form on the scale allows the practitioner to assess the emotion, attention level and behavior of the child based on the practitioner-child interaction. The Practitioner Evaluation Form is a rubric type measuring instrument consisting of the items scored from 0 to 3. The adaptation of the scale to Turkish was done by Tanrıbuyurdu and Yıldız in 2012. As a result of the factor analysis performed within the scope of construct validity, it was determined that the scale has a two factor structure. These factors are; Attention / Impulse Control and Positive Sense. The scale consists of 16 items. The reliability coefficient (α) for the 16 items forming the complete scale was .83. The reliability coefficient of Attention / Impulse Control of the scale related with 10 items was .88 and the reliability factor for the second factor Positive Sense was .80. There are 10 different tasks of 'Pre-School Self-Regulation Scale'. These tasks are; to walk on a straight line, to click on a pencil, to stack a cube, to collect cubes, to group objects, to collect objects, open gift packages, give the toy back, wait for instructions and keep sugar in the mouth (Fındık Tanrıbuyurdu & Güler Yıldız, 2014).

Data Analysis

In this study, it was examined whether 2 sub-dimensions of self-regulation skills (attention / impulse control, positive emotion) of the children participating in the research varied according to various demographic characteristics, according to the number of categories for independent variables, and with t test and Independent Variance Analysis (ANOVA) 20 package program for independent samplings. Relations between the variables are investigated with the Pearson Moments Multiplication Correlation Coefficient. The significance level of the statistics was 0.05.

RESULTS

Some demographic information on 103 children and their mothers constituting the sample of the study are presented in Table 1.

Some demographic information on 103 children and their mothers constituting the sample of the study are presented in Table 1.

When the distribution of demographic characteristics is examined according to Table 1, 47.6% (N: 49) of the children participating in the survey were girls while 52.4% (N: 54) were boys. When the birth order of the children participating in the survey is considered, 27.2% (N: 28) are the first child; 33% (N: 34) are the last child and 39.8% (N: 41) are among the middle children. 9.7% (N: 10) of mothers are under 25 years old. 28.2% (N: 29) between the ages of 26-29; 31.1% (N: 32) between 30-34 years of age; 22.3% (N: 23) were between 35-39 years and 8.7% (N: 9) were between 40-45 years of age. 10.7% of the mothers of the participating children (N: 11) are not not literate; 56.3% (N: 58) primary schools; 12.6% (N: 13)
secondary school; 10.7% (N: 11) are high school graduates and 9.7% (N: 10) are university graduates.

**Table 1:** Demographic Data on Children Included in the Survey

<table>
<thead>
<tr>
<th>Child Gender</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>105</td>
<td>101</td>
</tr>
<tr>
<td>%</td>
<td>51.0</td>
<td>49.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Birth Order</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>First child</td>
<td>28</td>
<td>27.2</td>
</tr>
<tr>
<td>Last child</td>
<td>34</td>
<td>33.0</td>
</tr>
<tr>
<td>One of the middle</td>
<td>41</td>
<td>39.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mother’s age</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25</td>
<td>17</td>
<td>16.5</td>
</tr>
<tr>
<td>26-29 ages</td>
<td>34</td>
<td>33.0</td>
</tr>
<tr>
<td>30-34 ages</td>
<td>23</td>
<td>22.3</td>
</tr>
<tr>
<td>40-45 ages</td>
<td>23</td>
<td>22.3</td>
</tr>
<tr>
<td>46 and over</td>
<td>6</td>
<td>5.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mother’s educational status</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not literate</td>
<td>11</td>
<td>10.7</td>
</tr>
<tr>
<td>Primary school</td>
<td>58</td>
<td>56.3</td>
</tr>
<tr>
<td>Secondary school</td>
<td>13</td>
<td>12.6</td>
</tr>
<tr>
<td>High School</td>
<td>11</td>
<td>10.7</td>
</tr>
<tr>
<td>University</td>
<td>10</td>
<td>9.7</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Table 2:** Score averages, Standard Deviations, and t Test Results for the Scores Received from the "Self-Regulatory Scale” by Gender of the Children Included in the Study

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>X</th>
<th>SS</th>
<th>X</th>
<th>SS</th>
<th>X</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>21.04</td>
<td>5.65</td>
<td>11.98</td>
<td>3.54</td>
<td>33.02</td>
<td>8.12</td>
</tr>
<tr>
<td>Male</td>
<td>54</td>
<td>18.26</td>
<td>7.80</td>
<td>10.20</td>
<td>4.24</td>
<td>28.46</td>
<td>11.60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T test Results</th>
<th>T</th>
<th>p</th>
<th>t</th>
<th>p</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.055</td>
<td>0.040*</td>
<td>2.293</td>
<td>0.024*</td>
<td>2.288</td>
<td>0.022*</td>
</tr>
</tbody>
</table>

* p <0.05

When Table 2 was examined, attention impulse control (t = 2.055, p <0.05), positive emotions (t = 2.293, p <0.05) and total (t = 2.288, p <0.05) of self-regulation skills dimensions were found to have meaningful difference statistically. When the averages of the points are examined; attention / impulse control (X = 21.04), positive emotion (X = 11.98) and total (X = 33.02) scores; it was determined that the average score of girls was higher than that of boys.

When Table 3 was examined, it was found the mean scores of attention / impulse part (X = 20.88), positive emotion part (X = 11.71) and total scale (X = 32.95) of middle children were higher than the children in the other group. However, according to the results of the variance analysis, it was found that attention/impulse control (F (3-99) = 1.260, p>0.05), positive emotion (F (3-99) = 0.955, p> 0, 05) and total scores (F (3-99) = 1.245, p> 0,05) of children’ self-regulation skills sub-dimensions did not make a statistically significant difference by birth order.
Table 3: Score Averages related with scores received from the "Self-Regulatory Skill Scale" of the children included in the study (according to birth order), Standard Deviations and variance analysis ANOVA Results

<table>
<thead>
<tr>
<th>Child Birth Order</th>
<th>Attention/Impulse Control</th>
<th>Positive Sense</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>X</td>
<td>SS</td>
</tr>
<tr>
<td>First Child</td>
<td>28</td>
<td>19,11</td>
<td>6,99</td>
</tr>
<tr>
<td>Last Child</td>
<td>34</td>
<td>18,41</td>
<td>6,90</td>
</tr>
<tr>
<td>One of the Middle</td>
<td>41</td>
<td>20,88</td>
<td>6,96</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>19,58</td>
<td>6,97</td>
</tr>
</tbody>
</table>

Variance Analysis

<table>
<thead>
<tr>
<th></th>
<th>Sd</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-groups</td>
<td>2</td>
<td>1,260</td>
<td>0,288</td>
</tr>
<tr>
<td>In-groups</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Score Averages related with scores received from the "Self-Regulatory Skill Scale" of the children included in the study (according to mothers’ ages), Standard Deviations and variance analysis ANOVA Results

<table>
<thead>
<tr>
<th>Mothers’ Ages</th>
<th>Attention/Impulse Control</th>
<th>Positive Sense</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>X</td>
<td>SS</td>
</tr>
<tr>
<td>Ages 25 and under</td>
<td>10</td>
<td>21,80</td>
<td>5,88</td>
</tr>
<tr>
<td>26-29 ages</td>
<td>29</td>
<td>19,97</td>
<td>7,81</td>
</tr>
<tr>
<td>30-34 ages</td>
<td>32</td>
<td>20,03</td>
<td>6,16</td>
</tr>
<tr>
<td>35-39 ages</td>
<td>23</td>
<td>18,09</td>
<td>7,44</td>
</tr>
<tr>
<td>40-45 ages</td>
<td>9</td>
<td>18,11</td>
<td>7,13</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>19,58</td>
<td>6,97</td>
</tr>
</tbody>
</table>

Variance Analysis

<table>
<thead>
<tr>
<th></th>
<th>Sd</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-groups</td>
<td>4</td>
<td>0,665</td>
<td>0,618</td>
</tr>
<tr>
<td>In-groups</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td></td>
<td></td>
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</tbody>
</table>

When Table 4 was examined, it was found that attention/impulse control ($F_{(4-98)} = 0,665, p>0,05$), positive sense ($F_{(4-98)} = 0,577, p>0,05$) and total ($F_{(4-98)} = 0,493, p>0,05$) of children’ self-regulation skills sub-dimensions did not make statistically significant differences according to mother’s age. When the averages of the scores were examined, it was found that the children who have a mother who is 25 years old or less have a higher mean of attention impulse control ($X = 21,80$) and total points ($X = 32,00$) than the children in the other group do.

When Table 5 was examined, it was found that attention/impulse control ($F_{(3-99)} = 1,518, p>0,05$), positive sense ($F_{(3-99)} = 1,812, p>0,05$) and total ($F_{(3-99)} = 1,362, p>0,05$) of children’ self-regulation skills sub-dimensions did not make statistically significant differences according to mother’s educational status. When the averages of the scores were examined, it was found that the mean of attention impulse...
control (X=23.27) and total points (X=36.09) of children of illiterate mothers were higher than the mothers in the other group do.

Table 5. Score Averages related with scores received from the "Self-Regulatory Skill Scale" of the children included in the study (according to mothers’ educational status), Standard Deviations and variance analysis ANOVA Results

<table>
<thead>
<tr>
<th>Mother’s educational status</th>
<th>N</th>
<th>X</th>
<th>SS</th>
<th>X</th>
<th>SS</th>
<th>X</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not literate</td>
<td>11</td>
<td>23.27</td>
<td>5.78</td>
<td>12.82</td>
<td>3.79</td>
<td>36.09</td>
<td>9.21</td>
</tr>
<tr>
<td>Primary school</td>
<td>58</td>
<td>18.47</td>
<td>7.67</td>
<td>10.59</td>
<td>0.55</td>
<td>29.05</td>
<td>11.13</td>
</tr>
<tr>
<td>Secondary school</td>
<td>13</td>
<td>18.77</td>
<td>6.30</td>
<td>11.08</td>
<td>1.35</td>
<td>29.85</td>
<td>10.81</td>
</tr>
<tr>
<td>High school</td>
<td>11</td>
<td>21.09</td>
<td>5.30</td>
<td>11.00</td>
<td>0.86</td>
<td>32.09</td>
<td>7.44</td>
</tr>
<tr>
<td>University</td>
<td>10</td>
<td>21.40</td>
<td>4.90</td>
<td>11.80</td>
<td>0.96</td>
<td>32.20</td>
<td>6.53</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>19.58</td>
<td>6.97</td>
<td>11.05</td>
<td>4.01</td>
<td>30.63</td>
<td>10.30</td>
</tr>
</tbody>
</table>

Variance analysis

<table>
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<tr>
<th></th>
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<th>F</th>
<th>p</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-groups</td>
<td>4</td>
<td>1.518</td>
<td>0.203</td>
<td>1.812</td>
<td>0.520</td>
</tr>
<tr>
<td>In-groups</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**DISCUSSION**

In this study, it was examined whether self-regulation skills of children (48 months and over) varied according to gender, birth order, education level of mother and mother's age.

According to the results of the research, the self-regulation skills of the children are affected by the gender of the child. Buckner, Mezzacappa, and Beardslee (2009) stated that girls’ self-regulation skills tend to be higher than boys. It can be considered that the fact that girls' self-regulation skills are higher than boys reflects the cultural structure. Girls are more sensitive to others in social life and are trained in controlling their emotions and behaviors. In the cultural context, it is expressed that boys are raised more freely and in this case, it leads to differences in behavior and skills in terms of gender (Kağıtçıbaşı, 2000). As a result of another research (Tutkun et al., 2017), it was seen that the gender of the children affects the self-regulation skills and that the self-regulation skills of boys are lower than girls’. The research conducted with 178 children between 4-5 ages by Jahromi and Shifter (2008) revealed that gender did not make a difference in children's self-regulation. In a study by Aksoy and Tozduman Yaralı (2017), from the early ages, boys tend to be more mobile, more aggressive and more impulsive than girls. Because of this situation, the results of the research show that girls have higher scores on self-regulation and attention than boys.

According to another result obtained in the research, children's self-regulation skills are not influenced by the age of the mother. The results of Findik Tanrıbuyurdu’s research (2012) are also in line with this finding.

According to another research result, it was found that there was no significant difference in self-regulatory skills as to birth order. Similarly, Findik Tanrıbuyurdu
(2012) and Ertürk (2013) found that the birth order did not affect children's self-regulation.

As a result of the research, it was ascertained that the education status of the mothers did not cause any difference in the self-regulation skills of the children. It was concluded that the children of the mothers with lower education status had higher attention impulse, positive emotions and total scores compared to the other children. Mothers with low educational status may create environments where they can control their attention and impulses, encouraging them to take more responsibility compared to other mothers. The research conducted by Özbey (2018) did not show any significant difference according to the educational status of the mother.

**SUGGESTION**

Considering the results of the research, the following suggestions can be given;

• Various in-service trainings on self-regulation skills can be given to teachers in educational institutions. Teachers can often include stimulant materials to support children's self-regulation skills, especially in classroom activities.

• Parents may be given family education programs to support early childhood self-regulation skills.

• Training programs that support children's self-regulation skills can be implemented in pre-school education institutions.

• It may be suggested to examine different variables such as parental attitudes, parental personality traits, and behavioral problems, which are thought to influence children's self-regulation skills.

• Longitudinal studies can be planned to monitor the developmental process of children's self-regulation.

**REFERENCES**


Chapter 31

Pedagogical Entrepreneurship: Reflections on the Curricula of Primary Education

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INTRODUCTION

The improvements in science and technology have led to some changes on social structures of the societies and the features expected from the individuals. The structural transition from industrial to information societies has had developed and developing countries to reshape their economic and social structures. Therefore, it is expected from individuals to possess particular knowledge, skills and attitudes required to follow these changes and improvements in 21st century societies. One of these skills is entrepreneurship (Assessment and Teaching of 21st Century Skills [ATCS], 2007; Association of American Colleges and Universities [AACU], 2016; European Parliament and the Council of the European Union [EU], 2006; International Society for Technology in Education, [ISTE], 2016; Organization for Economic Cooperation and Development [OECD], 2009; Partnership for 21st Century Skills [P21], 2006; World Economic Forum [WEF], 2015).

In 21st century world, one of the changes faced by the societies is the increase in population. The social structure and the increasing population have caused a search for new ways to employ the citizens. As seen in the rates of unemployment in 2017, (South Africa %27.6, Greece %21.8, Spain %17.3, Italy %11.1 and Turkey %11) Turkey is one of the five countries having the highest rates (OECD, 2018). The countries confronting this problem aim to raise individuals equipped with the skills to gain their own profits as active citizens. As a generic term for these skills, entrepreneurship is one of the most important skills.

Entrepreneurship is not a new concept and also, there are different thoughts on definition and understanding of entrepreneurship. Therefore, it can be said that it is hard to find a common definition in literature (Fatoki & Chindoga, 2011; Salami, 2011; Nani, 2016). Entrepreneurship definitions differ in terms of education and economy. In educational perspective, entrepreneurship is generally stated as “the skill of putting the opinions into action” (Eurydice, 2012). In economical view, it is defined as “starting a business or an organization”. Emphasizing the aspect of process, Venkataraman (1997) defines entrepreneurship as discovering, evaluating and using the products and services of future. In Kauffman Report (2006), entrepreneurship is defined as transforming an innovation into a sustainable entrepreneur generating value.
The number of research on educating entrepreneurial students has been increased in recent years. The questions like “Can entrepreneurship be taught? How should entrepreneurship education be?” have begun to be discussed again. As a result of this dynamism in the field of entrepreneurship, the concepts as entrepreneurship education, entrepreneurial learning, entrepreneurial school, entrepreneurial university, pedagogical entrepreneurship and academic entrepreneurship have gained more importance. **Entrepreneurship education** has both broad and narrow meanings. In narrow meaning, entrepreneurship education is defined as creating learning outcomes related to realization of a business or an entrepreneurial activity. In broad meaning, however, equipping the individuals with entrepreneurial features for life and work, and also with learning outcomes for being active citizen and being employed (European Commission, 2014). In another definition, entrepreneurship education is stated as the process of equipping the individuals with knowledge, skills and self-esteem to have them see commercial opportunities (Jones and English, 2004). **Academic entrepreneurship** is defined as the integration of scientific, academic and commercial activities (Nyeko & Sing, 2015). These activities include patenting, getting license, constituting techno parks, conducting academic research, industrial education courses, consulting and graduating qualified individuals (Philpott et al., 2011).

**Entrepreneurial learning**, on the other hand, is defined as individuals’ awareness and evaluation about opportunities, their communication with other people to start and organize an enterprise (Rae, 2005), and the process of entrepreneurs’ acquiring and updating knowledge (Minniti & Bygrave, 2001). Except the individuals, organizations and institutions are also described as entrepreneurial. The first one is **entrepreneurial school** defined as the organization in which the principals, teachers, counsellors and the other staff have the knowledge of aims in entrepreneurship education, the teaching, and learning process is integrated with entrepreneurship. Moreover, entrepreneurial school supports the creativity and risk-taking behaviours of students, and the teachers are provided with the support they need in entrepreneurship education (European Commission, 2015). The second one is **entrepreneurial university** including entrepreneurial academic staff and students. Furthermore, entrepreneurial university works in entrepreneurial relation with its environment (Röpke, 1998). The pedagogical entrepreneurship will be discussed in detail.

**Pedagogical Entrepreneurship**

Since the entrepreneurship has acquired a new perspective, pedagogical entrepreneurship has arisen as a new concept and have different definitions in literature. Because of being a new concept, it is seen that the number of research on pedagogical entrepreneurship is inadequate (Haara et al., 2016; Dal et al., 2016).

Pedagogical entrepreneurship is defined as a concept including features and competencies like problem solving, creativity, innovation, planning a work and working in a team (Dal et al. 2016). In another definition, pedagogical entrepreneurship is stated as the realization of entrepreneurship education from the teachers’ point of view (Leffler, 2009; Ødegård, 2003; Backström-Widjeskog, 2002).
2008; Riese, 2010; Svedberg, 2010). Ødegård (2003), defines pedagogical entrepreneurship as action-oriented learning and process realized in a social context including personal features, skills and knowledge in which the learners are active.

Riese (2010) states that the main aim of pedagogical entrepreneurship is to support the learners to be decisive, creative and independent individuals whether they start a business or not. According to Dal et al. (2016), pedagogical entrepreneurship is based on two purposes. One of them is to improve learning and teaching process in a creative and innovative way. Second one is to develop entrepreneurial and innovative mind-set.

When the literature is reviewed, it is seen that entrepreneurship is included in primary and secondary school curriculum of European countries (European Commission, 2012). Entrepreneurship is integrated to social sciences (history, geography, citizenship) and science courses (Adeyemo, 2009; European Comission, 2012; Bolaji, 2012; Deveci & Seikkula-Leino, 2016; Lackeus, 2015). In their research, Haara et al., (2016) states that the concept of pedagogical entrepreneurship is still ambiguous and the teachers are lack of knowledge about how to handle pedagogical entrepreneurship in primary and secondary schools. Moreover, they suggest to include pedagogical entrepreneurship in teacher education curriculum. Seikkulo-Leino et al., (2010), accordingly, points out in her research that Finnish teachers are not equipped with the knowledge of pedagogical entrepreneurship although they feel responsibility to teach entrepreneurship. As seen in the literature reviewed, the change from entrepreneurship as content and process to entrepreneurship as a method has been faced. From this point of view, the aim of this research is to examine the social sciences and science curriculum of primary schools in terms of the aspects “entrepreneurial learner characteristics, entrepreneurial teacher characteristics, strategies, methods and techniques promoting pedagogical entrepreneurship and measurement and evaluation techniques”

**MATERIALS AND METHODS**

**Research Model:** Aiming at examining 3th and 4th grade science and 4th grade social sciences curriculum, this research is based on qualitative research method. Qualitative research provides understanding of social phenomenon with minimal intervention using observation, interviews and document analysis techniques (Merriam, 1998). This research is conducted using document analysis which is defined as examining information sources related to the cases and phenomenon dealt with by researcher.

**Study Group:** The study group of this research consists of 3th and 4th grade science and 4th grade social sciences curriculum renovated in 2018 by Ministry of National Education in Turkey. The study group is determined examining the literature in which pedagogical entrepreneurship is integrated with particular courses. In science and social sciences curriculum, the chapters including “MNO Curriculum (Introduction), Perspective of the Curriculum, Measurement and Evaluation Approach in Curriculum, Personal Improvement and Curriculum, Conclusion, The Goals of Curriculum, Basic Skills and Values of Curriculum, The
Aspects Taken into Consideration in Implementation of Curriculum, The Structure of Curriculum, Objectives and Explanations are examined in terms of pedagogical entrepreneurship.

Data Collection Tools: In this research, a framework including learner characteristics, teacher characteristics, teaching strategy, approach, method and techniques, measurement and evaluation techniques is determined reviewing the literature. The expert opinions are acquired for the dimensions and the items concerning these dimensions. The expert group consists of 7 academic staff from science education, primary school education, social sciences, curriculum and instruction departments. The experts are expected to evaluate the items as “appropriate, inappropriate and inadequate”. With reference to these evaluations, Lawshe Content Validity Ratio (Lawshe, 1975) is estimated to provide content validation. Minimum values and the number of experts are presented on Table 1.

Table 1: The Number of Experts and Minimum Values to Estimate Lawshe Content Validity Ratio

<table>
<thead>
<tr>
<th>The Number of Experts</th>
<th>Minimum Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-7</td>
<td>.99</td>
</tr>
<tr>
<td>8</td>
<td>.78</td>
</tr>
<tr>
<td>9</td>
<td>.75</td>
</tr>
<tr>
<td>10</td>
<td>.62</td>
</tr>
<tr>
<td>11</td>
<td>.59</td>
</tr>
<tr>
<td>12</td>
<td>.56</td>
</tr>
<tr>
<td>13</td>
<td>.54</td>
</tr>
<tr>
<td>14</td>
<td>.51</td>
</tr>
<tr>
<td>15</td>
<td>.49</td>
</tr>
<tr>
<td>20</td>
<td>.42</td>
</tr>
<tr>
<td>25</td>
<td>.37</td>
</tr>
<tr>
<td>30</td>
<td>.33</td>
</tr>
<tr>
<td>35</td>
<td>.31</td>
</tr>
<tr>
<td>40</td>
<td>.29</td>
</tr>
</tbody>
</table>

Content validity ratio was estimated acquiring opinions from 7 experts and the items below .99 (being competitive, community-based learning) were excluded. The data was gathered by two independent researchers examining the curriculum in terms of the dimensions determined.

Analysis of the Data

In the analysis process, descriptive analysis was conducted. Firstly, Yes or No (1-0) analysis is used to examine the curriculum according to the dimensions for pedagogical entrepreneurship. Miles and Huberman (1994) formula was used to determine the consensus among the multiple coders. The formula used in this research is suggested as:

\[
\text{reliability} = \frac{\text{number of agreements}}{\text{number of agreements + disagreements}}
\]

According to this formula, the number of items coded same (n=585) was
divided into sum of the codes (n=616), and reliability among coders was estimated as 0.94. This ratio, according to Miles and Huberman (1994), is adequate for reliability.

**RESULTS**

**Table 2:** Entrepreneurial Learner Characteristics on 4th Grade Social Sciences Curricula

<table>
<thead>
<tr>
<th>Learner Characteristics</th>
<th>The Chapters in Curriculum</th>
<th>MNO Curriculum (Introduction)</th>
<th>The Aims of The Curriculum</th>
<th>Measurement and Evaluation</th>
<th>Approach in Curriculum</th>
<th>Personal Improvement and Curriculum</th>
<th>Conclusion</th>
<th>The Goals of Social Science Curriculum</th>
<th>Basic Skills and Values of Social Science Curriculum</th>
<th>The Aspects Taken into Consideration in The Structure of Curriculum</th>
<th>Objectives and Explanations</th>
<th>Total (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Innovative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Risk taking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Being initiative</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Problem solving</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Self-confident</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Self-regulated</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Self-disciplined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Making decisions</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Learning from mistakes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Analytical thinking</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Responsibility</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Self-competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Independent thinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Collaboration/Working in teams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Being far-sighted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Ambiguity</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
As seen in Table 2, entrepreneurial learner characteristics stated the most frequently in the curriculum is problem solving \((f=7)\) while learning from the mistakes \((f=0)\), ambiguity tolerance \((f=0)\), seeing opportunities \((f=0)\) and leadership \((f=0)\) are not included in the curriculum. The sample explanation from “MNO Curriculum (Introduction)” part of the curriculum is given below:

“...This change defines an individual producing knowledge, using this knowledge functionally in life, solving problems, thinking critically, entrepreneurial, decisive, having communicative skills, empathetic, contributing to society and the culture.”

**Table 3:** Entrepreneurial Teacher Characteristics on 4th Grade Social Sciences Curricula

<table>
<thead>
<tr>
<th>Teacher Characteristics</th>
<th>The Chapters in Curriculum</th>
<th>MNO Curriculum (Introduction)</th>
<th>The Aims of the Curricula</th>
<th>The Goals of Social Science Curriculum</th>
<th>The Aspects Taken into Consideration in the Structure of the Curriculum</th>
<th>Objectives and Explanations Total ((f))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has knowledge, skills and attitudes related to entrepreneurship</td>
<td>✓</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allows the learners to take risks</td>
<td>✓</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Values the learner mistakes</td>
<td>✓</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make use of the sources in school and the society</td>
<td>✓</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being in communication with the stakeholders</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being facilitator</td>
<td>✓</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plans, Analyse and</td>
<td>✓ ✓</td>
<td>✓</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
evaluates teaching-learning process and activities
Develops learning strategies with the activities supporting entrepreneurship
Managing time effectively
Open-minded
Communicating effectively
Flexible
Self-confident
Encouraging for learning
Guide

As seen in Table 3, the teacher characteristics related to pedagogical entrepreneurship which is the most frequently included in Social Sciences curriculum for 4th grade is planning, analysing and evaluating teaching-learning process and activities ($f=3$). The ones not stated in the curriculum are time management ($f=0$), being open-minded ($f=0$), communicating effectively ($f=0$) and being self-confident ($f=0$). A sample explanation related to planning, analysing and evaluating teaching-learning process and activities is given below:

“...Since the diversity in education is affected from inner and outer dynamics like the individual, education level, content of the lesson, social environment, facilities of school etc., providing the efficacy of measurement and evaluation is expected from teacher and education implementers not from the curriculum.”

Table 4: Strategies, Methods and Techniques Promoting Pedagogical Entrepreneurship on 4th Grade Social Sciences Curricula

<table>
<thead>
<tr>
<th>Strategy, Method, Technique</th>
<th>The Chapters in Curriculum</th>
<th>The Aims of The Curricula</th>
<th>Perspective of the Curriculum</th>
<th>Testing and Evaluation Approach in Curriculum</th>
<th>Personal Improvement and Curriculum</th>
<th>Conclusion</th>
<th>The Goals of Social Science Curriculum</th>
<th>The Aspects Taken into Consideration in Implementation of Social Science Curriculum</th>
<th>Objectives and Explanations</th>
<th>Total ($f$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Learning</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Constructive Learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Experiential Learning</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

380
The strategy, method and technique supporting pedagogical entrepreneurship which is the most frequently stated in curriculum is constructive learning ($f=4$). Furthermore, project-based learning ($f=0$), question-answer technique ($f=0$) and drama ($f=0$) are stated the least frequently in the curriculum. The objectives and explanations related to constructive learning are given below:

“Culture and Heritage: (SB.4.2.2.) The student gives examples researching the factors in his/her family and environment reflecting national culture.”

“Science, Technology and Society: (SB.4.4.4.): The student generates ideas for designing specific products based on the necessities in his/her environment.

Table 5: Measurement and Evaluation Techniques Related to Pedagogical Entrepreneurship 4th Grade Social Sciences Curricula
As in Table 5, among the measurement and evaluation techniques related to pedagogical entrepreneurship, performance evaluation is the most frequently stated technique \((f=3)\) while projects and portfolios \((f=1)\) are included the least frequently. The statement related to performance evaluation in “Measurement and Evaluation Approach in Curriculum” is given below:

“5. Education is provided not only to know (thought), but also to feel (emotion) and to do (action); so cognitive measurement is not adequate.”

Table 6: Entrepreneurial Learner Characteristics on 3rd and 4th Grade Science Curricula

<table>
<thead>
<tr>
<th>Learner Characteristics</th>
<th>The Chapters in Curriculum</th>
<th>MNO Curriculum (Introduction)</th>
<th>The Aims of The Curriculum</th>
<th>Perspective of the Curriculum</th>
<th>Measurement and Evaluation Approach in Curriculum</th>
<th>Personal Improvement and Curriculum</th>
<th>Conclusion</th>
<th>The Goals of Science Curriculum</th>
<th>Specific Skills related to Science in Curriculum</th>
<th>Implementations of Science, Engineering and Entrepreneurship in Curriculum</th>
<th>The Aspects Taken into Consideration in Implementation of Curriculum</th>
<th>Objectives and Explanations (3rd Grade)</th>
<th>Objectives and Explanations (4th Grade)</th>
<th>Total (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>6</td>
</tr>
<tr>
<td>Innovative</td>
<td></td>
<td>✓</td>
<td></td>
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<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Being initiative</td>
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<td>✓</td>
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<td></td>
<td>✓</td>
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<td>✓</td>
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<td>Problem solving</td>
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<td>✓</td>
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<td>✓</td>
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<td>✓</td>
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<td>✓</td>
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<td>Self-disciplined</td>
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<td>✓</td>
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<td>Learning from mistakes</td>
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<td>✓</td>
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<td>✓</td>
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<td>Analytical thinking</td>
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<td>8</td>
</tr>
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<td>Responsibility</td>
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<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Self-competence</td>
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<td>✓</td>
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</tr>
<tr>
<td>Independent thinking</td>
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<td>✓</td>
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<td>✓</td>
<td></td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>1</td>
</tr>
<tr>
<td>Collaboration/Working in teams</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>4</td>
</tr>
<tr>
<td>Being far-sighted</td>
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<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Ambiguity tolerance</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>0</td>
</tr>
<tr>
<td>Seeing opportunities</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>0</td>
</tr>
<tr>
<td>Using time effectively</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Critical thinking</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>4</td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>0</td>
</tr>
<tr>
<td>Effective communication</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>3</td>
</tr>
</tbody>
</table>

As seen in Table 6, entrepreneurial characteristics which are the most
frequently stated in the Science Curriculum for 3rd and 4th Grade are analytical thinking \((f=8)\) and problem solving \((f=7)\) while self-competence \((f=0)\), ambiguity tolerance \((f=0)\), seeing the opportunities \((f=0)\) and leadership \((f=0)\) are not included in the curriculum. The sample statement in the curriculum related to analytical thinking is given below:

“a. Life skills: Analytical thinking, Making decisions, Creative thinking, Entrepreneurship, Communication, Teamwork.”

Table 7: Entrepreneurial Teacher Characteristics on 3\(^{rd}\) and 4\(^{th}\) Grade Sciences Curricula

<table>
<thead>
<tr>
<th>Teacher Characteristics</th>
<th>MNO Curriculum (Introduction)</th>
<th>The Aims of Curriculum</th>
<th>Perspective of the Curriculum</th>
<th>Measurement and Evaluation of Curriculum</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has knowledge, skills and attitudes related to entrepreneurship</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Allows the learners to take risks</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Values the learner mistakes</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make use of the sources in school and the society</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Being in communication with the stakeholders</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Being facilitator</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plans, Analyse and evaluates teaching-learning process and activities</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develops learning strategies with the activities supporting entrepreneurship</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managing time effectively</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Open-minded</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Communicating effectively</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Flexible</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>0</td>
</tr>
<tr>
<td>Self-confident</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Encouraging for learning</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>6</td>
</tr>
<tr>
<td>Guide</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>3</td>
</tr>
</tbody>
</table>

Total \((f)\): 6
In Science curriculum for 3rd and 4th grade, facilitating learning and planning ($f=8$), analysing and evaluating teaching-learning process and activities ($f=8$) are the most frequently included characteristics among the entrepreneurial teacher characteristics. The sample statement from the curriculum is given below:

“It is expected from the teachers to make adaptations in the process of realization of the aims and objectives.”

**Table 8:** Strategies, Methods and Techniques Promoting Pedagogical Entrepreneurship on 4th Grade Sciences Curricula

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
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<tbody>
<tr>
<td>Active Learning</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>7</td>
</tr>
<tr>
<td>Constructive Learning</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>7</td>
</tr>
<tr>
<td>Experiential Learning</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>5</td>
</tr>
<tr>
<td>Action-based Learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cooperative Learning</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>4</td>
</tr>
<tr>
<td>Inquiry-based Learning</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>4</td>
</tr>
<tr>
<td>Project-based Learning</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Practice-based Learning</td>
<td></td>
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<td>✓</td>
<td>✓</td>
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<td>Contextual Learning</td>
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<tr>
<td>Discussion</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>3</td>
</tr>
<tr>
<td>Question-answer Technique</td>
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<td></td>
<td></td>
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<td>Problem solving</td>
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<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<td></td>
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</tr>
</tbody>
</table>

As seen in Table 8, active learning ($f=7$) and constructive learning ($f=5$) are the most frequently included ones among the strategies, methods and techniques promoting pedagogical entrepreneurship. Action-based learning ($f=0$), question-answer technique ($f=0$) and drama ($f=0$) are not included in the curriculum. The sample statement related to active learning is given below:

“...Since the scientific process is transferred to the learning environment, the
students are expected to understand development of knowledge researching and actively engaging to scientific process.”

Table 9: Measurement and Evaluation Techniques Related to Pedagogical Entrepreneurship 3rd and 4th Grade Sciences Curricula

<table>
<thead>
<tr>
<th>Measurement and Evaluation Technique</th>
<th>3rd Grade</th>
<th>4th Grade</th>
<th>Total (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation</td>
<td>✓</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Project</td>
<td>✓✓✓✓</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Portfolios</td>
<td>✓</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Performance Evaluation</td>
<td>✓✓✓✓</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

In Science curriculum for 3rd and 4th grade, project (f=4) is the most frequently stated one among the measurement and evaluation techniques. The sample statement is given below:

“....The activities like design projects, creating a model and product, presenting the product that the students are expected to do are suggested to realize in the classroom.”

DISCUSSION AND CONCLUSION

In this study, 4th grade social sciences curriculum and 3rd-4th grade science curriculum were examined in terms of pedagogical entrepreneurship. The sections in curriculum, learning outcomes and explanations were analysed in four main themes; (1) entrepreneurial learner characteristics; (2) entrepreneurial characteristics expected from teachers; (3) strategies, methods and techniques supporting entrepreneurship; (4) techniques to measure and evaluate entrepreneurial learning outcomes.

After examining 4th grade social studies course curriculum in terms of entrepreneurial learner characteristics, it is determined that problem solving, innovation, analytical thinking and taking responsibility are the most frequently stated characteristics. Deveci & Çepni (2015) states that problem solving, critical and creative thinking, are efficient to make children gain entrepreneurship in decision making process. Gürel (2017) examined 2017 social science course and points out that problem solving skill related to learning outcomes are presented as in...
2004 and 2015 social science curricula. However, Öztürk & Mutlu (2017) found that teachers did not make any practice for problem solving and other entrepreneurial features in their social science courses, or they did it 2-3 times a year. Moreover, Şimşek (2017), in his study of classroom teachers’ competence to recognize social sciences program, concluded that teachers think that the program did not include entrepreneurial characteristics such as problem solving and critical thinking. Although the program supports entrepreneurial features, this can be interpreted as the fact that teachers do not associate the social science course with entrepreneurial skills.

In terms of teacher characteristics, “planning, analyzing, evaluating learning-teaching processes and activities” is the most frequently stated feature in 4th grade social science curriculum. Teachers can contribute to the formation of entrepreneurial characteristics in learners by using entrepreneurship-related stories/texts as course materials, giving entrepreneurial projects to students, organizing trips to companies and hosting entrepreneurial individuals from companies. Moreover, teachers can use games developing entrepreneurial characteristics, classroom/school wide competitions and presentations of enterprises in the environment where the school is located. In the study conducted by Selanik Ay & Acar (2016) on the views of classroom teachers about developing entrepreneurial skills, it is determined that teachers plan a variety of activities and methods such as drama, group work, possibility of expressing themselves, bringing up experts to classroom, case study method, experiments, station technique, utilization of technology, story reading/completion to develop entrepreneurial characteristics of the learners.

When the social science curriculum was examined in terms of strategies, methods and techniques which support entrepreneurship, constructivist learning, active learning and research-based learning were determined as the most emphasized ones. Ruskovaara et al., (2010) found that primary and secondary school teachers prefer strategies, methods and techniques which are learner centered. In this kind of courses, students can learn by doing and are active participants in the learning processes. In the dimension of measurement and evaluation, performance evaluation is specified as the most emphasized method in 4th grade social science curriculum.

In science curriculum for 3rd and 4th grade, analytical thinking and problem solving are the most frequently included learner characteristics. In their research, Çelik et al., (2015) determined that the science teachers evaluate analytical thinking and problem-solving skills as entrepreneurial characteristics. Furthermore, teachers think that science curriculum promotes these skills. Among the entrepreneurial teacher characteristics, facilitating learning and planning, analyzing, evaluating learning-teaching processes and activities are stated most in the curriculum Deveci (2016), found out in his research that student teachers of science think of having entrepreneurial characteristics such as being a good planner, leader and creative. However, Deveci (2016) states that the student teachers do not feel sufficient for developing entrepreneurial characteristics of the learners. It can be said that this finding may be related to the absence of the entrepreneurship course in teacher
Among the measurement and evaluation techniques, projects are the most frequently included one in science curriculum. Bakırçı & Öçsoy (2017) state that science teachers think that projects can be used to develop and measure entrepreneurial characteristics of the learners. Johansen & Schanke (2014) also point out that projects about entrepreneurship increased the achievement of lower secondary school learners.

The findings acquired from the research indicate that entrepreneurship can be taught beginning from primary school level. Moreover, social sciences and science curriculum can promote pedagogical entrepreneurship. According to these findings, some suggestions are presented;

- In addition to learner characteristics, teacher characteristics, strategy, method, techniques and measurement-evaluation dimensions, curricula can be reviewed by determining characteristics of curriculum supporting entrepreneurship.
- In addition to curricula, textbooks can also be examined in terms of entrepreneurship-related dimensions determined in this research.
- Guidance sections in curricula can be prepared for teachers to develop entrepreneurial characteristics of learners.
- Teacher training programs may include elective courses about entrepreneurship integrated into branches.
- Experimental studies can be carried out on the effects of strategies, methods and techniques that can be used to make students gain pedagogical entrepreneurship.

REFERENCES


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Chapter 32

Language, Speaking and Parental Education in Children with Hearing Loss

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INTRODUCTION

Hearing loss occurs as a result of any pathology which comprises in between the area from the external ear to the auditory cortex of the brain (external ear, middle ear, internal ear, auditory nerve, central auditory pathways, primary auditory cortex). The nature and the etiology of hearing loss is represented based on the results of anamnesees and tests that were given to the people with hearing loss. There are basically 5 types of hearing loss. These are (Şenkal, 2014; Stach, 2010).

Conductive Hearing Loss: This type of hearing loss occurs when there is a pathology in the middle ear and the external ear. Serous otitis media or tympanic membrane perforations can be given as an example of conductive hearing loss (Stach, 2010; Schlauch & Nelson, 2015).

Sensorineural Hearing Loss: Pathologies that occur either both in the internal ear and auditory nerve or only in the one of them are the causes of sensorineural type of hearing loss. Difficulty understanding speech is at its highest level for the individuals with this type of hearing loss. Therefore, there are serious problems in communication for these people.

Mixed Hearing Loss: This type of hearing loss occurs in the external, middle and internal ear and the auditory nerve accompanies them. There can be tympanic membrane perforations as well as cochlear outer hair cells damage in this type of hearing loss (Stach, 2010; Schlauch & Nelson, 2015).

Auditory Processing Disorder (Central Hearing Loss): The area as near as the auditory cortex is normal. In other words, despite having normal hearing threshold levels, individuals have difficulty in understanding speech. The root of this problem is in the primary auditory cortex and other related areas (Stach, 2010; Schlauch & Nelson, 2015).

Functional (Nonorganic) Hearing Loss: Hearing and understanding are completely normal in this type of hearing loss. There are two main reasons of functional hearing loss: hysterical and malingering. The hysterical one occurs because of either any psychological reason or the belief of deafness that is hold by an individual. Impairments in the psychological well-being play fundamental roles in the occurrence of psychogenic hearing loss. Patients with psychogenic hearing loss, which is rooted from the psychic disorders, don’t admit their hearing loss.
consciously. The reason behind this is the psychological disorder itself. On the other hand, the situation that emerges in the malingering is completely different than psychic hearing losses. Individuals with malingering pretend wistfully as they really have hearing loss. It is observed that further (secondary) gains come to the forefront in this kind of situations. (e.g. for desertion, having disability certificate or showing reaction to the family as a child) (Stach, 2010; Schlauch & Nelson, 2015).

Besides, types of hearing loss can be also grouped as congenital and acquired hearing loss. Congenital hearing loss which occurs in prelingual period (before learning the language) has more severe effects on communication skills of individuals. Unilateral deafness gives rise to the loss of auditory balance in central mechanism which is actually supposed to be bilateral. Thus, there is an adaptation phase in unilateral deafness. At the same time, there can be voice localization problems in unilateral deafness (Stach, 2010; Schlauch & Nelson, 2015).

Whole auditory system can be cumulatively evaluated based on the extensive audiological investigation of an individual with hearing loss after the otorhinolaryngology examination is completed. It should be kept in mind that findings (level of hearing loss, configuration, etc.) as the outcomes of audiological investigations may have different effects on each person. Also, it shouldn’t be forgotten that data such as hearing thresholds and speech discrimination scores are obtained in artificial environments (e.g. silent cabin) cannot be representers of real-life situations. In the other audiological investigations, functioning of middle ear and such circumstances should be examined. Audi should be started among children and adults with hearing loss as soon as their diagnosis have been made. Early intervention is a prerequisite for a good hearing and speaking in children. The time between the onset of hearing loss and the first intervention has to be minimized for both children and adults. As the time increases depending on these parameters, the benefit of auditory training will decrease. In addition, children who use hearing aids don’t constitute an homogenous group. Since, the reasons, type, onset, severity and other characteristics of hearing loss in children vary among themselves. Hence, it is very crucial and necessary to guide children, who need auditory training, to follow the “Individualised Training Programs-ITP” (Şahlı, 2014 a).

**Early Diagnosis and Appropriate Evaluation**

Hearing aids and cochlear implants (amplification) comprise of the main step of using the residual hearing and rehabilitation of children. Disability that occurs as a result of hearing loss should be minimised by arousing it through using residual hearing and the rehabilitation of residual hearing.

Sensory deficits which are contingent upon hearing loss can cause physiological and behavioral problems. In addition to the limitation of communication skills, there can be also failures in language development, speaking and education in children. The most important point here is that reducing the time window between diagnosis of hearing loss, provision of amplification and auditory rehabilitation to the most minimum level (Şahlı, 2014 a).

Diagnostic and evaluative auditory screening programs for newborns are becoming more prevalent all around the world. Every newborn are subjected to
auditory screening tests to detect possible hearing loss. Since early diagnosis provides early amplification, by this means the effects of hearing loss are tried to be reduced. Otoacoustic emission (OAE) and Auditory Brainstem Response (ABR) are the tests that are used to screen hearing loss of newborns and these tests can also assess the middle ear and auditory nerve system of babies. If hearing loss is determined in any child, the language development should be assessed too. In addition to this, problems related with vision, intelligence and learning should be evaluated as well (Şahlı, 2014 a; Acar et al., 2015).

After the examination and assessments of hearing loss in children and the decision of diagnosis has been made, the acceptance of the family is another fundamental step. It may take time for the family to admit it. They may apply to other medical centers to make their children to be assessed again in terms of their problems related with hearing loss. At this point, a proper consultancy service should be provided to families. The awareness about the situation should be provided to the families by giving some basic information. For example, the impacts of hearing loss can be minimised by using hearing aid or cochlear implant, there is no correlation between mental retardation and hearing loss, any child after the diagnosis of hearing loss can still continue studying with his/her peers. These kinds of information will prevent the negative attitudes of families.

After the determination of hearing loss, hearing aid should be obtained as soon as possible. To ensure binaural hearing, bilateral hearing aid must be used. Hearing aid should be chosen and set based on each patient’s specific hearing loss. Although behind-the-ear type hearing aids are usually the most recommended equipments, there are also body type hearing aids for very small kids. Problems in terms of getting feedback are very important among these patients, yet behind-the-ear type hearing aids pretty much solve this problem. Because of the continuing growth process in children, their ear mold should be always under control. The exchange of the aids should be supplied in the periods of every 3-months or 6-months. Moreover, the use of alternative and supplementary hearing aids should be recommended to children. These equipments operate by decreasing the signal noise ratio. The most typical example of them is FM systems. FM systems which have crucial contribution in auditory development can also be used with cochlear implant. Ensuring the connection between speaker and listener is the greatest feature of FM systems. Thus, it is very important to use them at schools for individuals with hearing loss (Rocha & Scharlach, 2017).

Learning the Effective Use of Hearing Aid:

Families are responsible to choose most proper hearing aid and to decide whether to refer cochlear implant (which is suggested by experts). After the selection of proper hearing aid or cochlear implant surgery, the most significant subject is ensuring the continuity of usage (Bennett et al., 2017)

This process can be done through the collaboration of the audiologist, the family and educator (teacher). At the same time, periodic check-ups of hearing aids should be followed. For this process:

Families should learn how to use and maintain the hearing aid.
The child should learn how to use and take responsibility of the hearing aid. The tracking system should be set up by the audiologist, the family, the educator and the child. The benefit of the hearing aid or cochlear implant should be observed and followed by this tracking system.

Primary structure of hearing aids should be acknowledged by families and children related to these issues. Characteristics of check-ups and battery changes should be acknowledged. How to wear and take out the ear mold should be learned by families. What to do in the basic circumstances and in the periods of cleaning aids should be learned by the family and the child. Nevertheless, how to use the hearing aid sufficiently is the main issue to learn about.

Newborns with hearing loss whose diagnosis was done by auditory screening programs are generally suggested to use hearing aids. Although the newborn is appropriate for cochlear implant operation, they are recommended to use hearing aids for being experienced to the auditory stimuli at least for 6 months. Cochlear implant is applied after the age of one at the earliest (Sennaroğlu, 2015).

**Cochlear Implant**

Children who had used hearing aids continuously and in their proper age period, and had complete the auditory rehabilitation but failed to benefit from it are the appropriate patients for cochlear implant. These children should have intense auditory rehabilitation. All obstacles that are rooted from hearing loss are attempted to be challenged by auditory rehabilitation (Cano et al., 2018).

**Problems of people with hearing loss:** these are the problems related with communication, perception, language, speech (articulation), cognition, socialization, emotion, education and parents. Auditory, speech and parental education/trainings (workshops) are the key factors to overcome or minimise these problems. Therefore, all people with hearing loss have to benefit from the auditory trainings. The duration and intensiveness of auditory trainings should be determined by the audiologists. Audiologists manage these trainings according to the factors such as the onset, course, severity, etc. of hearing loss. Audiologists take the first step by informing the family and help patients to begin using hearing aids in the early period of the disorder. Auditory development is the compound process that begins with the awareness of distinctive voices and determination of the direction of voices, then followed by interpreting the voice. If the child with hearing aid don’t have any motor deficit, then the child should be encouraged to speak. By this means, speech delay of the child can be prevented (Movallali et al., 2017).

**Auditory Rehabilitation**

Auditory rehabilitation primarily based on the struggling with disability. Audiologists deal with the communicational, social and psychological problems of the child or adult patients as a result of hearing loss. Language and speech therapists, teachers (trainers, educators), psychologists and special tutors should support the audiologists. In this case, the most significant part of this group should be the family (Hull, 1999; Bader, 1997).

Distinctive strategies should be considered in terms of struggling with hearing
loss. Firstly, appropriate hearing aids and in turn hearing itself should be supplied. It is very important to think like “the way they hear, therefore they can talk like this” for the people with hearing loss. Therefore, hearing aids of children and adults should be checked up very carefully and sensitively. Hearing aids can never provide perfect hearing. The advantage of hearing aids differentiate from one situation to another (e.g. noisy environment, stressful situation, etc.). So, hearing and speech have to emphasized. More advantaged situations should be created for the person with hearing loss (e.g. speaking towards the hearing aid, speaking closely). Speech should be enriched with giving some clues. Language should be emphasized for the cognitive, emotional and social development. The gainings from using the hearing aid should be maximized by increasing the cognitive abilities of children to the optimum level. Lastly, underlining the family and the child is crucial for keeping the emotional status of the child and the family well (Murray, 2004).

Auditory rehabilitation is a team-work. This team involves trainers, audiologists, teachers, physicians, speech pathologists and consultants. The primary step of the auditory rehabilitation is the family. Families are the significant individuals who are always with their children and dynamic, strong and emotional people who follow the suggestions of experts and motivated to do their homework (Murray, 2004; Hull, 1999; Bader, 1997).

Roles of Experts in Auditory Rehabilitation

Even though auditory rehabilitation is a team-work, it mainly takes place in the triangle of child, family and audiologist. Other members of the team can be supportive as the occasion requires. This is why audiologist becomes a part of the unity of child with hearing loss and the family. Families follow the suggestions of the audiologist or other experts to cope with new circumstances or to make serious decisions about their children. Experts may sometimes even obliged to make decisions about the future of the child and the family. However, making decisions about the future of the family is not a job of experts. They can be only families’ guides to help them to make correct decisions. Experts are aware that their jobs are not solely depend on counselling. At the same time, they should always be professional and act fearless to help the family to make correct decision and if necessary, they should be also emotional with them (Hull, 1999).

Experts should be active and good listeners, committed to process, and encourage families to express their feelings, define the situations underlying the emotional moments, answer the questions of families. They should be supportive counselors in the face of the emotional reactions of families. When the experts behave this way, they can be trustworthy people in the eyes of families (Bader, 1997).

Families wonder everything about their children and would like to know them. The job of experts is to teach families how to consult their children depending on the family trainings and counselling. Moreover, families want to aware of the new technological developments and anything that they can make for their children. Experts should support families at this point. For example, the family with the child who uses unilateral cochlear implant would like to know the improvements about
stem cell transplantation and experts can provide the news in this field (Murray, 2004).

Families whose children recently diagnosed with hearing loss feel insensitised (numb). They are being shocked and feel helpless and lonely in the presence of hearing loss, audiogram, hearing aids and special trainings. Therefore, the communication between experts and families must be strengthened. For this reason, seminars, problem solving trainings, group meetings of families whose children with hearing loss should be organized. Group meeting of families who face with same problems resolves the feeling of loneliness and generates the motivation of dealing with struggles all together. In addition to family support groups, families can also receive help from their significant individuals (e.g. grandfather, grandmother, aunt, etc.) (Murray, 2004; Hull, 1999; Bader, 1997).

**Development of Auditory Skills in Children with Hearing Loss**

Auditory development is the process that begins with the recognition of auditory stimuli and continues till the understanding occurs. Auditory rehabilitation programs should be supported with the optimum use of residual hearing for the children with limited hearing loss. Not only early diagnosis and proper amplification are needed but also families’ motivation to their children in terms of increasing their auditory capacity and trainers’ skills to administer the program properly play crucial roles for the optimum use of residual hearing.

By this means, this program provides improvement in both language, speaking and auditory development and additionally cognitive, social, emotional, motor and self-care skills (Murray, 2004; Hull, 1999; Bader, 1997).

**Following Steps for Auditory Development**

**For an auditory development;** detection, discrimination, identification and comprehension are the following steps. Auditory development is completed by tracking a formal program in this manner and followed by speech development (Wong et al., 2017; Şahlı, 2014 b).

**Detection**

This includes the child’s recognition of voices and participation to voices. In this phase, the child is expected to react to the existence and the absence of the voice. This can be only done by amplification in children with hearing loss. Families should guide their children to the linguistic and nonlinguistic voices. For example, standing with the flow of the music, sitting with the absence of music can be one of the exercises (Wong et al., 2017; Şahlı, 2014 b).

**Discrimination**

Discrimination develops through perceiving distinctions in voices. Discrimination helps children to state auditory pattern as either similar or different. For example, reactions of the child to the high pitch and low pitch voices can be observed or reactions of the child to different music instruments can be observed. Children in discrimination level discover distinguished objects, people and situations (Wong et al., 2017; Şahlı, 2014 b).
Identification

Identification is the step that consists of memory progress which requires repetition of specific voices. Voices are not expected to notice in this phase. The child may repeat long vowels or short vowels. For example, when the cow toy is seen by the child, it may react like “mooooooo” or when the duck toy is seen, it may react like “vak, vak”. But the child isn’t able to recognize what animal it reacts to. This situation occurs when the child haven’t acquired the ability of knowing specific meanings of the words yet (Wong et al., 2017; Şahlı, 2014 b).

Comprehension

The last and the most complicated step of the auditory development is comprehension. In this phase, the child not only repeats the voices but also knows the meanings of the voices. So, it is basically the phase to combine the meanings with the words themselves. This long phase begins with auditory development and attention and ends with comprehension. This long and tough process should be accompanied by the development of listening skills. To accomplish this stage, the child should always be provided by appropriate listening environments and guided with instructions about effective listening. There is a significant factor which shouldn’t be forgotten. While training on listening skills, the child must be aware what, how and why to listen something. The primary task of families and trainers is to provide appropriate listening environment to the child (Wong et al., 2017; Şahlı, 2014 b).

If families train their children in the noise free environment (noise of washing machine, dish washer, television, radio, etc.), quality of auditory signal increases. This helps children to rise its listening capacity, attention and perception. The family should make the child to listen common (daily) voices (e.g. ring tone, dish washer, vacuum cleaner, doorbell, phone ring) and should show the source of the voice and also help child to make combination of the voice and meaning. Besides, the family should provide an opportunity to the child in order to react towards the environmental voices. In addition to trainings with nonlinguistic voices, trainings with linguistic voices have also primary significance. Because the goal of the listening is to understand speaking language. Furthermore, the best listening environment is the one that is linguistically rich. To create a perfect listening environment for children in preschool stage, family support is prerequisite (Şahlı, 2014 b).

Auditory learning is the most effective way of learning in daily life of a child. Also, helping the child to integrate whatever he/she hears with its daily routine and should be the main goal. Therefore, families should make connections among different stimuli. In other words, whatever the child hears and sees, even touches, the family should create meaningful connection and represent it to the child. For example, a mother who tells her child “cooking pot” in the kitchen should show the cooking pot and even make the child to touch it.

In addition to them, families should do:
- Attention and voice imitation trainings
- Naming the voices (e.g. car)
They should react to the voice being heard. When unusual voices were heard, the mother should show her ear and say “listen” to the child. The family must always encourage their children to listen and to keep awake. By the time, the child will start answer the family in a better way and in turn, this outcome will also motivate the family back, in this way as the family braced up the child will improve faster.

With the listening and auditory development, suprasegmental skills of the child also gradually show development. Productions of distinctive voices in distinctive situations are the outcomes of suprasegmental development. For example, when the child gets hurt, he/she can screams like “ouch” or when the child is rewarded with a toy by the father and reacts like “woo” (Şahlı, 2014 b).

**Educational Planning of Children with Hearing Loss**

Educational planning of children with hearing loss should be constituted with a group of people. This groups should involve families, audiologists, teachers, etc.

Along with the problems in communication skills, literacy is another problem for individuals with hearing loss. Literary enhances career opportunities, employment rates, economic and social freedom and self-confidence of the individuals. The most sufficient solution in literacy problem is acquisition of the targeted language (e.g. Turkish, English, French). Face-to-face individual and group trainings, auditory and visual trainings and self-trainings are necessary for the enhancement of literacy. Both the development of communication skills and literacy can be ensured by applying these trainings in different manners. At this point, children with hearing loss under perfect auditory trainings might not be as good as other children with normal hearing and normal development. Because hearing aids and cochlear implants may not show results like normal hearing. Nonetheless, the difference between the children with hearing long and children with normal hearing can be minimized with an appropriate amplification and auditory trainings. Adaptation of the brain to the voices which were provided by amplification and the maintenance of auditory trainings play fundamental roles for this to be actualized.

Hearing aids, tactile speaking aids and cochlear implants help speech perception, speech production and language development very much. Additionally, children with hearing loss put so much effort compared to children with normal hearing so that their development proceeds quite fast. Another training for children with hearing loss is the auditory verbal training (Şahlı, 2014 b).

**Auditory Verbal Training**

Children with hearing loss don’t have learn sign language or other alternative methods to communicate with others. It shouldn’t be forgotten that a child with hearing loss who is equipped with a proper hearing aid can make sense of the communication in a large extent. If residual hearing is assessed appropriately and proper amplification is provided (binaural hearing aid, FM system, Cochlear Implant), making sense of speech can be maximized. As a result of this, children can get on with good speech development. As the auditory input can be provided
properly, verbal language skills and reading skills develop as well. Also, early diagnosed children with residual hearing have been a part of a society who can express themselves independently and properly (Auditory-Verbal International, 1991).

Another significant point of auditory verbal training is the acoustic control. Acoustic control is very considerable at home and school. Voices which cannot be controlled acoustically become conflicts for the children with hearing aids. Therefore, it is very essential to have signals, noises and echoes under control. Families at home and teachers at school connect to individuals with hearing loss. Every voice being reflected on the surfaces and being conducted after this reflection may create some troubles for individuals with hearing loss at this point. Conducting the signal decently to the child, the reflection of the voice should be blocked. This setting can be provided with some easy methods. Especially voice absorbers which can be hung on the walls and ceiling can prevent the reflection (Bromwich, 1981).

Another problem is noise. Noise is a prevalent problem in and out of the school. Noise can be defined as a undesirable or unpleasant voice. Noise can mask the high volume voices and obstruct hearing. Thus, signal must always be higher than noise. Signal noise ratio should be at least +10 dB. Another solution for this problem is that problems related with noise and echo can be eliminated by using FM devices (Estabrooks, 2001; Auditory-Verbal International, 1991; Bromwich, 1981).

**FM Use**

FM devices have been used for 30 years. They have recently started to use with auditory aids. FM means “Frequency Modulation”. Radio signals are used in this system. Speaking and other signals are converted to electrical excitation in FM system. Then they are attached to radio signal and transfer to the receiver. This attached signal is modulated to radio signal. The transfer of voice can happen if the speaker stays close to the listener. If the listener stands in front of the loudspeaker or listens with a hearing aid, this effect becomes more apparent.

There two types of FM systems: personal and unrestricted (free) area. If listener uses either a hearing aid or speaker, this is the personal type of listening. On the other hand, if listeners hear the voice from loudspeakers then this is the free area type of FM system (Rocha & Scharlach, 2017).

FM system basically consists of a microphone and transmitter that the teacher wears and, headphones and a hearing aid. Listeners insert personal FM with a radio receiver or use several loudspeakers. Both personal and free area FM systems can be used in classrooms at the same time. In the FM systems, the voice of a teacher or a family member can be heard within 60 meters distance. Both types of FM systems provide the reduction in signal noise ratio (Johnson, 2012).

**Language Development in Children with Hearing Loss**

Language development is considered in overall development like an auditory development. Language development is investigated into two stages: language development for recipient and speaker. In the first 3 years of life, verbal
communication is the most essential way of hearing stimulus in children. Therefore, the advantage should be taken from this main stimulus. Families should be informed that not only children with hearing loss but also children with normal hearing should be grown up in a linguistically enriched environment. Hence, intense linguistically enriched environments should be designed for the children with hearing aids and cochlear implants (Yücel 2015; Ling, 2002).

Component of the language should be acknowledged in order to make progress in language development. Language has 3 components. These are structure (phonological, morphological, syntax), content and pragmatics. Despite the one by one evaluation of these components, these components are learned all together rather than independently. Speaking language has syntax (order of words), phonological (harmony of tones), and morphological (use of suffixes) in terms of its structure. Syntax knowledge represents grammar rules. Possessive and tense suffixes present the morphological component of the language structure (Yücel 2015).

Semantic component is the meaning unit of language. The meaning doesn’t represent the meaning of one word here rather it represents the content integrity of one word with other words. During the first 2 years of life, making simple sentences while talking with children will catch attention of them and let them to wonder and learn the meaning of the words in the sentence. Before the development of expressive language, infants make sense of movements.

Emphasis, grace, timing, intonation, and duration are the information that infants learn through imitation.

On the other hand, pragmatic use of language includes the integrity of speech and the functionality of speech. Briefly, it can be characterized as talking to the point and time.

As the child encounters the audial stimulus, understands it and reacts to it, this process describes recipient language. It is the production of expressive sentences. It begins with cryings in the first years of life and continues developing with making a sentence around the age of four and then reaches the speaking level of adults.

Hearing loss has a major impact on language acquisition. Families who are unaware about hearing loss of their child leads reduction in the frequency of communication over time. Informing family about it and enlightening the family member about the disorder has an essential role. Early detection of hearing loss, proper amplification and auditory training can help in language acquisition (Yücel 2015; Ling, 2002; Ling & Ling 1978).

**Speech Development in Children with Hearing Loss**

Today, children with hearing loss are evaluated by audiologists and speech and language pathologists. Individual certainly has to perceive, distinguish and define the sufficient information that is tried to be relayed in order to speak. Audiologists and speech and language pathologists help people with hearing loss by planning therapy sessions for them to improve their skills in notice, discrimination, comprehension and understanding.

In the past, sensory information had been provided via tactile stimulus and
kinesthetic hints. This was called as speech reading. However, today hearing loss became something that can be overcome with the developing technologies by such methods like early diagnosis of hearing loss and cochlear implant and can be reached in the level of completely normal or almost normal hearing (Yücel 2015; Ling, 2002; Ling & Ling 1978).

In the children with moderate, moderate-severe and severe level of hearing loss, it is observed that there is a correlation between the level of hearing loss and speaking skills. So, as the level of hearing loss becomes more severe, speaking skills are impaired. If these children are properly equipped and warned, they can adjust to the spontaneous nature of speaking language. Articulation problems are seen more often especially in the high frequency hearing loss. In spite of the great gaining, the benefit that can be provided is very limited in the high severity hearing loss. That is why cochlear implant is an alternative solution for high severity hearing loss. Another important issue is that there is a necessity of special education for the children with high severity hearing loss.

Rehabilitation succeeds at various extents in distinctive hearing levels and losses. Very small percentage of children with severe hearing loss who had perceptual training in the early period can speak normally. Nevertheless, it is known that speech level of most of these children is not sufficient enough (Johnson, 2012).

Children with hearing loss had been traditionally taught to produce firstly isolated voices and then to spell syllables and lastly to make sentences. Yet, some authors recently claimed that speaking should be learned in the natural environment like how other children with normal hearing do (Yücel 2015; Ling, 2002).

There is a greater diversity among children with hearing loss compared to the other children with normal hearing. According to this, none of the speech development program can satisfy the needs of one child. At this point, courses should be more relevant with daily life situations. It is very important that the use of equipments and application of methods should be adapted to daily life (Ling & Ling 1978).

Other than these issues, there are also inner and outer factors that affect the speech development of individuals with hearing loss. Hearing level, the age onset of hearing loss, current state of eye health and central nervous system, and peripheral areas related with speaking can be counted as inner factors. Equipment, people, life experiences can be counted as outer factors. Thus, daily life should be included into education and shouldn’t be limited to classroom and parental education (Yücel 2015; Ling, 2002; Ling & Ling 1978).

There are some crucial factors for the individuals with hearing loss in terms of Speech Development. The first of them is the Early Diagnosis of Hearing Loss. Auditory screenings for newborns give the opportunity for appropriate amplification in early diagnosis. In the first years of life, natural learning of speaking takes place as the children are exposed to the voice and speech. Furthermore, music and songs are recommended to be benefitted in this developmental phase for these children (Şahlı, 2014 a).

Moreover, making some new arrangements at home in order to prevent noise and shortening the distance between the mother and the baby will clearly help the
child to hear better. With the increasing locomotion of a child, exposure to noisy environments boosts. Despite this fact, informing families about these kinds of facts and creating consciousness is fundamental.

People receive their information about speech from 3 main sources. These are auditory, visual and tactile sources. If the hearing aid doesn’t provide efficient sensory information, then visual and tactile senses should be referred more.

Many steps should be exceeded before the children with hearing loss produce the first meaningful sound. According to these steps, Ling (1988) described informal and formal learning conditions and these overlapping steps are defined like this (Ling, 2002; Ling & Ling 1978).

Vocalization control
- Production of Rhythm, Accent (Emphasis), intonation
- Vowels and complex vocals
- Consonants

Children should be assessed periodically in the course of speech development. It is very essential to establish a ground for not only formal education but also informal procedures and to contribute auditory education to the children.

In the formal teaching, the goal is to bring skills to the children that were absent before the education. School and therapy processes are usually at this part. It can be applied into two parts. In the first part, for children to produce explicit vowels or group of vowels can be planned as a training. In the second part, correction of mistakes can be done. Auditory education is followed by reasoning and deduction in children with hearing loss. The recent trend is deduction which means referring to the whole puzzle picture in order to see one piece of the puzzle. In addition to this, it is also referring to the whole puzzle by looking at its one piece. In the trainings of a part to whole, it begins with the production of one phoneme and then 2 phoneme syllables, 3 phoneme syllables and a word with 4 phonemes. For instance, to make children produce (p), (o) and (t) phonemes and then train them to produce a word (pot) and afterwards expect them to produce more words with these letter (top, pot). This system and the letters can be used for the whole rehabilitation program.

Another issue is the necessity of focusing on not “how” but “what” a person says for the production of speech. There four ground rules to make the speech more spontaneous. These rules are accuracy, speed, economy (voice production requires too much effort) and flexibility. After these conditions are met, acquired skill should be adapted to situations. Children with hearing loss have great diversity in terms of many aspects. This fact still remains itself at a certain extent despite recent technological innovations (Şahlı, 2014 b; Auditory-Verbal International 1991).

In conclusion, children with hearing loss should be diagnosed early and should begin their auditory trainings with proper amplification. In addition to the appropriate amplification, alternative and supportive communication methods should be used in children with hearing loss. By this means, auditory trainings to be held will be successful. As a result of the trainings with the support of family, language and speech development will be provided.
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Chapter 33

How Cloze Procedure and Extensive Reading Improve the Reading Skills

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INTRODUCTION

Reading is an important part of daily life in modern, literate societies. It is considered as a social, interactive process as well as a personal and private activity. Reading, either in the mother tongue or in any other foreign language, is the understanding of the way in which the language is used.

In foreign language learning, reading is often used for different purposes than the use of reading in the mother tongue. The most typical use of reading skill in a foreign language class is to teach the language. Efficient reading, nowadays, is seen as one of the goals of the EFL curriculum. The purpose of reading for foreign language students is to improve their foreign language.

Reading in a foreign language helps the students to practise the language which they are learning. They can learn how to make sense of texts in order to get the information which they need, or the message which the text contains.

As Williams (1986) states:
"...the learner should be able to read general texts with comprehension, read flexibly, according to his purpose, be able to learn language and content from reading and read with some degree of critical awareness."

These are the fundamental aims of a reading programme in learning English as a foreign language. Thus, the teachers need to facilitate reading comprehension in foreign language at all levels. Their responsibility is firstly providing suitable texts, and then preparing activities that will focus the students' attention on the text. Reading is an active process in which the reader has to use his knowledge of vocabulary, syntax, discourse and the real world. It involves guessing, predicting, checking and asking questions to oneself. Skill in reading depends on precise coordination of a number of special skills.

In this paper, I am going to talk about the importance of the exercises and activities in a reading class and how they can be used effectively to improve the reading skill. I will tackle two types of activities, namely; cloze procedure and extensive reading. These two activities are commonly used in the foreign language classroom. In the first section, I will talk about cloze procedure as a classroom activity and as a test. In the second section, I will deal with extensive reading as a very important supplement to intensive reading. I am going to show how they can
Conscious development of reading skills is very important. The teachers may guide and encourage the development of skills, but the reading skills are only achieved by learners through practice. In order to teach reading in an effective way, the teachers should develop types of activities and techniques for using the texts that are intended to teach. Working on a piece of reading text through exercises and activities can be a very effective tool in getting the students to deal with the text and understand it. Teachers can help the students to develop their power of inference and prediction as well as linguistic abilities through systematic practice.

Viney (1985) claims that:
"There is an important place in any reading course for materials which help to develop the reading skill, and exercises directed at skill development include matching texts to charts, scanning, jigsaw reading exercises cloze techniques and reading for gist activities."

Students can be encouraged to anticipate the content of a text by being introduced to questions or illustrations. Moreover, these exercises help them to understand the structure and syntax of the text and gain vocabulary. Thus, reading comprehension activities are very important when dealing with a reading text. However, teachers should be very careful about preparing them. Activities should be variable and flexible. Exercises should be meaningful and correspond to one's expectations from the text. The aim of the activities should be defined clearly, and the teacher has to make a very clear distinction between teaching and testing.

**Cloze Procedure**

It is essential to be careful to make a distinction between teaching and testing if the teachers are using cloze procedure. The aim of using cloze procedure can be easily abused as it only differs in the way the teacher presents it.

Cloze procedure is an exercise which involves the systematic deletion of words in a text at regular intervals. For example, every sixth or seventh word is deleted. The text used for cloze procedure should be long enough to allow a reasonable number of deletions, ideally forty or fifty blanks. Each blank should be of a standard length so that the students cannot guess the words from their relative lengths. But, at the beginning, the first three or four sentences should be left completed. They help the students to understand the context. Cloze procedure is not simply a blank-filling exercise. The students are expected to guess the words which fit best to the blank. Their choice shows how well the students can get the author's message by using their knowledge of language and ability of prediction. Therefore, cloze procedure focuses on the students' process through a text, rather than on the text itself. Once the text is chosen by the teacher, then the preparation of cloze procedure is completely mechanical.

The principle of cloze procedure is based on Gestalt theory and it is designed by William Taylor (1953) who intended to measure the readability of prose. At that time, it was used for measuring the relative difficulty of the books. However, cloze procedure is a device which can be constructed in many ways for different purposes. Cloze technique has been found to be reliable, valid and highly efficient.
for measuring readability.

There has been a recent growth in the interest in the use of cloze procedure in the EFL proficiency test. The cloze test is considered as a good instrument for testing second language proficiency. They are proved to have some remarkably consistent characteristics of stability and sensitivity. They can measure the comprehensibility of a passage. It is suggested that well-designed cloze tests are capable of assessing language skills from basic to advanced. There are two methods of scoring a cloze test. One way is awarding for each acceptable answer and the other is awarding for an exact answer. Both methods are found reliable. However, some researchers argued that the first method is a little better than the other. Moreover, the first method is often more assuring for the students psychologically.

**Cloze Procedure as an Activity**

Several researchers discussing cloze procedure as a test commented on its advantages as a classroom activity. Cloze procedure can be applied to a number of teaching situations as an activity. It can be arranged according to the learners' proficiency levels and their interests. A cloze is very easy to prepare. However, the teacher should make sure that an introductory sentence without deletions is given at the beginning. The deleted text should be shown to the whole class, either by giving handouts or using overhead projectors. Everyone should see the text and they should be given enough time to read it. When they get the general idea of the text, they can make their choices for the blanks. Afterwards the teacher asks for the suggestions to fill in the blanks. In this situation, it is not a question of finding a single true answer but of discussing the possible answers and, if it is necessary, they can defend their own choices. They choose the best possible answers and give their reasons. At this point the real learning begins. Various answers reflect the possible misunderstandings of the students. The talk in the class should be done by the students. Discussion about the correct and incorrect answers, and their reasons, can be done by the advanced levels. Some answers may be wrong grammatically, others do not fit in with the meaning of the text. On any occasion of difficulty, it is a good strategy to read further ahead instead of immediately going back to reread whatever preceded the problematic passage. However, a student may need to read once more in order to discover the right answer. It involves using and understanding what is directly said.

Thus, the student makes the passage whole again by finding the deleted words. The ability to supply them is an indication of the correspondence between the readers' and writer's interpretation of the passage. A cloze procedure shows the interaction between a text and language user (Jonz 1987). Comprehension results from the interaction between texts and people. Cloze procedures can be used to encourage the students to explore the variety of possibilities which the text presents. It shows the meaning is not something that suddenly appears when we read the text. It is obvious that it does not occur word by word. The ability to supply the most suitable words for blanks requires a number of abilities that are related to language competence; knowledge of vocabulary, grammatical structure and discourse structure, reading skills and strategies.
It is argued that successful completion of cloze is bound to all their abilities which are the essence of general language proficiency. Thus, it may be concluded that cloze procedure requires linguistic abilities as well as the ability of prediction, inference and guessing. However, it can be argued that the systematic deletion of words is not the best procedure in order to train these skills.

In fact, using cloze procedure as a teaching device mostly depends on the discussion of the possible alternatives for filling each gap. This can be more effective and involves a greater number of students if it is done in groups. For example; each group discusses and agrees on a choice for each blank, then the class comes together to discuss their findings under the guidance of their teacher. If the subject of the text which is intended to be prepared for the cloze activity is familiar to the students, they can use their knowledge in order to fill in the blanks. This can be stimulating during the classroom activity, but it is essential in a cloze test to choose a neutral subject to make sure that they cannot use their background knowledge.

Cloze procedure has also some disadvantages. Firstly, the problem appears in the knowledge of vocabulary. Although cloze activities require productive knowledge of vocabulary, the students may not have been provided with the opportunity to develop productive control of these items.

Moreover, it is difficult to arrange the suitable texts according to the language level of the students. As it requires more than linguistic abilities, it is not practical to use this type of activity with students of low level English.

Whether used in language testing or as a type of classroom activity in different teaching situations, the cloze procedure aims at a number of abilities which constitute the learners' communicative competence in a second language. Responding to cloze procedure must involve a great deal of high order language processing. Now it must be demonstrated how the cloze procedure can improve students' linguistic abilities as well as other abilities like prediction and inference. Although, at the beginning, it is stated that in cloze procedure the words are systematically deleted, most of the cloze passages designed as classroom activities do not apply this rule. The deletion is done on purpose, not randomly, because, the aim of the exercise is to develop some linguistic skills of students. The example in Appendix 1 is a modified cloze procedure and is designed to be used as a classroom activity. Moller and Whiteson (1983) state that the deleted words comprise grammatical and lexical items which often cause difficulties for non-native speakers of English. Therefore, these exercises can develop students' linguistic abilities over a certain time.

At the beginning, the subject is introduced in two sentences. We have got the first clue that ‘Hot Stuff’ is an American, comic film. For the first blank, the student has to know simple past tense, and adverbs. It is not very easy to fill in the second blank. Probably the student will leave it and carry on reading. They can fill in the third blank taking the clue from the structure of the sentence. They can go on reading and fill in the blanks. As they read on, it becomes easier for them to guess the missing words. When they come to the 11th blank, they can get a clue for the second blank. Therefore, they have to be very attentive. For some blanks, they can
make two suggestions. For example, for the sixth blank, both thieves and crooks fit in. Likewise, for the tenth blank: which/that. However, this text is quite difficult to fill in, especially if the student does not have any idea about the film. When the subject is a well-known film, some students may have seen it, so they can complete the text more easily than those who have not seen it.

In the example in Appendix 2, the situation of the joke is given. This is supposed to be a familiar scene for all cultures. All the students may be expected to respond to it. However, they are very short parts, if the student can't guess three of them there is no chance to complete the text. But as they are well known jokes, it may be easier to guess the context and the nature of the joke. In ‘Dramatic Excuse’, at the beginning it is not clear who wanted Steve home by midnight. But later in the text, the student realises that they are his parents. In order to fill in blank 9, the student has to go back to the beginning to get his name, and fill in the blank as ‘Steve’. Or for the second blank, the student needs to know the expression ‘pay attention’.

Thus, it can be claimed that cloze procedure improves both the reading skill and the language skill, if it is done properly in the classroom as an activity.

**Extensive Reading**

Reading skill can only be improved through reading. It is one of the best ways of developing the knowledge of a foreign language. It is proposed that the best way of learning a language is using the language in the natural environment where the target language is spoken. However, this is difficult for the teachers to advise their students to do. Thus, the other possibility is to advise them to read a lot and practise their knowledge of English in this way. Nuttall (1982, 168) argues that besides going to live among native speakers, the best way of acquiring proficiency in a language is to read extensively in this language.

In Turkey, as an example, many students do not have the chance to go to an English-speaking country and stay there. Therefore, the most effective way to practise their knowledge of English is reading a lot of books or magazines and newspapers. Teaching reading skill is very crucial in Turkish education because, generally speaking, Turkish people are poor readers. In particular, the middle class, which is the largest proportion of the Turkish people, does not enjoy reading. Thus, it is very important both for Turkish teachers and English teachers to promote reading among their students by developing extensive reading programmes.

Students are generally given two kinds of complementary reading activities, which are extensive and intensive reading. Short reading texts of a reasonable degree of difficulty are the materials of intensive reading activities, whereas whole articles, chapters or books are used for extensive reading practice. Extensive reading does not deal with a detailed examination of the text, but it aims to get the general view of the book or chapter. However, teachers tend to concentrate on intensive reading more than extensive reading. Yet, both extensive and intensive reading are complementary, and both are necessary. Intensive reading lessons help students to develop their reading strategies and skills which they need to become successful readers, while extensive reading gives them the opportunity to put their
skills into practice independently. So, intensive reading practice is supported by extensive reading, in or out of class. Mostly, class time is not enough, and teachers do not want to use class time for extensive reading. Teachers should foster an extensive reading program which is very important for the language learners. It is essential for the teacher to employ some strategies in extensive reading in order to encourage the students. They need to be prepared psychologically for extensive reading. Students should be convinced that they will benefit from private reading in a foreign language. Moreover, they can be taught some strategies needed for effective reading. For example, dictionary use can be taught. Reference to a dictionary will be helpful if the learners have experience of using it and training in the necessary skills.

Many English teachers try to combine extensive reading with their teaching programmes. They often try to find ways to link extensive reading to the main course. The teacher can refer to particular books at some points in the main program relating to the characters, events or setting of the coursebook to the books in the extensive reading program. Extensive reading programs are generally organised in two different ways. The most common way is that the students take away the books with the recommendation of their teacher and read them at home. The teacher cannot provide private reading time in class. Extensive reading is mostly not encouraged as ‘in school’ activity in many schools.

However, extensive reading should be encouraged as a useful language activity in the classroom, especially where the students do not have sources at home. In this situation, time should be carefully planned. If the teachers can carry on extensive reading as a classroom activity, they can help students to get good reading habits by controlling their reading.

Individual private reading is a way of organising language learning which admits that students have different interests and motivation, intellectual capacities, tastes, and levels of maturity. Success in developing an extensive reading programme depends on giving students choice. Hedge (1986), argues that, for extensive reading, the most effective way of choosing reading materials is using graded readers. The books should be chosen very carefully. They may be written on purpose for a certain level. They take into consideration the students’ interests and needs. However, some of the graded readers are only simplified versions of well-known novels or short stories. For the sake of simplification, the authors change the texts and syntax which may affect the meaning and message of the book. During simplification, the whole style of the book is changed and may become more complex. Most of the time, the structure of simplified readers is more complex than the originals. Thus, instead of simplified books, teachers should offer the students graded readers which are written for certain language levels, and according to the age group of the students.

Teachers can use some original story books which are written in simple language, yet the students may have difficulties understanding the real meaning of the story. For example, in Turkey, in an extensive reading programme, the students were asked to read Hemingway’s original version of The Old Man and the Sea and some other short stories. The students were in seventh grade and had been learning
English for two years. English is the medium language for maths and science courses. Students, in general, could understand the story of the book, but they did not get the real meaning and the message. After four years they read the same books again. It was observed that students could get the message and hidden meaning. It was important to see their language development as well as intellectual development. Hence, it is essential to provide the most suitable reading materials which are capable of keeping the students' interest. This will be the key to success of extensive reading programmes. There are a number of advantages in developing extensive reading as an activity. Firstly, it is a fluency activity which involves a greater understanding of the language. In order to develop fluent, direct reading, the students can be trained to look at the general context, make an intelligent guess from the structure and content of the sentence, and try to relate it to similar words.

Secondly, reading out of class is a good way of achieving a reasonable general reading speed. It gives the students a chance to increase their speed. They learn to develop their own strategies; for example, they can predict or deduce the meanings of words and phrases taking clues from the context. Thirdly, this kind of private and self-directed reading makes students independent in learning, which is important for success. The eventual aim of a reading programme is to foster independent reading. Fourthly, individual reading allows students to choose books according to their own interests and experience. Therefore, a class library gives the students the opportunity to read books of their own choice.

Finally, through extensive reading programmes, teachers can help the students to develop good reading habits. They, at the beginning, get the habit of reading, and the habit of reading for pleasure.

In order to get the students to read more, teachers, parents etc. should firstly require them to do so, and then they convince them to read. Students may be given homework which requires reading extensively. In this way they can gain the habit of reading. Moreover, reading for enjoyment should be encouraged. If there is active encouragement of the reading habit, and if many enjoyable books are available, this will result in students who are reading books with enthusiasm. Reading skills will develop relatively if the students have a lot of practice. It is believed that reading will improve learners’ command of a second language.

Hofiz and Tudor (1983) based their argument on the assumption that "exposing learners to large quantities of meaningful and interesting L2 material will, in the long run, produce a beneficial effect on the learners' command of L2".

Moreover, in many research results, it is reported that subjects who have attended an extensive reading programme had a substantial improvement in receptive skills in all aspects of the subjects' L2 abilities. One might conclude that promoting extensive reading could affect the development of proficiency in a foreign language. It is a teacher's responsibility to assist extensive reading, in or out of class. They can create interest in any particular book. However, motivation for wanting to read is very crucial. An ideal way for motivation is to find out the students' interests and needs, select the reading materials according to these, and devise appropriate activities.

Students should be encouraged to read a particular part by hearing an amusing,
exciting part taken from the book. The teachers can read the part grammatically by using intonation, facial expression. They can stop the story at suitable points and they help the students to speculate on what might happen next, and encourage them to read by themselves. Moreover, cassette recordings with sound effects can help the teacher to arouse the students' curiosity and get them interested in the book. Students can be asked to give a very short summary of a part chosen from the book which they have enjoyed. The class asks questions about the book, so the student should be well prepared. This activity helps the student to develop self-confidence in using a foreign language in front of an audience.

Furthermore, they can be asked to prepare short talks saying why they have chosen this book, whether they enjoyed it or not, and their reasons. At the end they can recommend the book if they enjoyed it. In order not to force shy students who are not very comfortable with giving a speech, the students can be asked to prepare a brief note about the book for display on the noticeboard. Students should be encouraged to make things arising out of their reading, notes for the noticeboard, or short passages for the class or school newspaper.

After all the students finish their reading, they can discuss the subjects which may be ethical or social problems, in the class. Teachers should be very careful, when they are leading the students to choose books. The students should be given books according to their personal interest and need as well as their language level. When the students get the feeling of satisfaction on completing the books, they will be motivated by success. One of the disadvantages of extensive reading may be leaving the students with an unknown structure or any other grammar item. Viney (1985), solves this problem, stating that students who know the past and present perfect will rarely worry about a ‘had gone’ or ‘had walked’ in a long text. As they carry on reading, they would understand the parts which they could not understand at the beginning. The students choose books according to their interest in a subject, rather than the level of difficulty indicated by the grading system. Thus, it can be suggested that extensive reading can be applied in the classroom as an activity, as well as outside the classroom. This paper aimed to look at two types of activities: cloze procedure and extensive reading, and how they can improve reading skill. As it has been discussed, both activities can be used effectively by teachers who want to develop the reading skills and strategies of their students, although they may have some disadvantages. It is important to realise the potential of these activities which develop the linguistic abilities as well as some special skills, like guessing, prediction and inferring meanings. It is inevitable to accept that these activities help the students to develop their own reading strategies.
Appendix 1

Hot Stuff

A movie like this makes it fun to watch our tax dollars at work. Hot Stuff is a comedy based on a real-life US government caper.

A few years 1________, our government put up funds so that undercover cops in several cities could 2________ over pawnshops. Thieves brought 3________ goods to them to sell. Posing as ‘fences’, the cops 4________ get the goods on burglary rings and individual crooks. The plan 5________. A lot of stolen property was recovered. And a lot of 6________ went to jail.

7________are the facts, fans. Now for the slightly fictionalized 8________ version of them: A Miami, FL, burglary task force is about to lose the federal funds 9________its arrests 10________ result in many convictions. In a desperate try for hard evidence on thieves, the cops take 11________ a pawnshop and pose as fences. They 12________ police department money to 13________ stolen goods, and hidden cameras to photograph the thieves. Business is 14________ brisk that local mobsters try to muscle in. The cops find 15________ up against wall-to-wall danger. The situation is serious, but the movie 16________. How 17________ it be, when the masquerading cops are played by Dom De Juise, Suzanne Pleshette, Jerry Reed, and Luis Avalos? 18________ make Hot Stuff 19________ of the year's coolest comedies.

Appendix 2

But you can't take it with you.

The greedy relatives were gathered to listen to the reading of the will. When everyone is seated the lawyer spoke. "You will be out of here in no 1________" she said. "The will is only one sentence long. 2________ says 'Being of sound mind and body, I 3________ every penny I had.'"

Dramatic Excuse

Steve went out with his friends one night. His 1________ wanted him home by midnight. But he didn't 2________ much attention to the time. First, they 3________ to a movie. Then they went bowling. 4________ they went to a diner for a snack. By the time they were ready to go 5________, it was 2.00 in the 6________.

Steve was worried about facing 7________ parents two hours late. Then he had an idea. He 8________ them before he left the diner.

"Hi, Dad," he said. "This is 9________. Don't pay the ransom money. 10________ let me go, and I am on my way home."
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Examining Numeracy Skills of 48–60 Month-old Children in Terms of Certain Variables*

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INTRODUCTION

Children’s mathematical skills depend on their preschool period. Mathematical experiences children acquire during this period significantly affect their mathematical learning in subsequent years of education. Research studies show that the most powerful predictor of future mathematics achievement is early mathematical skills (Aubrey, Dahl & Godfrey, 2006; Duncan et al., 2007; Sarama & Clements, 2009; Romano, Babchishin, Pagani & Kohen, 2010).

Mathematical development is based on concepts. One of the significant concepts in mathematics is the concept of number (Akman, Yükselen & Uyanık, 2000; Charlesworth & Lind, 2010; Önkol, 2012). Numbers constituting the cornerstone of mathematics curricula (NAEYC, 2010) are not only the most important determinant of future mathematics ability (Demir-Lira, 2016) but also a prerequisite for teaching future mathematics skills (Charlesworth, 2012; Nguyen et al., 2016). Preschool mathematics curricula such as Big Math for Little Kids, Pre-K Mathematics Curriculum, and Building Blocks, which are administered by developed countries, emphasize the significance of early development of numeracy skills and aim to have children gain rich learning experiences with regard to numbers (Çelik & Kandır, 2013; Orçan, 2013; Ersan & İvrendi, 2016). National Council of Teachers of Mathematics (NCTM) (2000) emphasizes that in preschool mathematics education, the longest time span should be spared for the development of numeracy skills (as cited in Yılmaz, 2012). The knowledge of number in the early period is likened to the phonological awareness in the reading process. Just like how the lack of phonological awareness in early childhood leads to some problems in reading in the future, the lack of number knowledge in the early period may also lead to difficulties in mathematics in the future (Gersten & Chard, 1999).

The importance of numeracy skills and how they affect children’s mathematics achievement in subsequent years have also been demonstrated by Mazzocco and Thompson (2005). In their study, it was determined that learning disabilities in the field of mathematics primarily stemmed from a lack of understanding of the concepts of number and operation. Jordan et al. (2007) have found that the development of numeracy skills in the preschool period is also quite effective in

* This study was presented at the International Congress on Science and Education, held on 23-25 March 2018, in Afyonkarahisar/Turkey.
predicting mathematics achievement in the first grade of elementary school. Number knowledge and skills are elements that are frequently used in everyday life and influence future mathematical learning, and therefore, should be acquired from early ages.

In the early childhood period, numeracy skills develop consistently and gradually (Piaget, 1977 as cited in Garon-Carrier et al., 2018). Children acquire skills related to numbers at different levels based on the experience they gain in preschool education institutions as well as at home (Garon-Carrier et al., 2018). Certain factors cause children to attain different levels of numeracy skills, including the diversity of mathematical concepts used in the context of characteristics of the family environment (parents’ socioeconomic and educational level, etc. — constituting the first environment in which they live), playing mathematics-related games at home, and taking advantage of the means that emerge in home routines for educational purposes (Levine et al., 2010; Ramani, Siegler, & Hitti, 2012; Laski & Siegler, 2014). Research also shows that the frequency and diversity of practices that parents do for numerical development in the home environment are influential on children’s mathematical development (Starkey, Klein, & Wakeley, 2004; Young & Loveridge, 2004). It can be said, based on this context, that demographic characteristics of families are influential in supporting their children’s numeracy skills.

Children reach preschool age with different experiences about numeracy skills in the context of what they experience in the family environment. Research shows that mathematical skills acquired by preschool children in this process significantly affect their future mathematical achievements (Lopez, Gallimore, Garnier & Reese, 2007; Jordan et al., 2009; Mazzocco & Thompson, 2005; Çelik, 2015). An important factor that needs to be emphasized at this point is that children need a preschool education where they are offered a supportive educational environment, materials providing rich learning experiences, a qualified curriculum and effective teacher guidance (Tokgöz, 2006; Çelik & Kandır, 2013). In this context, it is thought that children’s receiving preschool education is also effective on their numeracy skills.

Numeracy skills, like many mathematics skills, develop as children grow (Aunio et al., 2004; Olkun, Fidan & Özer, 2013; Aunio et al., 2015). However, it is also known that children of similar age differ according to numeracy skills. While some children learn concepts and skills related to numbers more easily and quickly than others, some children have difficulties in acquiring numeracy skills (Garon-Carrier et al., 2018). From this viewpoint, this study was carried out to evaluate the numeracy skills in terms of certain variables on 48–60-month-old children who were receiving preschool education. To accomplish the general aim of this study, an attempt was made to seek answers to the question “is there a significant difference between 48–60-month-old children’s mean scores of the Early Numeracy Assessment Scale, according to the following variables: gender, status of receiving preschool education, maternal educational level, paternal educational level and socioeconomic level?”
MATERIALS AND METHOD

Research Model: This study was carried out as a cross-sectional survey model to evaluate the numeracy skills of 48–60-month-old preschool children in terms of certain variables.

Sample: The sample included 421 children aged 48–60 months who were attending the private and public kindergartens affiliated to the Ministry of National Education in Efeler district of Aydın province in the 2017–2018 school years. The children to be included in the sample were determined through the random sampling method. Due to lack of information on forms administered to families of the children, analyses were carried out using the research data obtained from 407 children.

Of the children in the sample, 200 were girls, and 207 were boys. Among them, 143 had already received preschool education before, and 264 of them started to go to a preschool education institution in the school year of 2017–2018 for the first time, when the study was conducted. A total of 86 of the mothers of the children in the sample were elementary school or middle school graduates, 169 were high school graduates, and 152 were university graduates. And, 63 of the fathers of the children were elementary school or middle school graduates, 171 were high school graduates, and 173 were university graduates. Moreover, 134 of the children in the sample were in the lower, 136 in the middle and 137 in the upper socioeconomic level.

Data Collection Tools: A “General Information Form” developed by the researcher was used in the study, to collect personal information about the children and their families. In order to measure and assess the children’s numeracy skills, the “Early Numeracy Assessment Scale” developed by Van Der Heyden (2008) and tested for validity and reliability on Turkish children aged 48–60 months by Yılmaz and İnal-Kızıltepe (2017) was used.

General Information Form: The General Information Form involved questions about the child’s date of birth, gender, duration of preschool attendance, parental educational level, parental occupation, monthly income, the frequency with which parents participate in social activities, and the number of reading books at home purchased in the last one year. The copies of the General Information Form were filled in by the parents of the children included in the study. The following four questions included in the General Information Form were used to determine socioeconomic levels of the families: monthly income, parental educational level, the frequency with which parents participate in social activities, and the number of reading books at home purchased in the last one year. These questions were determined based on the study in which Deniz et al. (2015) determined variables of socio-economic level using a clustering analysis. Based on their study, it was observed that the participants were clustered into homogeneous groups in terms of monthly income, parental educational level, frequency with which parents participate in social activities, and number of reading books at home purchased in the last one year. According to their being in the lower, middle and upper socioeconomic level, it was observed that the participants were clustered into heterogeneous groups. Three groups were determined according to the arithmetic
means and standard deviations of the responses given to these four questions. The groups with an average of -0.5 and below were called the lower socio-economic level, those with the values of 0.5 and higher were called the upper socio-economic level and those between -0.5 and 0.5 were called the middle socio-economic level.

Early Numeracy Assessment: The Early Numeracy Assessment Scale is a sub-scale of the Kindergarten Early Numeracy and Literacy Assessment Scale (KENELA) developed by Van Der Heyden, Witt, Naquin and Noell in 2001. The scale was developed on the basis of six principles set by the NCTM, with particular emphasis on the principles of equality, curriculum, teaching, learning and evaluation (VanDerHeyden et al., 2004; Yılmaz & İnal-Kızıltepe, 2017). The Early Numeracy Assessment Scale, which was revised into its final form by VanDerHeyden in 2008, consists of three sub-dimensions.

Count Objects and Circle a Number: This sub-dimension has 21 questions. There are circles, varying in numbers, ranging from 1 to 10 on the left side of the page and four answer options on the right side. Children count the circles and mark the number — by finding it from among the four answers — that match the number of circles (Yılmaz & İnal-Kızıltepe, 2017).

Count Objects and Write a Number: This dimension has 20 questions. There are circles, varying in numbers, ranging from 1 to 10 on the left side of the page and an empty box on the right side. Children count the circles and write the number — by identifying it — that matches the number of circles (Yılmaz & İnal-Kızıltepe, 2017).

Identify a Number and Draw Circles: In this sub-dimension with 20 questions, there are numbers ranging from 1 to 10 on the left side of the page and a line on the right side. Children should draw circles on the line as many as the number found in the box. Children draw as many circles as the number that they see in the box. The correct drawings are scored (Yılmaz & İnal-Kızıltepe, 2017).

The validity and reliability studies of the Early Numeracy Assessment Scale were conducted by Yılmaz and İnal Kızıltepe (2017) on 300 children who were aged 48–60 months and attended private kindergartens in Efeler district of Aydın province. The Lawshe Technique was used in the study for the validity of the test. The Content Validity Ratio (CVR) and Content Validity Index (CVI) values were obtained as 1.00. Accordingly, it was verified that the scale had content validity. When checking the reliability of the scale, Kuder–Richardson (KR-20) values were found as .963, .976, and .971 for the reliability of the “Count Objects and Circle a Number,” “Count Objects and Write a Number” and “Identify a Number and Draw Circles” sub-scales, respectively. The KR-20 value for the whole Early Numeracy Assessment Scale was .985. In order to support the KR-20 reliability coefficients of the scale, the relationships within the sub-dimensions of the scale were examined. Based on the results of the Spearman’s rank-order correlation analysis, it was found that the relationships between all sub-dimensions were positive and statistically significant (p<.05). These results show that the Early Numeracy Assessment Scale is valid and reliable for children aged 48–60 months (Yılmaz & İnal Kızıltepe, 2017).

Data Collection and Analysis: The data collected using the Early Numeracy
Assessment Scale and the General Information Form were transferred to the computer environment and analyzed using the SPSS 21 packet program and applicable statistical methods. In the study, demographic information of the children and their parents was given in frequencies and percentages. A Kolmogorov-Smirnov test was carried out to examine the differences between groups according to the variables in the Early Numeracy Assessment Scale and revealed that the data were not normally distributed. So, the Mann Whitney U test and the Kruskal Wallis-H test were carried out. Standardized z values were given for the Mann Whitney U Test since the number of units was more than 20. Because the Kruskal Wallis-H test revealed significant differences, the groups that were different from each other were determined by a Post-Hoc Multiple Comparison Test.

RESULTS

Table 1: Mann Whitney U test results of children’s mean scores from Early Numeracy Assessment Scale according to gender

<table>
<thead>
<tr>
<th>Subscale</th>
<th>n</th>
<th>Mean Rank</th>
<th>Sum of Rank</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Count Objects and Circle a Number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>200</td>
<td>205.8</td>
<td>41159.0</td>
<td>20341.0</td>
<td>-.306</td>
<td>.760</td>
</tr>
<tr>
<td>Boys</td>
<td>207</td>
<td>202.2</td>
<td>41869.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Count Objects and Write a Number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>200</td>
<td>212.9</td>
<td>42582.0</td>
<td>18918.0</td>
<td>-1.512</td>
<td>.131</td>
</tr>
<tr>
<td>Boys</td>
<td>207</td>
<td>195.3</td>
<td>40446.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Identify a Number and Draw Circles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>200</td>
<td>210.8</td>
<td>42163.5</td>
<td>19336.5</td>
<td>-1.154</td>
<td>.249</td>
</tr>
<tr>
<td>Boys</td>
<td>207</td>
<td>197.4</td>
<td>40864.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was found that the mean scores of the “Count Objects and Circle a Number,” “Count Objects and Write a Number” and “Identify a Number and Draw Circles” sub-scales in the Early Numeracy Assessment Scale did not differ significantly according to gender of the children included in the study (p>.05). Based on this result, it can be said that the girls and boys who were included in the study were at a similar development level in terms of numeracy skills.

The children’s mean scores of the sub-scales of the Early Numeracy Assessment Scale differed according to whether they received preschool education before (p<.05). When the mean ranks were examined, it was seen that the children who had received preschool education before scored significantly higher in the “Count Objects and Circle a Number,” “Count Objects and Write a Number” and “Identify a Number and Draw Circles” sub-scales compared to the children who had not received preschool education before.
Table 2: Mann Whitney U test results of children’s mean scores from Early Numeracy Assessment Scale according to whether they had received preschool education before

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Mean Rank</th>
<th>Sum of Rank</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Count Objects and Circle a Number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not receive preschool education before</td>
<td>264</td>
<td>173.4</td>
<td>45787.5</td>
<td>10807.5</td>
<td>-7.19</td>
<td>.000*</td>
</tr>
<tr>
<td>Received preschool education before</td>
<td>143</td>
<td>260.4</td>
<td>37240.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Count Objects and Write a Number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not receive preschool education before</td>
<td>264</td>
<td>172.8</td>
<td>45636.0</td>
<td>10656.0</td>
<td>-7.302</td>
<td>.000*</td>
</tr>
<tr>
<td>Received preschool education before</td>
<td>143</td>
<td>261.4</td>
<td>37392.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Identify a Number and Draw Circles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not receive preschool education before</td>
<td>264</td>
<td>182.2</td>
<td>48109.5</td>
<td>13129.5</td>
<td>-5.092</td>
<td>.000*</td>
</tr>
<tr>
<td>Received preschool education before</td>
<td>143</td>
<td>244.1</td>
<td>34918.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

Table 3: Kruskal Wallis-H test results of children’s mean scores from Early Numeracy Assessment Scale according to maternal educational level

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Mean Rank</th>
<th>x²</th>
<th>SD</th>
<th>p</th>
<th>Post Hoc</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Count Objects and Circle a Number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school or middle school</td>
<td>86</td>
<td>131.3</td>
<td>66.9</td>
<td>2</td>
<td>.000*</td>
<td>1-2</td>
</tr>
<tr>
<td>High School</td>
<td>169</td>
<td>192.7</td>
<td></td>
<td></td>
<td></td>
<td>1-3</td>
</tr>
<tr>
<td>University and higher</td>
<td>152</td>
<td>257.6</td>
<td></td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td><strong>Count Objects and Write a Number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school or middle school</td>
<td>86</td>
<td>130.9</td>
<td>66.1</td>
<td>2</td>
<td>.000*</td>
<td>1-2</td>
</tr>
<tr>
<td>High School</td>
<td>169</td>
<td>193.3</td>
<td></td>
<td></td>
<td></td>
<td>1-3</td>
</tr>
<tr>
<td>University and higher</td>
<td>152</td>
<td>257.2</td>
<td></td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td><strong>Identify a Number and Draw Circles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school or middle school</td>
<td>86</td>
<td>141.8</td>
<td>46.8</td>
<td>2</td>
<td>.000*</td>
<td>1-2</td>
</tr>
<tr>
<td>High School</td>
<td>169</td>
<td>195.6</td>
<td></td>
<td></td>
<td></td>
<td>1-3</td>
</tr>
<tr>
<td>University and higher</td>
<td>152</td>
<td>248.4</td>
<td></td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
</tbody>
</table>

*p<.05

The children’s mean scores of the sub-scales of the Early Numeracy Assessment Scale differed significantly according to maternal educational level (p<.05). A pairwise comparison test was carried out to determine which group the
difference originated from. It was determined that the mean scores of the children whose mothers graduated from university were significantly higher than the mean scores of the children whose mothers graduated from elementary school, middle school or high school. Moreover, it was determined that the mean scores of the children whose mothers were high school graduates were significantly higher than the mean scores of the children whose mothers were elementary school or middle school graduates. In other words, as the maternal education level increased, the mean scores of the children from the sub-scales of the Early Numeracy Assessment Scale also increased.

**Table 4:** Kruskal Wallis-H test results of children’s mean scores from Early Numeracy Assessment Scale according to paternal educational level

<table>
<thead>
<tr>
<th>Sub-Scale</th>
<th>n</th>
<th>Mean Rank</th>
<th>x²</th>
<th>SD</th>
<th>p</th>
<th>Post Hoc</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Count Objects and Circle a Number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school or middle school</td>
<td>63</td>
<td>136.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>171</td>
<td>179.8</td>
<td>58.2</td>
<td>2</td>
<td>.000*</td>
<td>1-3</td>
</tr>
<tr>
<td>University and higher</td>
<td>173</td>
<td>252.5</td>
<td></td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td><strong>Count Objects and Write a Number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1-2</td>
</tr>
<tr>
<td>Elementary school or middle school</td>
<td>63</td>
<td>130.0</td>
<td>67.1</td>
<td>2</td>
<td>.000*</td>
<td>1-3</td>
</tr>
<tr>
<td>High School</td>
<td>171</td>
<td>178.6</td>
<td></td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td>University and higher</td>
<td>173</td>
<td>255.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Identify a Number and Draw Circles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school or middle school</td>
<td>63</td>
<td>148.3</td>
<td>40.2</td>
<td>2</td>
<td>.000*</td>
<td>1-2</td>
</tr>
<tr>
<td>High School</td>
<td>171</td>
<td>183.4</td>
<td></td>
<td></td>
<td></td>
<td>1-3</td>
</tr>
<tr>
<td>University and higher</td>
<td>173</td>
<td>244.6</td>
<td></td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
</tbody>
</table>

*p<.05*

When Table 4 was examined, it was seen that the children’s mean scores of the sub-scales of the Early Numeracy Assessment Scale differed significantly according to paternal educational level (p<.05). A pairwise comparison test was carried out to determine which group the difference originated from. It was determined that the mean scores of the children whose fathers graduated from elementary school or middle school were significantly lower than the mean scores of the children whose fathers graduated from high school, university or a higher institution. Moreover, the mean scores of the children whose fathers graduated from high school were significantly lower than the mean scores of the children whose fathers graduated from university or a higher institution.
The children’s mean scores of the sub-scales of the Early Numeracy Assessment Scale differed statistically significantly according to socioeconomic level (p<.05). When the table was examined, the children in the lower socioeconomic level were found to have significantly lower mean scores in all sub-scales than the children in the middle and upper socioeconomic level.

**DISCUSSION AND CONCLUSIONS**

This study was carried out to assess 48–60-month-old children’s numeracy skills in terms of certain variables. In the study, in order to assess the children’s numeracy skills, the “Early Numeracy Assessment Scale” was used. It was developed by Van Der Heyden (2008) and tested for validity and reliability on Turkish children aged 48–60 months by Yılmaz and İnal-Kızıltepe (2017). To collect information about the children and their families, the General Information Form was used. It was developed by the researcher.

Based on the analyzes, no difference was found in numeracy skills of the 48–60-month-old children according to gender. The results obtained from many domestic and international studies that have examined whether the development of numeracy skills of children is influenced by the gender variable support this finding (Başaran, 2006; Erdoğan, 2006; Dağlı, 2007; Sezer, 2008; Aunio et al., 2008; Önkol, 2012; Olkun et al., 2014; Çelik, 2015; Auino et al., 2015; Avcı, 2015). Aktaş-Arnas et al. (2003) developed the Number and Operation Concepts Test in order to measure the concepts of number and operation as understood by 48–86-month-old children. Based on the implementation that they carried out, they have determined that there is no statistically significant difference in the number and operation skills according to gender. Aunio et al. (2004) examined number sense skills of 630 children aged four to nine in different countries. They found that there
was no significant difference based on gender. Olkun, et al. (2013) examined the development of the concept of number in five–seven-year-old children. They found that there was no significant difference in the development of the concept of number according to gender. However, there are also a number of research findings (although limited in number) about the divergence of numeracy skills in early childhood (Strand, 1997; Anders et al., 2013). Jordan et al. (2006) followed the development of the sense of number in preschool children experiencing difficulties in acquiring mathematical skills. They found that males were more successful than females. Strand (1999) found that girls’ numeracy skills were better than those of boys. When the literature is examined, it is seen that no significant difference has been found according to gender in the majority of the studies carried out on the numeracy skills in preschool period.

Another result obtained from the study was that the children who had previously received preschool education had significantly higher mean scores in numeracy skills than the children who started preschool education in the year the study was conducted. Children’s future mathematics skills depend on their preschool years (Aubrey et al., 2006; Sarama & Clements, 2009; Romano et al., 2010; Buldu, 2012). Research shows that mathematical skills acquired by preschool children in this process significantly affect their future mathematical performance (Jordan et al., 2009; Lopez et al., 2007; Mazzocco & Thompson, 2005). Clements and Sarama (2008) found that children attending the kindergartens where the Building Blocks program was implemented achieved more gains in terms of math concepts and skills than their peers at the end of a year in preschool education. Çelik (2015) found that mean mathematics achievement scores of children receiving preschool education for more than one school year were significantly higher than those of children receiving preschool education for only one school year. The fact that numeracy skills varied depending on whether preschool education had been received in this study is consistent with the results of many research studies in the literature.

It was determined as a result of the analyses in this study that the educational levels of parents caused differences in numeracy skills of the 48–60-month-old children. According to this result, as the educational levels of parents increase, the mean scores those children receive from the scale gets better. Children’s informal mathematics learning develops based on the interaction with their family in the home environment and with their immediate surroundings (Çelik & Kandır, 2013; Avcı 2015). Research shows that the frequency and diversity of practices that families carry out for mathematical development in the home environment positively influence the way they support their children’s mathematical development (Starkey et al., 2004; Young & Loveridge, 2004; Blevins-Knabe & Musun-Miller, 1996). The researchers also revealed that parental educational status, parents’ attitudes towards mathematics, and the mathematical experiences offered to children at home are very effective in children’s mathematics development (Pan et al., 2006; LeFevre et al., 2009; Levine et al., 2010). Parental educational level also influences parents’ perceptions of mathematics and the quality of mathematical experiences offered to children at home (Clements & Sarama, 2007; Musun-Miller
Another result obtained from this study was that the numeracy skills of the children differed according to parental socioeconomic level. Accordingly, the mean scores of the children of lower socioeconomic level families were significantly lower than the mean scores of the children of middle and upper socioeconomic level families. When the literature is examined, it is seen that socioeconomic level has an important influence on mathematical skills of children. The socioeconomic level is a typical indicator of family income, the level of poverty in the area where the child lives, and the educational level of family members (Clements & Sarama, 2008; Garon-Carrier et al., 2018). Parental socioeconomic level affects the quality and frequency of mathematical experiences offered to children (Starkey et al., 2004; Melhuish et al., 2008). Researchers indicate that the mathematical development of children from low-socioeconomic families is lower than expected (Arnold & Doctoroff, 2003; Jordan & Levine, 2009; Siegler & Ramani, 2009, Kandır & Koçak Tümer, 2013; Çelik 2015). When examined from the numeracy skills point of view, there are many studies indicating that preschool children at lower socioeconomic levels — compared to children at upper socioeconomic levels — score lower in basic tasks carried out with various verbal or written numbers such as identifying/naming written numbers, counting objects, counting forward or backward from a number that is different from 1, adding and subtracting, and comparing numerical quantities (Griffin, Case & Siegler, 1994; Jordan et al., 2006; Ramani & Siegler, 2008; Siegler & Ramani, 2008). It is seen that the results of this study parallel previous studies; that is, socioeconomic level affects numeracy skills.

When the results of a study are evaluated, the limitations of the study must also be considered. This study was a cross-sectional study carried out on 407 preschool children attending private and public kindergartens affiliated to MoNE in Efeler district of Aydın province. Accordingly, it may be suggested to conduct studies with larger samples involving different cities. This study was limited to 48–60-month-old children. Research studies involving younger or older age groups may be carried out to examine whether the same variables affect numeracy skills of children of different age groups. Finally, intercultural studies may also be designed to examine the factors affecting numeracy skills of preschool children.

REFERENCES


competence, and mathematics learning difficulties in young children.
2(2), 1-14.


Chapter 35

The Dream Concepts and Contents of Turkish Preschool Children*

İnanç ETİ¹ and Ayperi SİĞİRTMAÇ²

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²Prof. Dr., Çukurova University, Faculty of Education, Early Childhood Dept. Adana, Turkey

INTRODUCTION

At early ages, children cannot exactly explain what a dream is, yet they all experience the phenomenon of dreaming just as adults do. Children, who initially think that their dream is real, begin in line with their cognitive development progress to understand that it is actually a dream and not exist in reality. In the early childhood period, children’s perception of the dreams and their dream contents provide a rich source of children’s development of mind (Woolley & Wellman, 1992).

Children are fairly curious about dreams they recalled with vivid images and intensive emotions (Clark, 1999). Although the prevailing thought was that the content of a dream is influenced by the emotional experiences in previous-day, psychological state, health condition, diets and sleeping conditions of the individual (Foster & Anderson 1936), recently, it is claimed that just like adults’ dreams, 3 to 5-year-old children’s dreams are not merely a simple repetition of their waking-life experiences but of a combination of various complex mental processes (Foulkes, 1990). As the main components of dreams are personal memories and comprehensive forms of knowledge, a person’s dream is limited to one’s cognitive structure and the developmental state of its content (Foulkes, Hollifield, Sullivan, Bradley & Terry, 1990). Foulkes (1990) argues that dreaming is a cognitive synthesis process that is based on a set of mnemonic elements which are active and parallel to one another but not consistent with each other at all.

In early studies by Piaget, who first became famous for his Cognitive Development Theory, the researcher examined childhood dreams. According to Piaget, children follow a special system of sequential steps to understand the dream just as they begin to perceive the life. At early ages, children perceive dreams to be real but then realize that dreams are unreal and that everyone dreams just like them. In addition, children gradually understand that a dream is an invisible intrinsic process specific to the person (Crain, 2000). Although it is pointed out that just like

* This study was presented at the 2nd International Conference on Social Sciences and Educational Research held in Istanbul, Turkey on October 4-6, 2016
adults, a 4-year-old child recognizes that dreams are personal imaginations (Woolley & Wellman, 1992). Piaget claims that the child fully discovers dreams at the age of six or seven (as cited in Crain, 2000). Foulkes, who studied on children’s dreams for long years, points out that dreaming is a complex activity based on image representation and narration skills which involve a great change between the ages of three and seven (as cited in Meyer & Shore, 2001). Children’s capacity to dream develops most probably in line with the maturation of consciousness and symbolic structures (Foulkes et al., 1990). Therefore, asking children to share their dreams could help them understand and develop their intrinsic experiences (Honig & Nealis, 2012).

Children’s dream reporting rates and having similar qualities with adult dreams are not related to their psychosocial or emotional states but to their cognitive competencies (Foulkes, 1990). While reporting their dreams, children use shorter and simpler statements than adults. However, they are likely to use longer and more complex sentences when reporting their dreams at older ages (Helminen & Punamaki, 2008). Piaget (1947/2010), claims that in the cognitive development process of the children, they find the dream realistic since they cannot figure either the distinction between the subject and the object or the nature of thought. Thus, it should be regarded as a normal situation if children inadequately define the dream concept, which is a quite subjective phenomenon, at early ages.

Studies demonstrate that the quality and content of childhood dreams are examined in different dimensions. In a five-year longitudinal study carried out by Foulkes in a sleep laboratory, 14 children (7 girls and 7 boys aged 2 years 9 months - 4 years 8 months) were recorded by electronic imaging devices in nine nights of sleep each year and awakened three times in the night and were asked to report their dreams. Foulkes (1990), concluded that children’s dreams at early ages differ qualitatively from their dreams in the following years and as well as from adults’ dreams. For example, between the ages 3-5, the dream reports of children were brief, lacked a plot or storyline and contained limited number of characters and actions. But from the age of five, the dream reports improved in length and complexity: more physical activities, social interactions and self-representations. In another study, Wooley and Wellman (1992) concluded that 3-4-year-old children begin to figure out the fictional nature of dreams and regard dreams as fictional things that did not exist in real life. Resnick, Stickgold, Rittenhouse and Hobson (1994), found that dreams recorded by parents at home would reveal a more realistic and natural results than the laboratory environment, suggesting that children starting from the age of four, had dreams involving core elements existed in adults’ dreams. In another study conducted with children between 3-7-years-old, Meyer and Shore (2001) reported that as children aged, they considered dreams as an unrealistic, personal and intrinsic psychological state. Recently, Honig and Nealis (2012) investigated the dreams reported by 2 to 5-year-old children in a class environment and collected by their teachers, and found that children reported longer dreams from the young age to the older age and the contents of the dreams differed depending on their gender.

Piaget argues that not only the frequency of experiencing the dream
phenomena but also the quantity and variety of dream experiencing are restricted by the cognitive maturation of children in waking-life (as cited in Foulkes 1990). Even the dreams experienced passively or mindlessly, the dreams created by the mindful intelligence of the person (Foulkes, 1990). From this point of view, it is worth to examine the contents of childhood dreams that contain numerous details of children’s cognitive development. Although children’s dreams provide a unique source of information about the structural development of dream, and the psychological and cognitive aspects of child development, very few studies focused on this issue (Resnick et al., 1994). Moreover, there are limited studies investigating that how children perceive the dream phenomena and the content of children dreams collected in their natural environments such as home or school. Currently, no studies have been found regarding the dream concepts and contents of Turkish children. The research questions were sought in the current study: “How do the 5 to 6-year-old preschool children explain the dream phenomenon and what the dream contents of 5 to 6-year-old preschool children are?

**METHOD**

In this qualitative study conducted on children’s dreams, the phenomenological research design was used. Children’s dreams were taken as a phenomenon. Phenomenology focuses on how people experience and give meaning to a phenomenon (Patton, 2002), and it is an approach that allows studying on effective, emotional and intense human experiences (Merriam, 2009). Because of the diverse and the person-specific nature of dreams, and to reach the data saturation, the study group consisted of a large group of children from different backgrounds.

**Study Group:** This study was carried out with the convenience sampling method, one approach to qualitative research sampling. The study group was selected among those living in three biggest municipalities of Adana, a city located in the southern part of Turkey, where the researchers were also living at the time of the study. The participants were 158 children registered to three different preschools (two of them belonged to the Ministry of National Education, and one of them was in the body of a state university). All the children participated in the study on voluntary basis. In addition, when they were asked to explain what the dream is and report one of their dreams, they were not forced to talk about it if they failed to explain what the dream is, recall their dream or just avoided talking about it. In the study, a total of 30 children who did not explain the dream concept, could not remember any dream or who were reluctant to talk about it were not included in the study group. Consequently, the study group was made up of 128 students with an average age of 65 months (N= 65 girls, N=63 boys). The age-related criterion for including the children in the study group was that they all turned five. According to the related literature, starting from the age of four, children recognize that dreams are personal imaginations, just like adults (Woolley & Wellman, 1992), and after the age of six, they fully discover what the dream is (Crain, 2000). Therefore, only those children who were older than 60 months were included in the study. These children had families with moderate and high socio-economic status, and none of them have any chronical diseases or handicaps.
**Data Collection Tools and Data Collection Process:** Phenomenological interview is the primary method of data collection tool to reveal the basic structure or reality underlying an experience (Merriam, 2009). Therefore, preschool children’s dreams were gathered through the interviews audio-recorded in a quiet and appropriate room at each school (teachers’ room, the deputy principal’s room, counseling service office). Before the interviews, the researcher participated in the activities carried out in the class for two days and spent time with the children to let them know more about the researcher. The children in the study group were taken one by one into the interview room by the researcher. When the child sat on the chair in front of the researcher, the interview started with “May I ask you something? What does dream mean?” questions. After responding to the first question, “Well, have you ever had a dream?”, “Would you tell me a dream you remember?” were asked to the child. The definitions and reports of the children were audio-recorded. The interviews lasted about five minutes in average.

**Data Analysis Process:** The audio-recorded descriptions of the dream reports were first transcribed and subjected to thematic content analysis by the researcher and categorized with respect to the definition of dream, and characters, the main actions and the place and time in the dreams. A systematic process to find patterns and categories within the dream reports; the raw data were coded and then codes were compared and grouped into meaningful categories. The categories obtained via content analysis and the frequencies of these categories are presented in the findings accompanied by direct quotations from the children’s dream reports. For these direct quotations, 128 children participating in the study were assigned name-codes from C1 to C128.

**Validity and Reliability:** In the study, referential adequacy was obtained by audio-recording the research data in all the research environments. In order to increase transferability, the children’s own statements were provided, and these descriptions were presented in their natural forms. In addition, for the purpose of increasing reliability, the decision phases, the processes and the methods used to conduct the study were recorded and reported in detail as suggested by Merriam (2009). Lastly, for confirmability, the process of peer debriefing was conducted. Peer debriefing is defined by Merriam (2009) holding interviews and making discussions with expert colleagues in relation to the consistency of the findings obtained via the raw data in the research process. In this respect, the researchers examined the analysis process via discussions when necessary in the process.

**FINDINGS**

In line with the research questions of the present study, this section presents the findings obtained via the analysis results regarding the dreams of the children who were asked to explain the concept of dream and to report a dream they recalled.

**Children’s Definitions of the Dream Concept**

When the children were asked to state the meaning of dream, 120 of all the 128 children in the study group provided a definition of dream. When the children’s definitions of dream were examined, it was seen that they defined it as seeing
something while sleeping/sleep, as something real-unreal and imaginary/nightmare; and as a good-beautiful experience. Some of the definitions belonged to more than one category. Below is the table of the categories and related quotations of the children’s definitions of the dream phenomena.

**Table 1: Categories and quotations of the children’s dream definitions**

<table>
<thead>
<tr>
<th>Categories</th>
<th>Sample Quotations</th>
</tr>
</thead>
</table>
| **Seeing Something While Sleeping** | “We have dreams during our sleep: I mean it is as if we watch something while sleeping” (C22).  
“We have dreams when we sleep. But when we get up, they disappear” (C93) |
| **Reality and Unreality**       | “You see something in your sleep. You think it is real, but it is not” (C70)  
“It means seeing something at night though it doesn’t exist in reality” (C109) |
| **Imagination**                 | “It is something like imagination” (C3)  
“It is something imaginary that people sometimes see” (C52) |
| **Fear and Nightmare**          | “For example, you see a dream, and it is a nightmare. I mean it means having a nightmare in your sleep” (C59)  
“You may have different dreams, but they may sometimes be scary. For example, you may see yourself dead in your dream” (C131) |
| **A Good and Beautiful Experience** | “It is something good. When you have a dream in your sleep, you see everything is good. I sometimes have dreams in my sleep” (C125)  
“It is very beautiful. You see wonderful things in your sleep. If you don’t see the whole dream, then you develop it in your brain” (C41)  
“We see something during our sleep. There is a computer in our heads. I tell my mother that I am afraid, but she says she is near me” (C87) |
| **Metaphors**                   | “It means filming something in our brain. It is like a video. We watch something in our dreams” (C57) |

As seen in Table 1, children at 5-6 years-old (average 65 months) can describe the dream. Generally they tended to describe the dream phenomena as its functional meaning such as seeing something or reality-unreality contrast, while some children defined dream with good feelings and metaphors some others preferred to explain by associating the fear and nightmares. These findings provide a clue as to how young children can
perceive the dream phenomenon in different ways.

**The Content of Children Dreams**

The contents of the children's dream reports were examined in terms of characters, main actions, time and space in their dreams. These elements are derived directly from children's natural dream narrations through the content analysis. The figure 1 shows the contents of children’s dreams.

![Diagram of Children’s dream content elements](attachment:image)

**Figure 1: Children’s dream content elements**

**Characters in Children’s Dreams**

It is found that children report people, animals and unreal characters in their dreams. In the study, it was found that the human character was more frequent in children’s dreams when compared to other characters. Almost all the children whose dreams were examined (f=120) reported the human character in their dreams at least once, while more than half of the children (f=75) reported two human characters. In addition, very few children (f=10) reported more than two human characters in their dreams.

When the human characters in children’s dreams was explored, it was seen that they most frequently saw themselves and their family members, which were followed by TV cartoon characters, strangers/bad men/thieves, their friends, and their teachers, respectively. The direct quotations from the children regarding the human characters in their dreams were as follows in Table 2.
### Table 2: Human characters and sample quotations in children’s dreams

<table>
<thead>
<tr>
<th>Human Characters</th>
<th>Sample Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-representation</strong></td>
<td>“I was swimming in the pool, and the fish were just about to bite me, my leg. I was in the sea. I mean I felt myself as if I were in the sea. I was happy, but it was freezing when I came out of the sea. I became sick.” (C12)</td>
</tr>
<tr>
<td><strong>Family members</strong></td>
<td>“I saw my mom and dad in my dream. My brother was little. My mother said &lt;Would you like to be the elder brother?&gt;. I said no. My mom and dad wrapped me in something and took me out. It was dark outside, and we turned back into the house. It was really terrifying because it was as if it were real. When I woke up, I understood that it was not real” (C4).</td>
</tr>
<tr>
<td><strong>Tv-Cartoon Characters</strong></td>
<td>“There was a flower. I was turning around it with other Winxes. I mean I was a Winx.” (C25)</td>
</tr>
<tr>
<td></td>
<td>“I was a cartoon hero in my dream. I was a princess. We were sitting there eating something. We were in the dining hall of the Kingdom. Then, we were sleeping. When we got up, we had a breakfast. Also, there was a prince. My dream ended when the prince grew up” (C75)</td>
</tr>
<tr>
<td><strong>Strangers (bad men/thieves)</strong></td>
<td>“One day, I was going to the supermarket in my dream. A man and a woman said &lt;Would you like to be our son?&gt;. Well, I was sleeping actually, but I thought it was real. I start crying every time I sleep.” (C88)</td>
</tr>
<tr>
<td><strong>Friends</strong></td>
<td>“We were in a forest. I was walking with my friend. We got lost, and my friend Arda saved me.” (C124)</td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
<td>“I saw my teacher. She went to the beach. She was swimming in the sea, and I was sitting at home and watching TV. I wanted to go near my teacher. It was really strange” (C85).</td>
</tr>
</tbody>
</table>

Another character represented by the children in their dreams was animals. Of all the dreams analyzed, 27.3% of them included at least one animal, while there were more than one animal in 6.3% of the dreams. In their dream reportings, the children most frequently mentioned wild animals such as shark, lion, tiger, bear, wolf and giraffe; pets like dog, fish, rabbit, bird and cat; fantastic animals like the dinosaur and unicorn; and such farm animals as the lamb and chicken, respectively.
The quotations from the children regarding the animal characters in their dreams were as follows in Table 3.

Table 3: Animal characters and sample quotations in children’s dreams

<table>
<thead>
<tr>
<th>Animal Characters</th>
<th>Sample Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wild Animals</strong></td>
<td>“I caught a shark in the sea. We became friends, and she took me to her house. She had foods there. She caught little fishes. Also, she had a TV set in her house.” (C44)</td>
</tr>
<tr>
<td><strong>Pets</strong></td>
<td>“There was a rabbit. I liked him and gave him a carrot. I was going into the forest alone.” (C102)</td>
</tr>
<tr>
<td><strong>Fantastic Animals</strong></td>
<td>“I saw unicorns in my dream. They were flying towards the stars. I saw a sky eagle. I also saw a big wave taking me away. It grasped everyone. It sent them all to a very beautiful place.” (C2)</td>
</tr>
<tr>
<td></td>
<td>“I saw dinosaurs in my dream. T-rex came while the two dinosaurs were fighting with each other. Then another dinosaur appeared. It was flying, and it was eating fish.” (C95)</td>
</tr>
<tr>
<td><strong>Farm Animals</strong></td>
<td>“People were feeding the animals there. They were feeding the sheep with milk. The chickens were giving eggs, and I was just there. I grew carrots. It was a very beautiful place.” (C91)</td>
</tr>
</tbody>
</table>

It was revealed that besides the human and animal characters, the children saw such fiction characters as ghosts, monsters, zombies and aliens in their dreams. The children who saw unreal characters in their dreams reported that:

*I sometimes see unreal things in my dream; for example, ghosts. They always appear to me. The say ‘come on, we’ll take you home, and I say ‘no’* (C99)

“Once, I saw a monster when I slept. It had red eyes. I was with my mom and dad, and my aunt. The red-eye monster came near us, and someone else came and killed him with a sword.” (C147)

“I see zombies. They are walking and attacking me. I am really afraid of them” (C13)

Following the analysis of the characters in the children’s dreams, the main actions of the characters in the children’s dreams were explored.

**Main Actions in Children’s Dreams**

When the dreams of the children in the study group were explored, it was found that many of the actions experienced, observed or imagined by the children in their daily lives existed in their dreams as well. It was revealed that almost every dream included at least one action and that some of the dreams even included a series of actions or more than one independent action. However, the main actions
which were prominent in the child’s dream and which reflected the theme of the dream were reflected in findings, and among 128 dream reports, 40 different main actions were determined.

In the current study, it was found that such daily life activities as playing, wandering/walking, eating, going out and talking as well as such dramatic actions as fighting, attacking, escaping, being kidnapped, dying, being injured and falling down and fantastic actions such as flying and transforming were the main actions in children’s dreams. Table 4 below presents the findings regarding the main actions revealed in the children’s dreams.

Table 4: The main actions in children’s dreams

<table>
<thead>
<tr>
<th>Main Actions</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Life Actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing</td>
<td>17</td>
<td>13,3</td>
</tr>
<tr>
<td>Wandering-walking</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Eating</td>
<td>6</td>
<td>4,7</td>
</tr>
<tr>
<td>Riding</td>
<td>4</td>
<td>3,1</td>
</tr>
<tr>
<td>Going out</td>
<td>3</td>
<td>2,3</td>
</tr>
<tr>
<td>Going vacation</td>
<td>3</td>
<td>2,3</td>
</tr>
<tr>
<td>Talking</td>
<td>3</td>
<td>2,3</td>
</tr>
<tr>
<td>Dramatic Actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fighting</td>
<td>8</td>
<td>6,3</td>
</tr>
<tr>
<td>Attacking</td>
<td>8</td>
<td>6,3</td>
</tr>
<tr>
<td>Escaping</td>
<td>7</td>
<td>5,5</td>
</tr>
<tr>
<td>Being kidnapped</td>
<td>6</td>
<td>4,7</td>
</tr>
<tr>
<td>Dying</td>
<td>5</td>
<td>3,9</td>
</tr>
<tr>
<td>Being Injured</td>
<td>4</td>
<td>3,1</td>
</tr>
<tr>
<td>Falling down</td>
<td>3</td>
<td>2,3</td>
</tr>
<tr>
<td>Fantastic Actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flying</td>
<td>5</td>
<td>3,9</td>
</tr>
<tr>
<td>Transforming</td>
<td>5</td>
<td>3,9</td>
</tr>
<tr>
<td>No Action</td>
<td>4</td>
<td>3,1</td>
</tr>
<tr>
<td>Other Actions</td>
<td>28</td>
<td>21,9</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td>100</td>
</tr>
</tbody>
</table>

Besides the main actions presented in Table 4, such actions with a frequency value of two or less such as sleeping, searching, collecting mushroom, swimming, loving, climbing, stealing, making friends, growing up, going to the toilet, fishing, buying presents, being hit by a car, shopping, spending time with someone, dancing, getting lost, saving someone, doing magic, arresting and emitting light were also found to be among the main actions in children’s dreams labeled as other actions on the Table 4. Only four children did not mention any actions in their dream reportings.
Time and Place in Children’s Dreams

As the children’s dreams were taken as a story line while analyzing their dream contents, the focus was also on the time and place in the dreams as well as on the characters and actions. However, in this study exploring the dreams of children who were at the age of five to six, it was seen that most of the children did not mention any time indicators in their dreams. It was also revealed that only 10 children described the time in their dreams and that the time in most of these dreams (f=6) was day time. In addition, only three children mentioned that their dreams were at night and that one child stated that it was both day time and night.

When the places in the dreams were analyzed, it was found that 70.4% (f=90) of all the children in the study group mentioned a place in their dreams. Table 5 presents the places in children’s dreams.

Table 5: The places in children’s dreams

<table>
<thead>
<tr>
<th>Places</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accomodation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child’s own house</td>
<td>21</td>
<td>16,4</td>
</tr>
<tr>
<td>House of others</td>
<td>8</td>
<td>6,3</td>
</tr>
<tr>
<td>Public Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Park-playground</td>
<td>8</td>
<td>6,3</td>
</tr>
<tr>
<td>School</td>
<td>7</td>
<td>5,5</td>
</tr>
<tr>
<td>Market place</td>
<td>6</td>
<td>4,7</td>
</tr>
<tr>
<td>Holiday resort</td>
<td>6</td>
<td>4,7</td>
</tr>
<tr>
<td>Zoo</td>
<td>4</td>
<td>3,1</td>
</tr>
<tr>
<td>Nature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest</td>
<td>7</td>
<td>5,5</td>
</tr>
<tr>
<td>Sea</td>
<td>6</td>
<td>4,7</td>
</tr>
<tr>
<td>Space-Sky</td>
<td>4</td>
<td>3,1</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>10,1</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>70,4</td>
</tr>
</tbody>
</table>

The most frequent place in the children’s dreams was a house. This place was mostly the child’s place of accommodation. In some of the children’s dreams, the place was sometimes a house of friend or sometimes a house of another family member. Besides the first 10 places presented in Table 5 with respect to their frequencies, those belonging to the category of “other” included a road (f=3), fantastic worlds (f=2), a hole, work place, farm, car, space ship, kingdom dining hall, City of Adana and guest house.

DISCUSSION

The findings obtained in current study revealed important data regarding the contents of the dreams of pre-school children aged five to six. In the study, the first finding was that the children mostly defined the concept of dream as sleep or as seeing something while sleeping. Piaget (1947/2010), points out that children perceive dream as a phenomenon depending on external factors like sleep or night. In the present study, it was found that some of the children defined the concept of dream using the phenomena of reality and imagination. Based on this finding, it could be stated that some children are better in terms of cognitive development and that they consider dreams to be unreal. According to Piaget (1947), children whose
levels of cognitive development increase in time in line with their ages believe that dreams depend on the internal factors belonging to the human body. In addition, it was found that some of the children defined dream in association with fear and nightmare. Similarly, in their study, Muris et al. (2000) reported that it was common to have frightening dreams among children aged four to six and that at older ages, especially at the age of 10 to 12, there was a decrease in the frequency of such dreams.

When the characters in the children’s dreams were examined, it was found that their dreams mostly included themselves (75.8%), which was followed by family members (33.6%), friends (19.5%) and TV/cinema characters (11.7%). The finding obtained in the present study in relation to the five-to-six-year-old children’s seeing themselves most in their dreams differed from the results reported by Foulkes et al. (1990), who also investigated the contents of children’s dreams. In their study, Foulkes et al. (1990) reported that children younger than seven years old rarely saw themselves in their dreams. The researchers associated their finding with Piaget’s cognitive development theory and claimed that children do not have enough cognitive capacity to create their own images in their dreams. However, in the current study, it was found that children at an average age of five years five months mostly saw themselves in their dreams. This difference between the findings of the two studies is thought to be due to the data collection method used by Foulkes et al. in their study. The reason is that in the Foulkes’s study, the children were asked to report their dreams in laboratory conditions by awakening them during their REM sleep. Another study conducted by Resnick et al. (1994) in children’s own houses revealed different results from those reported by Foulkes et al.. Similar to the results obtained in the present study, Resnick et al. (1994) found that children aged four to five years old (85%) and those aged eight to ten years old (89%) mostly saw themselves as the main character in their dreams. This finding is consistent with the one obtained in the present study. Based on these findings, it could be stated that the contents of children’s dreams are influenced by the conditions where children report their dreams.

Another finding obtained via the children’s dreams was the structure of the actions in their dreams. In this study, most of the children reported such actions involving movement as playing, wandering/walking, fighting, attacking, escaping, being kidnapped, eating and so on. On the other hand, Foulkes et al. (1990) found that the dreams of children younger than seven years old mostly included actions which did not include any movement (Foulkes, 1990). According to Honig and Nealis (2012), who conducted their study with children aged three to five years old, 81.2% of the children reported movement-related actions in their dreams. The fact that children see movement-related actions in their dreams is not a surprising finding as obtained both in the present study and in the one carried out by Honig and Nealis (2012). The reason is that most children, especially those at preschool age, lead quite an active life doing something constantly when they are awake. For this reason, most of their first life experiences involve movements, which cause them to see similar actions in their dreams.

The findings that the time in the dreams was not mentioned by the children at
all could be associated with the children’s levels of cognitive development. Since time is an abstract and relative concept when compared to movement and action, it is quite difficult for children at the preoperational stage to understand the exact meaning of this concept (Leushina 1991, Nair and Pool, 1991 cited in Aktaş Arnas, 2006). The fact that the children did not comprehend the meaning of this concept fully was probably the reason why the children did not mention the time in their dreams.

In addition, the findings obtained in the present study in relation to the place in the children’s dreams were consistent with those obtained in other studies conducted by Resnick et al. (1994) and by Honig and Nealis (2012). In these two studies or in the present one, almost half of the children did not provide any clear clue regarding the place in their dreams. However, the findings obtained in the present study, differed from others since more children gave clues regarding the place in their studies when compared to the participants in other studies.

**Limitations**

Among the important limitations in the present study could be the fact that the study was carried out only with children aged five to six years old. As in other studies (Foulkes, 1990; Resnick et al. 1994; Honig and Nealis, 2012), it may be beneficial if future studies are conducted with children from different age groups to reveal the developmental differences between children. However, children from an age group of five to six years old who were assumed to understand the concept of dream and who had a certain level of language acquisition were included in the present study. In addition, the children’s reporting of one dream they remembered was used to collect the research data.

**CONCLUSION AND SUGGESTIONS**

The results of the present study carried out in school environment with children at the age of five and six revealed that the children described the concept of dream in association with seeing something while sleeping, reality, imagination, fear/nightmare, good/beautiful and with certain metaphors. These results demonstrate that five-year-old children can define the concept of dream. In addition, among the most frequent human characters in the children’s dreams their self-representations, family members, TV-cartoon characters, strangers, friends, thieves and teachers, respectively. Animal characters and fiction characters were also main characters of some children’s dreams. Moreover, it was seen that there was at least one main action in the dreams of almost all the children in the study group and that the main actions were mostly those in the children’s daily lives but there were also dramatic actions and fantastic actions in dreams. Lastly, it was revealed that the children mostly mentioned the place in their dreams but only few of them stated the time for the events in their dreams.

Depending on these results, a similar study could be carried out with children from different age groups to examine their perceptions of dream and the contents and of their dreams. In addition, another study could be conducted using the quantitative research design to examine whether the contents of children’s dreams differ with respect to such demographic variables as gender and socio-economic
level. Also, the relationship between the contents of children’s dreams and their levels of cognitive development could be investigated. Lastly, future research could also focus on children’s levels of first language acquisition by examining their language use in their dream reports.

REFERENCES


Chapter 36

Examination on the Degree of Organizational Socialization of Preschool Teachers

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INTRODUCTION

Organizational socialization is learning process that new attendees in an organization or personnel with new job in the same organization go through about learning one’s duties, responsibilities, behaviours and one’s manner towards the organization within (Can, 1999). Organizational socialization isn’t a fixed concept, it happens in process. This process begins before the personnel enters the organization and it intensifies as the personnel enters the organization (Porter et al., 1975). With organizational socialization process person not only learns about morals, norms and patterns of the organization they joined but also interiorise it. This process doesn’t happen and end in an instant but continues throughout person’s life (Nelson and Quick, 1987).

Organizations are communities gathered together for a purpose or purposes. For organizations to achieve their purpose or purposes, personnel have to be committed to each other and their commitment must be constant (Başaran, 2000). Every organization and every person has specific morals and manners. Thanks to organizational socialization, organization’s and individuals’ morals and manners compromises and organization can achieve its purpose or purposes. Learning process of a new attendee in an organization or someone that started to work in a different department in the same organization’s learning process about the manner they are expected to perform, morals and behaviours is called organizational socialization. Organizational socialization ensures that the new personnel feels like a part of the organization (Çapar, 2007).

Organizational socialization in educational field is the process of educational field personnel to become an efficient and active member of the school. Thanks to this process educational personnel internalizes school culture while forming the work, manners and behaviours that are expected of them. At the same time they understand their role in school and gain their new work identity. Socialization is an important part of the school success and educational personnel (Kartal, 2003).

Because in school organizations the personnel are teachers, the organizational socialization of teachers is very important. Teachers’ organizational socialization is a process that happens throughout their career, when they start working in a new
position, or when they change the school they work in. Actually organizational socialization is a process that consciously happens but throughout their career this process continuous without teachers’ awareness (Kartal, 2007).

Socialization in educational organizations which are schools is administrators, teachers and students’ process of learning schools existing morals and norms and adapting to them (Memduhoğlu, 2008). In this process teachers also gain experience and undergo changes. It is apparent that teachers’ process of change and improvement is relevant to their socialization in the organization. Teachers have to make a constant effort to have a career advancement and to undertake new responsibilities. Thinking that way, teachers’ socialization processes don’t end when they join their organizations, in other word schools, it continuous throughout their career (Lacey, 1988).

As every organization has a purpose on their own, every educational institution has a social purpose. For this purposes to be achieved teachers have to work efficient and productive. In hitches that prevents teachers working this way can be count as lack of job satisfaction, motivation, organizational commitment and acceptance that are sub-dimensions of organizational socialization. This deficiency is causing unfavorable results such as not wanting to go to work, not being able to cooperate, not being able to make stabile decisions. This causes teachers to have difficulty in making their jobs (Elçi, 2008).

When a teacher undergoes a successful socialization process, their job satisfaction increases and teacher can show a high and efficient performance. On the other hand a teacher that went through an unsuccessful socialization could have identity crisis, conflicts and hard time in conformance thus causing them to show low performance (Erdoğan, 2012). In a country’s development and increasing a county’s wealth level, educational organizations have a big duty. A person’s first step in school life, that is preschool education is has a huge and important thing. Because person’s advances in this step on education shapes their whole life. For this reason, preschool education needs teachers that are trained in their field, that can advance children’s capabilities and talents and that can guide them (Akkurt, 2008).

Importance of preschool education is discovered more in every passing day thus increasing the versatile duties about preschool education. Increasing versatile tasks are making capability of the preschool teachers more important. For preschool education to improve, teachers having the necessary information and skills and gaining children these abilities, their manner towards the children and loving their jobs are very important characteristics a preschool teacher must have. Because in this state of their life, the most important factor in children’s growing is the people around them and preschool teachers are the first people they encounter after their families (Akkurt, 2008). First time the child have preschool education is the first time they encounter a teacher. When a baby first came to world the first people they see , their family , maintains a huge importance in their life , their first teacher also maintains a very important place in their life , they affect their whole educational life and hence their entire life . Preschool teachers’ commitment to job, motivation, organizational commitment and organizational acceptance that are organizational socialization sub-dimensions are directly effecting children’ and their own lives.
Because a teacher that has high organizational socialization level can minimize unfavorable effects such as loneliness and dissatisfaction, their performance will be high and productive. As preschool teachers are the first teachers of our children after family, their importance is big for our children’s future. For that reason, teachers’ organizational socialization being high holds an important place in our future.

This study is aimed at analyzing preschool teachers’ organizational socialization skills. Answers of the questions below are searched with this purpose:

**Sub – Purposes:**

Based on preschool teachers’ organizational socialization and sub-dimensions of organizational socialization points, what is the degree of teachers’ organizational socialization?

Is preschool teachers’ age makes a significant difference in organizational socialization or sub-dimensions of organizational socialization point average?

Is preschool teachers’ gender makes a significant difference in organizational socialization or sub-dimensions of organizational socialization point average?

Is preschool teachers’ state of how willing full they were to choose their job makes a significant difference in organizational socialization or sub-dimensions of organizational socialization point average?

Is the seniority of preschool teacher makes a significant difference in organizational socialization or sub-dimensions of organizational socialization point average?

**MATERIALS AND METHODS**

**Pattern of the Study**

Pattern of this study that is about analysing the degrees of preschool teachers’ organizational socialization is descriptive model. Study, in general searching models, has relational screening model features (Karasar, 2012).

**Universe and Examples**

This study’s universe is constituted by the preschool teachers that works in schools of National Education Ministry in Şiverek district, connected to provincial centre of Şanlıurfa in 2017-2018 academic year. Total number of the preschool teachers that worked at official educational corporations in Siverek district in 2017-2018 academic year, is 267.

Using the sampling formula from the universe, over the formula it is calculated that the minimum sample size is 98 subjects. Total sample size is divided in plates by their weight percentages (Çıngı, 1990). 98 subjects are determined from universe by basic coincidental sampling method and 110 preschool teachers that are reached constitute study’s sample.

**Data Collecting Device**

In this study, for collecting data; “Personal Information Form”, prepared for obtaining teachers demographic data, and “Organizational Socialization Scale”, prepared for measuring teachers organizational socialization degree, are used.

Personal Information Form is containing questions aimed at determining
preschool teachers’ will in choosing their job and their seniority.

Organizational Socialization Scale: The Organizational Socialization Scale is developed by Kartal in purpose of determining teachers’ organizational socialization degree. The scale is constituted by four sub-dimensions that are independent from each other. These dimensions are: job satisfaction, motivation, organizational commitment and organizational acceptance. It is constituted by; 13 material in job satisfaction dimension, 16 material in motivational dimension, 18 material in organizational commitment dimension, 13 material in organizational acceptance and total 60 material. In the original version of scale, the reliability of every sub-scale is examined by Cronbach Alpha coefficient and reliability of the job satisfaction, motivation, organizational commitment and organizational acceptance sub-scales are calculated as 0.76, 0.87, 0.80, 0.76 in order (Kartal, 2003).

In determining the participants’ degree of participations on the stated terms Likert Type Quintet Examination Scale is used. Scale is consisting (1) Never, (2) Slightly, (3) Sometimes, (4) Mostly, (5) Always selections. The minimum point participants can receive is 60, maximum point is 300. The minimum and maximum points the participants can receive in sub-dimensions of the scale are like this:

In job satisfaction dimension minimum is 13, maximum is 65,
In motivational dimension minimum is 13, maximum is 80,
In organizational commitment dimension minimum is 18, maximum is 90,
In organizational acceptance dimension minimum is 13, maximum is 65 point.

Data Analysis

Data that is obtained from this study are analysed by the SPSS 20 package program. As a result of Normality tests of the obtained data, parametric tests are preferred.

RESULTS

Table 1: Frequency and Presentence Distribution Of Participant Preschool Teachers’ Demographic Data

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>18-25 age</td>
<td>37</td>
<td>34,55</td>
</tr>
<tr>
<td></td>
<td>26-33 age</td>
<td>47</td>
<td>42,73</td>
</tr>
<tr>
<td></td>
<td>34-41 age</td>
<td>26</td>
<td>22,72</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>105</td>
<td>95,45</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>5</td>
<td>4,55</td>
</tr>
<tr>
<td>Choosing The Job in One’s Will</td>
<td>Yes</td>
<td>101</td>
<td>91,82</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>8,18</td>
</tr>
<tr>
<td>Seniority</td>
<td>0-5 year</td>
<td>64</td>
<td>58,18</td>
</tr>
<tr>
<td></td>
<td>6-10 year</td>
<td>39</td>
<td>35,45</td>
</tr>
<tr>
<td></td>
<td>11-15 year</td>
<td>7</td>
<td>6,36</td>
</tr>
</tbody>
</table>

When Table 1 is analyzed, we see that %34,55 of the teachers that participated in this study is between age 18-25, %42,73 are between age 26-33 and %22,72 are between age 34-41. While 95,45 of the teachers that participated in the study is female 4,55 are male. While 91,45 of the teachers that are participating in this
study states that they choose their job in their will. 8,18 states that they did not choose their job in their will. 58,18 of the teachers that participated in this study has 0-5, %35,45 has 6-10 and %6,36 has 11-15 years of work experience.

**Table 2: Data of the Points Participant Preschool Teachers Had In Sub-Dimensions of Organizational Socialization**

<table>
<thead>
<tr>
<th>Sub-Dimensions</th>
<th>N</th>
<th>Point Average</th>
<th>S.S.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>110</td>
<td>45,31</td>
<td>7,31</td>
<td>26,00</td>
<td>62,00</td>
</tr>
<tr>
<td>Motivation</td>
<td>110</td>
<td>54,48</td>
<td>7,40</td>
<td>32,00</td>
<td>75,00</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>110</td>
<td>64,58</td>
<td>7,84</td>
<td>42,00</td>
<td>90,00</td>
</tr>
<tr>
<td>Organizational Acceptance</td>
<td>110</td>
<td>67,00</td>
<td>9,71</td>
<td>40,00</td>
<td>92,00</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>231,56</td>
<td>33,70</td>
<td>155,00</td>
<td>301,00</td>
</tr>
</tbody>
</table>

When analyzed, Table 2 shows us the data of participant preschool teachers’ points from sub-dimensions of organizational socialization scale. The lowest point that is obtained from job satisfaction sub-dimension is 26, the highest point is 62 and average point of the group is 45,31. The lowest point that is obtained from motivation sub-dimension is 32, the highest point is 75 and the point average of the group is 54,48. The lowest point that is obtained from organizational commitment sub-dimension is 42, highest point is 90 and group’s point average is 64,58. The lowest point that is obtained from organizational acceptance sub-dimension is 40, highest point is 92 and group’s point average is 67,00. In total point area the lowest point that is obtained is 155, the highest point is 301 and the point average of the group is calculated as 213,56.

**Table 3: Point Averages Of Participant Preschool Teacher’s Points From “Organizational Socialization Scale” According To Their Age, Standard Deviations Variance Analysis (ANOVA) Results**

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>X</th>
<th>SS</th>
<th>X</th>
<th>SS</th>
<th>X</th>
<th>SS</th>
<th>X</th>
<th>SS</th>
<th>X</th>
<th>SS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>105</td>
<td>45,85</td>
<td>6.87</td>
<td>55,01</td>
<td>6.94</td>
<td>65,03</td>
<td>7.36</td>
<td>67,45</td>
<td>9.22</td>
<td>231,45</td>
<td>32.40</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>34,20</td>
<td>8.11</td>
<td>43,40</td>
<td>8.90</td>
<td>55,00</td>
<td>12.14</td>
<td>57,40</td>
<td>15.37</td>
<td>190</td>
<td>40.17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T test results</th>
<th>t</th>
<th>p</th>
<th>t</th>
<th>p</th>
<th>t</th>
<th>p</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.666</td>
<td><strong>0.000</strong></td>
<td>3.610</td>
<td><strong>0.000</strong></td>
<td>2.890</td>
<td>0.138</td>
<td>2.307</td>
<td>0.218</td>
</tr>
</tbody>
</table>

* p<0.05  
** p<0.01

When Table 3 is analyzed it is detected that in sub-dimensions of organizational socialization, preschool teachers’ job satisfaction ($F_{(2,107)}= 0.066$, **p<0.01**).
p>0.05), motivational degree (F(2,107)= 0.006, p>0.05), commitment (F(2,107)= 1.002, p>0.05), acceptance (F(2,107)= 0.893, p>0.05) and their total point (F(2,107)= 0.098, p>0.05) has no difference caused by age in statistics. When age averages are examined it is calculated that preschool teachers’ between ages 34-41 commitment degree (X=66.38) and acceptance degree (X=68.73) are higher than teachers from other groups.

Table 4: Point Averages of Participant Preschool Teacher’s Points From “Organizational Socialization Scale” According To Their Gender, Standard Deviations and t Test Results

<table>
<thead>
<tr>
<th>Age</th>
<th>Job Satisfaction</th>
<th>Motivation</th>
<th>Commitment</th>
<th>Acceptance</th>
<th>Total Point</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>X</td>
<td>SS</td>
<td>X</td>
<td>SS</td>
</tr>
<tr>
<td>18-25 age</td>
<td>37</td>
<td>45.68</td>
<td>7.47</td>
<td>54.59</td>
<td>7.67</td>
</tr>
<tr>
<td>26-33 age</td>
<td>47</td>
<td>45.13</td>
<td>7.51</td>
<td>54.42</td>
<td>7.76</td>
</tr>
<tr>
<td>34-41 age</td>
<td>26</td>
<td>45.15</td>
<td>6.95</td>
<td>54.42</td>
<td>6.58</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>45.32</td>
<td>7.31</td>
<td>54.48</td>
<td>7.40</td>
</tr>
</tbody>
</table>

When Table 4 is analyzed it is detected that in sub-dimensions of organizational socialization, preschool teachers’ points in job satisfaction (t=3.666, p>0.05), motivational degree (t=3.610, p>0.05), commitment degree (t=2.980, p>0.05), acceptance degree (t=2.307, p>0.05), and total (t=2.767, p>0.05) has a significant difference caused by gender in statistics. When point averages are analyzed it is detected that point’s of job satisfaction degree (X=45.85), motivation degree (X=55.01), commitment degree (X=65.03), acceptance degree (X=67.45) and total points (X=231.45) are higher in woman teachers’ point average’s than male’s point average.

When Table 5 is analyzed it is detected that in sub-dimensions of organizational socialization, preschool teachers’ points in job satisfaction (t=2.478, p<0.05), motivational degree (t=1.384, p<0.05), commitment degree (t=1.392, p<0.05) and acceptance degree (t=3.541, p>0.05) has a significant difference caused by one’s state of choosing the job in their will in statistics. When point averages are analyzed it is detected that points of job satisfaction degree (X=45.82), motivation degree (X=54.77), commitment degree (X=64.89), acceptance degree (X=67.93) and total points (X=231.44) are higher in point average of teachers who choose their job within theirs than teachers who didn’t choose their jobs willing fully.
Table 5: Point Averages of Participant Preschool Teacher’s Points From “Organizational Socialization Scale” According To Them Choosing Their Job's At Will, Standard Deviations and t Test Results

<table>
<thead>
<tr>
<th>Seniority</th>
<th>Job Satisfaction</th>
<th>Motivation</th>
<th>Commitment</th>
<th>Acceptance</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>X</td>
<td>SS</td>
<td>X</td>
<td>SS</td>
</tr>
<tr>
<td>0-5 year</td>
<td>64</td>
<td>45.72</td>
<td>7.49</td>
<td>55.03</td>
<td>7.53</td>
</tr>
<tr>
<td>6-10 year</td>
<td>39</td>
<td>45.08</td>
<td>6.52</td>
<td>53.79</td>
<td>7.31</td>
</tr>
<tr>
<td>11-15 year</td>
<td>7</td>
<td>43.00</td>
<td>10.13</td>
<td>53.29</td>
<td>7.34</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>45.32</td>
<td>7.30</td>
<td>54.48</td>
<td>7.40</td>
</tr>
</tbody>
</table>

Variance Analysis

<table>
<thead>
<tr>
<th></th>
<th>Sd</th>
<th>F</th>
<th>P</th>
<th>F</th>
<th>P</th>
<th>F</th>
<th>P</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intergroup</td>
<td>2</td>
<td>0.465</td>
<td>0.629</td>
<td>0.431</td>
<td>0.651</td>
<td>0.834</td>
<td>0.437</td>
<td>0.999</td>
<td>0.372</td>
</tr>
<tr>
<td>In-Group</td>
<td>107</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>109</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Point Averages of Participant Preschool Teacher’s Points From “Organizational Socialization Scale” According To Their Seniority, Standard Deviations Variance Analysis (ANOVA) Results

<table>
<thead>
<tr>
<th>Choosing The Job</th>
<th>Job Satisfaction</th>
<th>Motivation</th>
<th>Commitment</th>
<th>Acceptance</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Will</td>
<td>N</td>
<td>X</td>
<td>SS</td>
<td>X</td>
<td>SS</td>
</tr>
<tr>
<td>Yes</td>
<td>101</td>
<td>45.82</td>
<td>7.36</td>
<td>54.77</td>
<td>7.64</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>39.67</td>
<td>3.39</td>
<td>51.22</td>
<td>2.05</td>
</tr>
<tr>
<td>T test results</td>
<td>T</td>
<td>P</td>
<td>t</td>
<td>p</td>
<td>t</td>
</tr>
<tr>
<td></td>
<td>2.478</td>
<td>0.015*</td>
<td>1.384</td>
<td>0.001*</td>
<td>1.392</td>
</tr>
</tbody>
</table>

When Table 6 is analyzed it is detected that in sub-dimensions of organizational socialization, preschool teachers’ points in job satisfaction ($F_{(2,107)} = 0.465, p>0.05$), motivation ($F_{(2,107)} = 0.431, p>0.05$), commitment ($F_{(2,107)} = 0.834, p>0.05$), acceptance ($F_{(2,107)} = 0.999, p>0.05$) and total points ($F_{(2,107)} = 0.782, p>0.05$) has no significant difference caused by seniority in statistics. When point averages are analyzed it is detected that points of commitment (X=68,29), acceptance (X=68,56) and total points (X=68,56) are higher in point averages of teachers’ between age 11-15 than other teachers’ in the group.

**DISCUSSION AND CONCLUSIONS**

In this debate, it is analyzed if preschool teachers’ organizational socialization skills change or not based on their age, gender, if they choose their job with their will and seniority.

There is no change detected in preschool teachers’ organizational socialization skills based on their age. When looking at the point averages, it is seen that older teachers’ commitment and acceptance percentage is higher than teachers from other groups. With age, professional efficiency of the teacher improves. This situation can cause teachers to show high commitment and accordance towards their superiors and co-workers. Çapar (2007) states that organizational socialization degree improves as the age grows older. On the other hand Aliyev (2014) states that
there is no significant difference between personnel within different age groups in accordance to organizational socialization.

In other results from the study a significant difference is detected based on gender about job satisfaction, motivation and total points. It is seen that perceptions about female teachers’ organizational socialization are higher than male teachers. We see that male teachers usually don’t participate in preschool education. Male teachers not being able to cooperate with their co-workers properly, feeling insecure with their job and them having low motivational level may be causing this situation. In contrast with study’s results, other studies detected that personnel’ gender makes no significant difference in organizational socialization degrees (Kelepçe and Özbek, 2008; Özçelik, 2008).

According to study results there is a significant difference in organizational socialization levels based on whether or not the preschool teacher choose the job with their will. Teachers doing their job with love is very important in terms of building up a positive attitude and behaviour towards their job. That way they high motivational level, job satisfaction and commitment towards organization can be seen. Some studies shows that people who chooses their job at will are more positive towards teaching profession (Zembat and Bilgin, 1996; Üstün, 2005). Demirci (2011) shows that teachers who choose teaching profession and branch at their will have higher levels of motivation and job satisfaction.

There is no significant difference detected about organizational socialization levels based on seniority. When looking at the point averages it is seen that more senior teachers has more commitment, acceptance and total points than teachers from other groups. Teachers’ knowledge, skills and experiences will improve with their seniority. This situation may affect teachers’ socialization process within interpersonal relationships. It can be expected of teachers that as their seniority grows, their commitment and acceptance towards their job increases. Kılıçoğlu and Yiğmaz (2013) says that teachers can learn more about their school’s customs, culture and their co-workers. Kartal (2003)’s study results is also parallel with this finding. It is detected that as seniority grows, acceptance improves hence organizational socialization levels improves.

**SUGGESTIONS**

Preschool teachers’ organizational socialization and professional competence can be improved by giving them in-service training.

By giving university candidates vocational education as they start their undergraduate education, people can be procured to choose their job at their free will.

By organizing orientation programs within preschool teachers’ first years of their job, their vocational adjustment and organizational socialization degrees can be improved.

By organizing social activities regularly for preschool teachers, we can prevent the loneliness that preschool teachers who are the only one in their branch may feel and their socialization and job love can be improved.

We can make educational programs about the regional language for teachers.
who are having communication issues with children because of the language difference. In that way teachers’ job satisfaction and motivation hence organizational socialization levels can be increased.

Deficiency in preschool education classes can be fixed by making physical qualification tests at least once in a year. In that way teachers’ organizational socialization levels can improve by the increasing job love and sense of achievement.

The study is about preschool teachers that are working in Şanlıurfa, Siverek. Similar studies can be made about preschool teachers that are working in other cities and districts.

This study uses survey as data collecting device. Similar studies can use other qualities data collecting devices such as interview and observation.

REFERENCES
Chapter 37

Participation in Early Childhood Education of Families Using Different Language At Home

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INTRODUCTION

Today, the contribution of pre-school education to furthering the social, emotional, personal, and psychomotor development of children is an undeniable fact. The success of pre-school programs mainly depends on family participation. Since parents are the first and longest educators of children, parents and other individuals involved in children’s lives should be part of pre-school education (Wheeler, 2007). Family participation in pre-school education should include teachers informing them about child development, education and guiding them to play an active role in development of children, and providing emotional support for them, as well as information sharing between teachers and parents (Coleman and Churchill, 1997).

Research has showed that family participation is beneficial for the academic success of children, early academic skill development, social development and personality development (Anders et al. 2012; Arnold et al. 2008; Bennet, Weigel & Martin, 2002; Fan & Chen, 2001; Gürşimşek, 2003; Henderson and Mapp, 2002; Jeynes, 2007; Kapusuzoğlu, 2004; Kleeman, Peeters, Segers and Verhoeven, 2012; Marcon, 1999; Pomerantz, Moormann and Litwack, 2007; Roopnarine et al., 2006; Sylva, Melhuish et al. 2004). It is stated that cooperation of parents with school contributes higher social skills, self-control, academic success, and academic motivation of children, and children are prone to cooperation at school or home (Mcwayne ve Owsianik, 2004).

For effective family participation, there should be communication between families and schools. Lack of communication between family and school is preventable (Coleman and Churchill, 1997; Cotton and Wikelund, 1989; Kauffmann et al. 1998; Nakamura, 2000; Wheeler, 2007; Keyes, 2008). Teachers or parents alone could be insufficient for defining fundamental experiences, ideas, and problems, as well as talking about them (Klein and Miller, 2008). In addition, parents may struggle to cooperate with educators to determine the parents’ needs. Limited skills, limited opportunities created for interaction, psychological obstacles and cultural obstacles between teachers and parents may prevent parental participation. For example, parents may be unwilling to interact with teachers that are culturally different from them in terms of language, religion, values, or ethnic
background (Sohn and Wang, 2006).

The official language in Turkey is Turkish; however, various other languages are also spoken in this country (Ayan-Ceyhan and Koçbaş, 2009). In regions and cities where these languages are used as well as areas of migration in western and coastal region cannot speak Turkish or cannot use the language effectively (Aktaş-Arnas, 2011). Since Turkish is used at a minimum level in the family, children face communication and academic success problems when they start school. Teachers are at the other side of this problem (Ayan-Ceyhan and Koçbaş, 2009). As teachers do not know the mother tongue of children in their own culture, communication between teachers, children, and parents becomes problematic. Therefore, educators working as teachers in these regions are struggling with language problem before they can achieve their education objectives. Another obstacle for teacher-parent communication is that most of the women in these regions are illiterate (Hoş, 2011). It is worth investigating how teachers overcome these obstacles and why parents participate.

In light of this information, the purpose of this study is to analyze how mothers participate in the education of their children and to better understand the problems mothers and teachers face particularly for Kurdish descent families migrated from Southeast Anatolian Region where Turkish is the second language.

**MATERIALS AND METHOD**

This study was designed with a survey model. Survey models are research methodologies that aim to describe a prior or current event as it is. Event, individual, or object of the research is tried to be defined in its own conditions and as it is. There is no manipulation of variables by the researcher. The important thing is to observe and describe the event (Karasar, 2002).

**Study Sample**

The study sample consisted of 5 teachers who worked at a public independent preschool and two public primary schools in Tarsus, Mersin, where migrant families from the southeast Anatolia Region were living intensively, and 8 mothers of bilingual students from these schools. Personal information about to the participant teachers are given in Table 1 below.

**Table 1: Personal information about the participant teachers**

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Mothers</th>
<th>Education status</th>
<th>Professional Seniority</th>
<th>Service time at their current schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher 1</td>
<td>Mother 1</td>
<td>Graduated from Preschool Teaching</td>
<td>2 years</td>
<td>2 years</td>
</tr>
<tr>
<td>Teacher 2</td>
<td>Mother 2</td>
<td>Graduated from Preschool Teaching in Open Education Faculty</td>
<td>4 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Teacher 3</td>
<td>Mother 3</td>
<td>Graduated from Preschool Teaching</td>
<td>2 years</td>
<td>2 years</td>
</tr>
<tr>
<td>Teacher 4</td>
<td>Mother 4</td>
<td>Graduated from Classroom Teaching</td>
<td>5 years</td>
<td>1 year</td>
</tr>
<tr>
<td>Teacher 5</td>
<td>Mother 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The participant mothers were between the ages of 23 and 55, and were all housewives; however, they worked at fields to support their families at certain times of year. All the mothers had nuclear family. Other information about these mothers are presented in Table 2 below.

**Table 2: Personal information about the participant mothers**

<table>
<thead>
<tr>
<th>Mothers</th>
<th>Teachers</th>
<th>Time spent living in Tarsus</th>
<th>Ethnicity</th>
<th>Currently spoken language at home</th>
<th>Turkish Speaking Level</th>
<th>Education Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother 1</td>
<td>Teacher 1</td>
<td>1.5 years</td>
<td>Kurdish</td>
<td>Turkish-Kurdish</td>
<td>Understands less-unable to speak</td>
<td>Illiterate</td>
</tr>
<tr>
<td>Mother 2</td>
<td>Teacher 2</td>
<td>7 years</td>
<td>Kurdish</td>
<td>Turkish-Kurdish</td>
<td>Does not understand and is unable to speak</td>
<td>Illiterate</td>
</tr>
<tr>
<td>Mother 3</td>
<td>Teacher 3</td>
<td>Since birth</td>
<td>Kurdish</td>
<td>Turkish-Kurdish</td>
<td>Speaks like mother tongue</td>
<td>High school drop out</td>
</tr>
<tr>
<td>Mother 4</td>
<td>Teacher 4</td>
<td>8 years</td>
<td>Kurdish</td>
<td>Turkish-Kurdish</td>
<td>Speaks like mother tongue</td>
<td>Secondary school graduate</td>
</tr>
<tr>
<td>Mother 5</td>
<td>Teacher 4</td>
<td>Since birth</td>
<td>Kurdish</td>
<td>Turkish</td>
<td>Speaks like mother tongue</td>
<td>Primary school drop out</td>
</tr>
<tr>
<td>Mother 6</td>
<td>Teacher 5</td>
<td>18 years</td>
<td>Kurdish</td>
<td>Turkish-Kurdish</td>
<td>Unable to speak well</td>
<td>Illiterate</td>
</tr>
<tr>
<td>Mother 7</td>
<td>Teacher 5</td>
<td>25 years</td>
<td>Kurdish</td>
<td>Turkish</td>
<td>Speaks like mother tongue</td>
<td>Illiterate</td>
</tr>
<tr>
<td>Mother 8</td>
<td>Teacher 5</td>
<td>20 years</td>
<td>Kurdish</td>
<td>Turkish</td>
<td>Speaks like mother tongue</td>
<td>Illiterate</td>
</tr>
</tbody>
</table>

**Data Collection**

Data for this study was collected in May and June 2012. Semi-structured interview forms were given to both mothers and teachers. Interpreters were used to interview mothers who do not know Turkish. Data collected from mothers was obtained from home visits. Interviews with teachers were conducted in schools. A voice recorder was used during interviews.

The interview form for mothers consisted of two parts. The first part asked questions to collect personal information such as the mother’s age, education level,
and number of children, as well as whether she knows Turkish. The second part asked questions regarding how the mothers contribute to the education of their children, how they interact with the teacher, and the cultural and language differences between teachers.

The interview form for teachers also consisted of two parts, a personal information section and a school-parent communication section. In the personal information section, questions regarding how long they have been teaching, how long they have been working in this school, and how they have previously worked with children and parents with different language or cultural infrastructure were included. In the teacher-parent communication section, questions were asked about parental participation strategies teachers used for communicating with parents with different cultural backgrounds, communication styles used to convey information about children to parents, and which activities parents do.

Data Analysis

In this study, interviews of mothers and teachers were recorded and transferred to a computer, providing 50 pages of data. A descriptive analysis and a qualitative data analysis of the data were obtained. Teachers and mothers interviewed were coded as T1, T2, or M1, M2, based on interview order.

RESULTS

Findings obtained from the study are presented under two titles in line with the purpose of the study.

Parental Participation Activities Participated by Mothers

Mothers were asked whether they talked with their children’s teacher, and if so, when, how, and about what topics they talked. Six of the mothers stated that they have talked to teachers more than once and that these talks took place during entrance-exit hours. Three of the mother also talked with teachers during PTA meetings. Mothers stated that these meetings were mostly greetings and receiving information about the child, and one mother stated that the teacher made recommendations about eating and hygiene. One of the interviewed mothers expressed that she had seen the teacher once, that they talked about the child’s status, and that they never met again. Another mother said that she visited the school once a month to learn about the status of the child and whether there was anything needed for the child.

During these interviews, all mothers stated that while they saw the teacher more frequently in the first semester, their meetings were less frequent in the second semester. When the reasons for this were inquired of, mothers expressed that they had given birth or had a smaller child (5), the child was going to school with siblings (5), there was a sick child (2), they were working in a field and needed to work harder in spring (2), they did not know Turkish (2), and they were uncomfortable with the approaching the teacher (1).

Teachers were asked whether they had met parents, what did they do to know parents, and why they did not know parents if they did not. One of the teachers (T5) said that during the second semester, she called all of the parents to school and
visited the homes of two children who were not coming to school. Another teacher said that he or she had seen all of the parents and knew all of them. One of the teachers (T4) said that there were parents who visited the school once and never came back because these parents had smaller child and they were working in a field. Teachers explained that they received this knowledge from older siblings in the same school or from neighbors or relatives of the parent. Teachers had nothing to say regarding participation of parents with different languages and cultural backgrounds.

**Home Visits**

In the study, mothers were asked about whether teachers ever visited their home, if they wanted the visits, and their emotions and thoughts about these visits. Only one of the mothers (M6) said that the teacher visited their home, that she had invited the teacher, and that she was happy about this visit. However she was sad since the teacher did not accept the offerings. She said, “I invited the teacher for couple of times. The teacher came to the house once. And it was good. But when the teacher comes, she doesn’t drink tea. It would be nice if she does.” (M6). Other mothers expressed that teachers didn’t come to their homes.

Mothers whose teachers did not visit their house were asked what emotions and thought they would have if the teacher would want to visit and why. One of the mothers said that the teacher did not have to come home and said: “Teacher never came to my house. They don’t need to come. They don’t need to worry about it. I don’t need it. They have too many students and if they visited everyone’s home, they would be tired, and get bored. I am thinking of them. There is no problem if they come home.” (M8) Another mother said that a visit from the teacher would make her happy, and she would feel like the teacher cared for her and the child. Some of the mothers had the following expressions: “The teacher didn’t come. I wanted to. I love having guests at home. I would be happy. I know that she comes for my child. I feel that my child is cared.” (M3) “I would be happy if the teacher visited the house. When the teacher of my oldest daughter came, the teacher stayed until late. I was very happy. I thought that she cared for us.” (M2) “The teacher never came home. I mean I want her to come, she can come and have a cup of tea. I want that. Right? It would be nice if we had tea.” (M7)

Teachers were asked if they have ever visited the homes of children with different language and cultural background. Among five teachers, only two of them (T1 and T4) expressed that they had. Teachers were asked about the purpose of a home visit and whether their thoughts changed after the visit. One of the teachers (T1) said she made the home visit to meet the parents and was warmly welcomed by the mother. She expressed there she was worried about the relationship between the child and step-mother before the visit, but due to the warm and sincere approach of the mother, she observed that the child embraced the mother as his own mother. Another teacher (T4) stated that she made this visit after the invitation of the mother. The teacher expressed that during the visit, the mother and other family members welcomed her warmly, and that she got to know the child and parents more closely. The teacher emphasised that after the visit, there was a change in her
expectations regarding the child and the family.

Parent meetings

Mothers were asked whether they attended meetings in school. While five mothers indicated that they have attended the meetings and three said they did not. When mothers who have not attended meetings were asked why, one explained she had a small child and have no one to take care (M5), one didn’t speak Turkish and was uncomfortable with approaching the teacher (M1), and one had other important things to do and their child was sick (M8).

Teachers were asked whether parents from different languages and cultural backgrounds had attended meetings in the academic year, how they communicated with these parents, and if they knew why some parents did not attend. Three of the teachers (T1, T4, and T5) stated that one of the parents with different cultural and language background did not attend the meeting but that others did. Two of the teachers (T2 and T3) expressed that parents with different cultural and language background attended all of the meetings.

One of the teachers (T3) said that parents attending the meeting had no problem using Turkish, so she communicated with them in Turkish. Another teacher (T2) said she received help from another mother who knew Kurdish or the elder child who knew Turkish to communicate with the parent who did not know Turkish. Teachers who indicated that parents did not attend meetings were asked whether they knew why the parents did not attend. Two of the teachers (T4 and T5) said that parents had smaller children and no one to watch the child, and one of these teachers (T4) said that parents did not care about the meeting. Another teacher (T1) said that parents forgot about the meeting or had health problems.

Parental participation in class activities

Mothers were asked if they participated in the education of their children at school, and what teachers did for them regarding their participation. Only one of the eight mothers said that she entered the classroom when she took her child to school and observed the environment for a short time, while other mothers expressed that they had not attended any activities in school. Two of the mothers said that they did not have time for school activities. One of those mothers said that she had a small child, the child need to stay in the hospital for a long time, and she needed to care of the child, while the other mother said that she needed to work in the field. All of the mothers said that none of the teachers invited them to class activities. One of the mothers (M3) said that it would be nice to participate in class activities but that teachers would be better able to do the activities without the mothers’ involvement: “We would like to attend to such thing. It would be nice. Why not, if it is beneficial for our child, it would be nice. It would be better if the teacher gave it. We know that she is a teacher. She knows them better.”

Teachers were asked what they have done for parents with different language and cultural background to participate in class activities, and teachers who said there was participation were asked how did they included parents, and what was their role in these activities. Teachers stated that they have encouraged all parents for story-telling, participating in certain activities organised in certain days and
weeks, and helping to prepare activity materials, however, they had no special effort to include parents with different language and cultural background. Additionally, only one of the teachers said she included parents with different language and cultural background and who do not know Turkish into class activities, but in the following stages, as the child get used to school, mother never attended class activities.

Problems Faced with Parental Participation

Language problems

Mothers were asked whether they experienced any problems while speaking Turkish. Of the eight interviewed mothers, two of them hardly spoke Turkish, experienced problems in communication with the school and the teacher, did not understand teachers, and could not express themselves. One of the mothers said that she was not attending parent-teacher meetings because she does not know Turkish. Six of the mothers said that they can speak Turkish as their mother tongue, they spoke Turkish at home, and they experience no problems communicating with the school and the teacher in terms of language.

Mothers who could not speak Turkish were asked whether there was a communication problem due to language, and if there so, if they knew of solutions and if they expected teachers to solve this problem. The mother that expressed she did not attend meetings due to language problems said that they did not understand each other when communicating, she wanted the teacher to know Kurdish, and she would feel relaxed if she spoke the same language with the teacher. On the other hand, she said that there was no one to help her with the language, and that the teacher had made no effort to solve this problem. The mother said as follows: “If people in school know Kurdish or they were Kurdish, I would go easier. The teacher pays attention to other mothers and talks to them more. The teacher is getting bored since I don’t know Turkish. She doesn’t want to tell me. I am also bored as I don’t understand. She doesn’t tell other women to tell me. Since there is no one to help, the teacher doesn’t say help or translate. No one in the school knows Kurdish. There is no one to help me and come to school with me. Şiar (oldest child) is also attending school. I have no one and I don’t want to go.” (M1).

Other mothers experiencing problems while talking Turkish said that they wanted the teacher to know Kurdish so they could better understand the teacher and that the teacher asked for other Kurdish descendant mothers who can use Turkish effectively to translate. One mother explained as follows: “I am struggling since I cannot speak Turkish well. We don’t understand what they are saying. I wanted the teacher to talk in Kurdish. Because I want to understand what the teacher says. Teacher speaks in Zaza. But I don’t know Zaza. I wanted her to know Kurdish so that I can understand. I really want that. I cannot understand when she is talking to my children. I am feeling bad. When the teachers wants to tell something, she asks other mothers to explain me. She is working hard for me to understand. Although she tries hard, I wanted to understand her in my own language. (M2)

Teachers were asked whether they wanted to know the language of parents who do not speak Turkish, whether they would be occupational gains to knowing
that language, and whether they were showing any efforts to communicate with parents who do not know or speak Turkish. While three of five interviewed teachers said that they had no parents that do not know Turkish although their mother tongue is different, two of them (T1 and T2) said that they had one parent that does not know Turkish. These two teachers said that they want to know the language of the parents, but they were not trying to learn. One of the teachers (T2) said she received help from other mothers who know Kurdish or an elder child who knows Turkish to communicate with the parent who does not know Turkish during entrance-exit hours and parent-teacher meetings. Another teacher (T1) said that she tried to talk in Turkish during entrance-exit hours with the parent that does not know Turkish, that this parent never came to meetings, and that she received help from other mothers to communicate with another mother who was not competent in Turkish.

Three of the teachers (T1, T2, T3) said that they wanted to know the language of parents who do not speak Turkish and that this would be beneficial to better understand the parents and express themselves to parents. One of the teachers (T2) said knowing the language of the parents would eliminate prejudices against teachers, teaching, and pre-school education. One of the teachers (T5) said she had previously worked in Urfa, she considered learning Kurdish when she had problem communicating with parents, but she believed that it would be better if parents knew Turkish. Another teacher (T4) said that knowing the language of the parents who cannot effectively talk Turkish would offer occupational gains, and that they would communicate better if they spoke a common language. “I don’t know if knowing their language will provide me something, I don’t think so. We have a common ground. Although we don’t have a common language, we can communicate. Via kids. Kids tell. But they worst one understands you. I mean, parents with little Turkish knowledge also understands.”

**Cultural differences**

Mothers were asked whether they had different language and cultural backgrounds from the teachers, and if so, what these differences were and how they felt about them. One of the eight mothers who had been living in Tarsus for 1.5 years and another who had been living in Tarsus for 7 years said that there were cultural differences with the teacher. One of the mothers said that this difference is good. The other mother said that compared to local Tarsus mothers and their relationships, cultural differences affected the behaviours of the teacher. The mothers explained as follows: “Of course there are differences. But I am not telling them to the teacher. I realize these differences. It is better to have these differences. Because my children are raised better. They fight less. I love my children to be in such school environment. (M2). “We are different, and her behaviours towards me are different. When I go to school, I see that she pays attention to locals. If I was from here, she would care more. Everything is different with the teacher.”(M1).

The six mothers who were born in Tarsus or lived there for a long time said that there was no difference and that the teachers were like them. Two of the mothers explained as follows: “She is like us. I mean. We are here for a long time. We never go back to our land (Diyarbakır) and saw that place. There is no
difference.” (M8) “We never talked our difference with the teacher. We never have. We don’t have a problem.” (M7).

Teachers were asked whether their own traditions and cultural values were different from mothers, whether these cultural differences affected communication, and in light of these differences, how parental participation should be organized. Teachers expressed that mothers speaking different languages did not make any difference in terms of communication but caused them to feel uncomfortable while expressing themselves. A teacher of Arabic descent (T3) said that she communicated with mothers in their language for greetings or small talk that this helped promote warmer and sincere relationships, and that parents saw her as one of them. Another teacher who is Zaza said that although she lived in Tarsus for a long time, she has residues of her previous culture, and that this caused her to understand Kurdish people better and have easier communication with them. One of the teachers (T1) said that she did not believe there were any cultural differences with parents that she did not feel these differences, and that one of the mothers of this teacher said that she was uncomfortable with this difference.

Mothers were asked whether teachers treated them and Turkish mothers in the same way, if there were any differences between them, and how they felt about these differences. One of the mothers (M1) said that the teacher talked with Turkish mothers more. She also said that she had explained to the teacher that she was getting bored, and that if she was Turkish the teacher would care more. Because of this, she felt uncomfortable, and she did not want to go to school and meet with the teacher. Another mother said that the teacher treated everyone equally, that she asked help from other mothers who know Kurdish for translation, and that she was happy with the teacher’s attitude. “The teacher is treating everyone equally. She is listing all parents She is talking to everyone one by one. There are no differences. Also, the teacher is telling other women to explain me as I don’t know the language. She is asking for help from people there. I am feeling happy.” (A2) The other six mothers said that teachers were not treating them differently compared to Turkish mothers.

Teachers were asked whether they had equal distance from all parents or acted differently towards parents with different language and cultural backgrounds. Two of the teachers said that rather than different language and cultural backgrounds, the interest of parents towards the education of their children was the determining factor for differences.

CONCLUSION AND DISCUSSION

The results and analysis of this study examined how mothers participate in their children’s education and what problems are faced by mothers and teachers in this participation. This study specifically looked at Kurdish descent families migrated from Southeast Anatolian Region where Turkish is the second language, and showed significant outcomes. One of the results from this study was that the parental participation strategy of teachers and strategies for participation from parents with different languages and cultural backgrounds were the same. The most frequent parental participation strategies of teachers were sending notes to parents,
meeting with parents during entrance-exit hours to school, and parent-teacher
meetings. Mothers commonly used entrance-exit hours and parent-teacher meetings
to communicate with teachers. Additionally, seven of the mothers said that they
wanted home visits, but teacher did not prefer home visits. It was found that only
two of the interviewed teachers made home visits and that these visits followed
parents offering insistent invitations. Studies in Turkey (Abbak, 2008; Aktaş, 2002;
Günay Bilaloğlu, 2014; Koç, Taylan and Bekman, 2002; Kuşin, 1991; Tezel Şahin
and Turla, 2003) found that teachers were mainly using parental participation
activities to communicate, and that home visits were the least preferred or never
preferred parental participation strategy. Unfortunately, this undermines efficiency
and effectiveness in parental participation activities. To achieve success, desired,
and expected level in parental participation, it is important for schools and teachers
to offer strategies that would meet the preferences of parents (Aktaş Arnas, 2011).
Home visits may be helpful to know and understand the family, child, and culture
of the family (Love, 1996; Weinstein and Mignano, 1993). Findings of this study
support other findings. It was determined that the thoughts and expectations of
teachers who made home visits towards family and children have changed. When
teachers make home visits, parents and children feel better because they assume that
the teacher cares for the children (Meyer and Mann, 2006). Interviews showed that
mothers would be happy with teacher visits, and that home visits would lead them
to feel like the teacher cared for them and their child.

Another result of this study was in comparing the mothers’ living periods in
Tarsus. Mothers who lived there for a longer time for more willing to participate in
parental participation activities in school and were involved in different parental
participation activities. Mothers who had been born and raised in Tarsus or lived
there for a long time and had been blended with the area were willing to come and
go to school and had no problems communicating with the teacher. However,
mothers who had recently moved to the region were only communicating with their
close relatives, and they were not communicating with the school as they were not
used to the language and culture. Additionally, these mothers saw themselves as
different from other mothers and believed that the behaviours of teachers were
different. In the literature, it was found that immigrant parents who had no idea
regarding school activities for their children had an effect on participation (Poza,
Brooks and Valdés, 2014). Additionally, the huge gap between language spoken at
home and language spoken in school was a great obstacle in parent communication
(Ladky and Peterson, 2008) and thus should be considered by school management
and teachers. Therefore, it is important for parental participation that school
management and teachers are aware of cultural and language differences of families
and find appropriate strategies to bring parents to be more involved in school
(Tebben, 2017). On the other hand, one of the factors that decrease parental
participation was that mothers were agricultural workers in Tarsus to decrease their
economic problems and contribute to their families. Calzada et al. (2015) claimed
that low socioeconomic levels affects parental participation in school activities;
however, parents can still choose to support their children’s education. As a result,
it would be effective to know the conditions and opportunities of these immigrant
families and determine appropriate parental participation activities.

Another result of this study was that most of the teachers regarded cultural differences as language differences. Only two of the five teachers said that they had parents who did not know Turkish. These teachers indicated that they tried to communicate via a translator, but that this was unsuccessful. These two teachers also made no efforts to learn their language. However, the two mothers who did not know Turkish expected the teacher to speak Kurdish. Because teachers are working to understand language and communication models of the culture of the parents, learning some simple words in that language and using that language for greetings might convey that they care for the culture and values of that family. This could help parents to have positive attitudes towards school and teachers, as well as increase parental participation in their children’s education (Hoş, 2011). In this study, it was found that two mothers who did not know Turkish were not participating in school activities. Additionally, it was found that greeting parents of Kurdish descent in their own language by a teacher of Arabic descent helped communication to be warmer and more sincere. The beliefs and views of teachers may be impacting or impacted from not putting an effort to learn the language of parents that speak different languages. It is important for teachers to evaluate their beliefs and prejudices while working with parents with different language and cultures (Olivos, 2009).

Another result of this study was that parents with different languages and cultural backgrounds have other problems with school participation besides the language barrier. These barriers were found to be that mothers had smaller children and had no one to leave this child with, they needed to work on field, and they were not happy about the attitude of the school and teacher. When the literature was reviewed, it was clear that there are other studies supporting these results (Hornby and Lafaele, 2011; Koçak, 1991; Office of Educational Research and Improvement, cited in England, 2005; Sheldon, 2002). Brandon (2007) stated that cultural and/or language diversity, economic status, home-school communication, teacher-parent interaction, and personal limitations (childcare etc.) were barriers for parental participation (cited in Brandon and Brown, 2009). That the mothers did not feel teachers inviting them for activity participation is another potential barrier to parental participation. The mothers expressed that they were not invited to class activities, but that they would want to participate. It is important for teachers to recognize barriers and expectations of parents, apply different strategies to create appropriate participation opportunities for each parent, welcome parents in the best way possible, and openly express their desire for parental participation.

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Chapter 38

An Investigation of the Attitudes and Opinions of Students about Altruism

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INTRODUCTION

In the literature, behaviors dealt with as loyalty, obedience, personal initiative, courtesy and help are called prosocial behaviors (Smith, Organ & Near, 1983). Altitude, which is one of the most important requirements of social life within the prosocial behavior group, is defined as any kind of behaviors made only for the benefit of others without expectation of interest (Barton, 1986, Batson, Duncan, Ackerman, Buckley & Birch, 1981). Altruism means that the individual spends voluntarily for other individuals in the target group, material assets, time and energy. In this context, concepts such as philanthropy in the moral framework can motivate the individual to volunteer to help them by considering other individuals in the society and can be examined within the framework of "altruism" (Palaz & Boz, 2008).

In the nineteenth century, Auguste Comte (1875), one of the founders of sociology, introduced the concept of individualism and defined it as 'the desire and desire to live for others' for the first time. On the other hand Durkheim; emphasized that altruism is not just a courtesy or help to others (Karadağ & Mutafçılar, 2009). Leeds (1963) said altruism; at least as a result of a voluntary act, which can be a benefit to another individual, and which is not motivated by an individual's expectation of reward. According to Piliavin and Charning (1990), altruism refers to values, preferences and behaviors that are directed towards the needs of other individuals rather than the individual's own needs.

Alturism is one of the concepts that have been studied for many years. Batson and Shaw (1991) describe altruism as an instinctual situation. Those who exhibit altruistic behavior feel good when they perform this behavior. However, for this to happen, he needs to focus on the good of the person who has altruistic behavior. Oliner (2003) distinguishes two categories as alturistic behavior, heroic altruistic behavior and traditional altruistic behavior. Heroic altruistic behavior; when the individual is directed to help the other individual, when the individual must take a great sacrifice or risk, and voluntarily stand by the other individual without expecting material compensation. Traditional subcational behavior is that the
individual exhibits behavior that does not involve high risk or sacrifice. (Karadağ & Mutafçılıar, 2009).

The altruistic behavior with the motivation to help others by thinking aims to increase the well-being of the other without being in any expectation of reward (Topses, 2012). When individuals help others, they are less inclined to look at negative thoughts and are motivated to help because they feel better. Individuals who are happy with the result of their helping behavior, are trying to help again and maintain this situation. For this reason, individuals with a positive outlook are ignoring the personal costs of assistance they are doing. On the other hand, in order to eliminate the tensions in the negative atmosphere, individuals tend towards altruism and exhibit altruistic behavior as an understanding of social responsibility (Batson & Powell, 2003).

It is very important to give positive qualities such as compassion, empathy, motivation and awareness, which are the basis of altruism, in the process of gaining altruism. In particular, compassion-based educational activities that focus on the well-being of other individuals rather than him or herself need to be discovered (Holtzman, 2013). On the other hand, altruism is influenced by many factors such as age, gender, psychological condition and the characteristics of the individual who needs help.

Research findings indicate that altruism and prosocial behaviors increase with age (Benenson, Pascoe & Radmore, 2007; Chou, 1998). It also shows that, in different studies, the psychological state has an effect on altruistic behavior. Individuals with a positive outlook are more likely to be aware of what is happening around them and to help those in need (Baumann, Cialdini & Kendrick, 1981; Bower, 1981; Clark & Teasdale, 1985; Krueger, Hicks & Gue, 2001; Piliavin & Charng, 1990).

Surveys show that altruism is a trait that can be taught (Akbaba, 1994, Kristeller & Johnson, 2003, Batson & Powell, 2003; Shek & Lau, 2006; Jazaieri et al., 2012). It is very important to learn the concept of altruism that contains such important values. Social learning theorists also argue that ethical principles centering on self-sacrifice for the well-being of others are learned through modeling, imitation and reinforcement (Mercin, 2005). The purpose of this study is to examine the attitudes and opinions of students about altruism.

MATERIALS AND METHODS

Research Model

Research model is mixed method. Mixed method is defined as collecting quantitative and qualitative data mixed method and analysing them mixed method (Creswell, 2006). Survey model and Phenomenological design were preferred Survey model is used to identify people’s attitudes, beliefs, values, habits, thoughts (Mcmillan & Schumacher, 2001). which is one of the qualitative research approach was used while examining the opinions of students about altruism. Phenomenological designs aims to investigate phenomenologies that we do not realize well in our mind (Yıldırım & Şimşek, 2011).
Population and Sample
The accessible population of the study consists of 11-14 years old students in Buca, İzmir. The study was conducted with 190 students. Sample units are selected from easily accessible due to the existing limitations of the money, time and workforce (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz & Demirel, 2011).

Table 1: Demographic informations of quantitative part

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>112</td>
<td>63,3</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>65</td>
<td>36,7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>177</td>
<td>100,0</td>
</tr>
<tr>
<td>Class</td>
<td>5th class</td>
<td>77</td>
<td>43,5</td>
</tr>
<tr>
<td></td>
<td>6th class</td>
<td>50</td>
<td>28,2</td>
</tr>
<tr>
<td></td>
<td>7th class</td>
<td>28</td>
<td>15,8</td>
</tr>
<tr>
<td></td>
<td>8th class</td>
<td>22</td>
<td>12,4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>177</td>
<td>100,0</td>
</tr>
<tr>
<td>Education level of mother</td>
<td>Primary school graduate</td>
<td>56</td>
<td>31,6</td>
</tr>
<tr>
<td></td>
<td>Secondary school graduate</td>
<td>80</td>
<td>45,2</td>
</tr>
<tr>
<td></td>
<td>High school graduate</td>
<td>34</td>
<td>19,2</td>
</tr>
<tr>
<td></td>
<td>Under graduate</td>
<td>5</td>
<td>2,8</td>
</tr>
<tr>
<td></td>
<td>Post graduate</td>
<td>2</td>
<td>1,1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>177</td>
<td>100,0</td>
</tr>
<tr>
<td>Education level of father</td>
<td>Primary school graduate</td>
<td>30</td>
<td>16,9</td>
</tr>
<tr>
<td></td>
<td>Secondary school graduate</td>
<td>76</td>
<td>42,9</td>
</tr>
<tr>
<td></td>
<td>High school graduate</td>
<td>54</td>
<td>30,5</td>
</tr>
<tr>
<td></td>
<td>Under graduate</td>
<td>14</td>
<td>7,9</td>
</tr>
<tr>
<td></td>
<td>Post graduate</td>
<td>3</td>
<td>1,7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>177</td>
<td>100,0</td>
</tr>
</tbody>
</table>

The frequencies and number are given according to the participants’ gender, class, education level of mother, education level of father.

Table 2: Demographic informations of qualitative part

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13</td>
</tr>
<tr>
<td>Education level of mother</td>
<td>Primary school graduate</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Secondary school graduate</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>High school graduate</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Under graduate</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13</td>
</tr>
</tbody>
</table>
The list of students participated in qualitative part are given according to gender, education level of mother and education level of father. All students are 8th grade students.

Instruments
Altruism Scale
Scale was developed by Ersanlı & Çabuker (2015). Scale has 20 items. In the analysis, Cronbach alpha reliability coefficients were calculated to determine reliability of the tool and it was, 76. The scale has preference level: from 1 to 5.

Altruism Interview Form
Demographic characteristics of the participants were asked first and questions are:
- What are the characteristics of a good person?
- Do you share what you have with other people? What are these?
- What does “doing good without interest” bring to you?

Analyses
SPSS 17.00 program was preferred. Independent Samples T Test and Kruskal Wallis were used for analyzing quantitative data. Qualitative data is analyzed by content analysis. Content analysis reveals codes and categories from raw data (Patton, 2002). For validity and reliability; interpretation of the data involved the participants’ own direct statements (Ratcliff, 1995).

RESULTS
Quantitative data analyzed and results were found:

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>S.d</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altruism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>112</td>
<td>79,7857</td>
<td>9,60239</td>
<td>1,79</td>
<td>.08</td>
</tr>
<tr>
<td>Male</td>
<td>65</td>
<td>77,0154</td>
<td>10,46795</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attitudes of students about altruism dont differ according to gender (p>.05).

<table>
<thead>
<tr>
<th>Class</th>
<th>N</th>
<th>Mean ranks</th>
<th>X²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altruism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5th grade</td>
<td>77</td>
<td>115,54</td>
<td>50,10</td>
<td>.00</td>
</tr>
<tr>
<td>6th grade</td>
<td>50</td>
<td>85,88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7th grade</td>
<td>28</td>
<td>42,04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th grade</td>
<td>22</td>
<td>62,98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attitudes of students about altruism differ according to class (p≤.05). 5th grade students have the highest altruism points and 7th grade students have the lowest
Table 5. Students' Attitudes about Altruism According To Education Level of Mother

<table>
<thead>
<tr>
<th>Education level of mother</th>
<th>N</th>
<th>Mean ranks</th>
<th>$X^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary school graduate</td>
<td>56</td>
<td>92.88</td>
<td>6.53</td>
<td>.16</td>
</tr>
<tr>
<td>Secondary school graduate</td>
<td>80</td>
<td>86.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td>34</td>
<td>97.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under graduate</td>
<td>5</td>
<td>46.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post graduate</td>
<td>2</td>
<td>42.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attitudes of students about altruism don’t differ according to education level of mother ($p>.05$).

Table 6: Students' Attitudes about Altruism According To Education Level of Father

<table>
<thead>
<tr>
<th>Education level of father</th>
<th>N</th>
<th>Mean ranks</th>
<th>$X^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary school graduate</td>
<td>30</td>
<td>102.27</td>
<td>9.17</td>
<td>.06</td>
</tr>
<tr>
<td>Secondary school graduate</td>
<td>76</td>
<td>93.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td>54</td>
<td>84.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under graduate</td>
<td>14</td>
<td>56.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post graduate</td>
<td>3</td>
<td>67.17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attitudes of students about altruism don’t differ according to education level of father ($p>.05$).

Qualitative data analyzed and findings are as follows:

Table 7. Opinions of Students about Characteristics of a Good Person

<table>
<thead>
<tr>
<th>No</th>
<th>Categories</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Helpful</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>Honest</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Understanding</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Decent</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Humble</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Tolerant</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Devoted</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Respectful</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Reliable</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Generous</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>Fair</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Merciful</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Full of love</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>Outspoken</td>
<td>1</td>
</tr>
</tbody>
</table>

14 categories were found in content analysis. Most repetitive category was “helpful.” “Honest” was repeated 6 times. The least repeated categories were “understanding, decent, humble, fair, merciful, outspoken”.
Table 8. Opinions of Students about Sharing What They Have With Other People

<table>
<thead>
<tr>
<th>No</th>
<th>Categories</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pencil</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Money</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Dictionary</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>Clothes</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>Food</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>Information</td>
<td>1</td>
</tr>
<tr>
<td>7.</td>
<td>Love</td>
<td>2</td>
</tr>
</tbody>
</table>

All students said they always share their possessions. 7 categories were found in content analysis. Most repetitive category was “food”. “Pencil” and “money” were repeated 3 times. The least repetitive categories were “dictionary”, “clothes” and “information”.

Table 11. Opinions of Students about What “Doing Good Without Interest” Bring To Them

<table>
<thead>
<tr>
<th>No</th>
<th>Categories</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Happiness</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>Friendship</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Peace</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>Respect</td>
<td>2</td>
</tr>
<tr>
<td>5.</td>
<td>Love</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>Reliability</td>
<td>1</td>
</tr>
</tbody>
</table>

6 categories were found in content analysis. Most repetitive categories were “happiness and peace”. “Love” was repeated 3 times. The least repetitive category was “reliability”.

DISCUSSION AND CONCLUSIONS

Quantitative results are as follows:

Attitudes of students about altruism differ according to gender. The research of Ekşi, Sayın & Çelebi (2016) showed that the altruism attitude of female students is higher than the altruism attitude of male students. The higher level of altruism in female students may be due to gender roles attributed to women by society. Attitudes of students in this research about altruism differ according to class. Banbal (2010) has found that there is no significant difference in the altruism scores according to the classes of the nursing students. Some researches (Akbaba, 1994; Kasapoğlu, 2013) stated that class level influences altruism attitudes. Attitudes of students in this study about altruism don’t differ according to education level of mother and father. In the study of Ak (2013), the result is that the mother's work situation is not a variable affecting the altruistic attitude. It is parallel to Banbal's (2010) results.

Qualitative results are as follows:

14 categories were said by students about characteristics of a good person. Most repetitive category was “helpful”. The second most frequently repeated category was “honest”. The least repetitive categories were “understanding, decent,
humble, fair, merciful, outspoken”. All students said they always share their possessions. 7 categories were found in content analysis. Most repetitive category was “food”. The second most frequently repeated category were “pencil” and “money”. The least repetitive categories were “dictionary”, “clothes” and “information” and they were repeated once. 6 categories were found in content analysis for opinions of students about what “doing good without interest” bring to them. Most repetitive category were “happiness and peace”. The second most frequently repeated category was “love”. The least repetitive category was “reliability”. It would be beneficial for schools to create an atmosphere that supports students' altruism, and at the same time to inform teachers about it. It can also be argued that self-helping and self-mannered behaviors are effective in increasing students' attachment to the school and contributing to their achievements. It can be said that encouraging children to volunteer activities at an early age will contribute to their growth as altruist individuals in the future.

REFERENCES


program in Hong Kong: Project PA. THS (Positive Adolescent Training through Holistic Social Programs). *Journal of Basic Education, 15*(1).


INTRODUCTION

From the moment when the infant is born, the infant struggles to explore the surrounding and continue her/his life. Even if her/his needs are fulfilled by the caretaker, she/he has some sensors that ensure her/his openness to stimulants against the outside factors. Eyes, ears, tongue, nose, and skin, which are sensors for senses, help infant to define the outside world by receiving stimulants from outside (Santrock, 2016). Infants, who use knowledge gathered through sensory receptors, begin composing their own notions along with the brain and nerve development and they develop these notions related to their surroundings (Piaget, 1969; Staley, 1997). Interpretation through senses helps infant to define herself/himself and her/his surrounding. However, sensory receptors do not interact with every stimulant and they are selective when they perceive the surrounding (Gibson, 1966). Senses are grouped as eyesight, hearing, taste, touch, depth, and movement. According to the Turkish Language Association (Turkish Acronym TDK, 2017), the sense is the skill to perceive the data received from outside world through eye, ear, tongue, nose and skin receptors. In other words, the sense is the process started by stimulating the sensory receptors and perception is a deliberative awareness against these stimulants. Senses enable infant to explore her/his surrounding and thus learn and to stay away from factors that might hurt herself/himself. Sensory development begins before the birth and continues all along childhood. Due to the physiological growth of brains of the newborn infants, their skill of processing the sensorial knowledge develops continuously. Having said this, stimulants coming from the surrounding contribute to the sensorial development. By working together, senses help infant to interpret the world. Aside from the fact that the sucking and swallowing moves of a infant while sucking milk are in a harmony, she/he focuses on stimulants such as the face, intonation, body odor and milk taste.

When the literature is reviewed, there are many classifications concerning senses. Ayres (2005) discusses the system of senses in three groups: senses related to touching, senses related to balance and movement, and deep senses. Starting from these senses, he composed the sense completion theory. Sherrington (1906) composed four distinct classifications: proprioceptive, exteroceptive, enteroceptive and teleceptive. When the other studies are examined, it is seen that senses are classified into two groups: specialized and general (VanPutte, Regan and Russo,
Senses that have receptors spreading to the most parts of the body are named general senses; senses that are specialized in some structures that are limited in certain organs are named as specialized senses. Aristo, on the other hand, gathered senses under five headings: eyesight, hearing, olfaction, tasting and touching (Johansen, 1997; Gregoric, 2007). However, when the recent researches are examined, it is seen that in addition to the five senses, deep and motion senses are also cited (Casler, 2002; Aktümsek, 2012; Ayres, 2005). In perceiving senses and processing the gathered information, receptors that sensory nerves are tied and sensory center situated in cerebral cortex perform their duties. Sensory receptors are categorized as to their places and stimulant kind. Sensory receptors are exteroceptor, interoceptor, teleceptor and proprioceptors according to their places. Chemical, mechanic, heat, pressure, light and pain receptors are receptors according to their stimulant kind (Moller, 2003). These receptors help infant to interact with her/his surrounding and gather information related to her/his body through transmitting the stimulants that they took from the outside environment to the concerned part of the brain.

Although infants are born with sensory receptors, the fact that adults support the infants to use their senses contributes to the cognitive, language, social, emotional and psychomotor development (Berk, 2015; Santrock, 2016). Aside from these, if there are problems in the processing of senses (or in sense processes), this can affect social, cognitive and sensorimotor development in infants and late childhood (DeGangi and Greenspan, 1989; Dunn, 1997; Greenspan, Wieder and Simons, 1998). The growth of a infant can be with work in harmony of the senses coming from eyesight, deep sense and vestibular systems aside from enough motor development. Development of sense organs can show a variance of time. A baby is born with olfaction and eyesight not well developed. These senses show development in relation to organs’ development. The sense of touch is an important tool to learn during the first days of the infant. Especially the oral parts help to recognize the surrounding and her/his body by touching. Way of recognizing the surrounding in relation to motor development, is realized using hands, eyes, ears and nose altogether transcending using solely the oral part of the infant.

Sense development is affected by factors such as premature birth, development of the brain, stimulants from surrounding, sex (Berk, 2015; Santrock, 2016). In a study conducted with premature babies in the 28th week, it is found out that their sensory processing skills are low. Sense completion intervention program was applied to these infants and after the intervention program, an amelioration was seen in their sensory processing skills (Pekçetin, 2015). Detecting the disorders in sense development in the early period and supporting these disorders is also important in infant’s interaction with the environment aside from the infant's development fields. In the literature, the two senses that were added have been stressed rather for infants with special requirement at the same time five basic senses along with deep and motion sense are also mentioned. These senses are among the senses that are necessary to be developed also in infants displaying normal development. The fact that motion and deep sense work with touching and eyesight in a body, effect directly infant's skill to establish successful interaction
with herself/himself and her/his surrounding (Emmons and Anderson, 2006). Aside from balance and manipulative motion skills development, deep and motion sense constitute an important place in development of especially locomotor skills such as infant's crawling, walking with help and standing properly. In order for these skills be developed, supporting proprioceptive and vestibular senses for infants is a necessity. In the study, in addition to the five senses, development of proprioceptive and vestibular senses in the infancy period are also dealt with. When the literature is examined, it is seen that sense development and education studies in Turkey are carried out less in infancy period (Çelik, 2016; Pekçetin, 2015), more in three-year-old and over (Koyuncuoğlu, 2017; Yazıcı, 2013; Balhel Tekin, 2005). Development of senses starts before the birth and continues after the birth. Since the infancy period is the growth period when learning with sense is more common, it is called also as affective period (Piaget, 1953). For this reason, studies related to sense education should be started in early period and these studies must be increased. The aim of the study is to examine the development of senses which has an important place both in affective period and other development periods and to present suggestions for supporting senses in terms of playing facilitator roles in infant’s development.

**Sense of Sight**

When the baby is born, eyesight is the least developed one compared to other senses, since eyehole and muscles belonging to eyes are not developed enough. Focusing and recognizing sensitivity display improvement in time in newborn babies (Berk, 2015). Eyesight and a infant recognizing her/his surrounding follow a line from center to outside. First of all, infant strives to see her/his hands and feet. Along with gaining focusing and recognizing sensitivity, she/he starts to recognize adults and objects situated around her/him. Many researches have been conducted concerning sight of infants. Development in time of visual acuity, adaptation, visual space, focusing, watching, color view and shape perception, from the birth of the infant are revealed with these studies. Infants focusing on an object using their sole eye starts with the birth; focusing on an object starts after two to three days after the birth (Gallahue, Ozmun and Goodway, 2014). Nevertheless, infants start carrying the objects to the focal point from two months (Banks, 1980). Their visual accuracy reaches the span of a normal adult when they are 6 months to 1-year-old (Cohen et al., 1979). The fact that space that infants can see by immobilizing their eyes widens in relation to development of central and peripheral systems is revealed (Aslin and Salapatek, 1975; Cohen et al., 1979). In order for the infant to follow an object in motion, her/his eye movements are fast and short or slow. Fast eye movements enable infants to chase the objects. This fast eye chasing is gained nearly after the second week (Aslin, 1984). Gaining low speed chasing starts with the end of sixth week (Aslin, 1981). It could not be revealed from the studies whether the level of infants’ perception of colors and recognition of colors from each other are the same as adults. However, infants tend to react to intensity of colors rather than hues (Gallahue, Ozmun and Goodway, 2014). Infants shape perception is revealed with reactions such as preferring to look at objects and faces.
longer in the studies. In the studies, it is seen that infants showed interest in human faces, they preferred especially their mothers' faces to other strangers (Fantz 1961; Bushneil et al., 1989). Infants prefer less complex visuals instead of visuals comprising detail and complexity due to their weakness in their sight skills at the beginning; however, after the second month, closely related to development, they start showing more interest in visuals with more contrast and detail (Brennan, Ames and Moore, 1966). They start to recognize details in these months and they become more sensitive to contrasts in complicated motives (Gwiazda and Birch, 2001). With their study, Meltzoff and Moore saw that newborn babies can imitate adult facial movements such as opening mouth, bottom lip and sticking out one's tongue. Hand skills such as infant's comprehension of an object, reaching out an object, etc. via knowledge through seeing are developed with repetition/imitation (Meltzoff and Kuhl, 1994; Nagy et al., 2005). Therefore, adults providing an opportunity for infants to imitate have an important place in gaining a skill.

**Suggestions for Supporting Infants’ Sight Sense**

Soaps with colors in the bathroom can be used in order to develop infants' eyesight. Toys with bright color, blinking light or feature to reflect light (can also be wrapped with aluminum foil) and mobiles can be situated on the infant's eye level. Balls with bright colors can be stuck to the infant's bed. Also, a mirror to be situated in the bed can have the infant watch her/his own movements. Light tulles, feathers or balloons that can move easily with the wind can be placed to space where her/his diaper is changed. Lamps that reflect light to the wall that can draw her/his attention when she/he is put to bed at night. We can talk to the infant by coming closer or moving away. We can read books comprising colored figures by showing them based on the fact that her/him able to sit. Toys such as cars, animals that move, make different sounds or music that the infant can follow with his/her eyes by turning her/his head and moving her/his body can be used. Naming activities can be made by showing pictures that are hung on the wall one by one. Activities such as looking at illuminated, different and colorful shop windows, promenade in a lake where there are ducks and geese can be made (DeGangi and Greenspan, 1989).

**Sense of Hearing**

Ear, as the receptor of hearing, completes its structural development before the birth and by this, hearing begins before the birth (Gallahue, Ozmun and Goodway, 2014). Ear, the organ for hearing, starts growing from the fifth week of the pregnancy and all hearing structures start working on the 24th week (Berk, 2015). It is revealed in the studies conducted with fetuses that hearing starts long before the birth. It is distinguished that fetuses on 33-41th weeks recognize their mothers' sound from strangers and they react to their mother's sound (Decasper et al., 1994; Kisilevsky et al., 2003; Lee et al. 2007). It is seen that the infant reacted to the stories made listened/read in their mother's womb (Decasper and Spence, 1986).

Along with the drainage of amnion liquid at the moment of the birth, ear starts hearing more clearly. After the birth, infants show that they pay attention to the
sounds by turning their head or eyes to the outside stimulants. Talent of establishing where the sound comes, reacting to the sound volume, tone and duration starts with the birth (Gallahue, Ozmun and Goodway, 2014). Sensitivity to sound increases with the growth. While infants' threshold for sensitivity ranges between 40-60 dB in the newborn, in the first year of life this threshold increases gradually. She/he can have difficulty to hear sounds; in order for the hearing be realized, sound frequency should be higher (Moller, 2003; Cone Wesson and Ramirez, 1997). Skill of the infants to perceive a sound is tied to the duration of the sound along with the sound frequency. Infants can have difficulty to hear the sounds that last short (Clarkson et al., 1989). Infants do not make sense of any sound they hear. They react to the incoming sound by turning their eyes and/or head help them to explore their surroundings (Berk, 2015). Infants can make also auditory selections at hearing such as in seeing. They may prefer human sounds to other sounds more. Even if this is not their mother, they may select the language of her/his mother to the sounds they are more familiar with vis-à-vis other languages (DeCasper and Spence, 1986; Mehler et al., 1988; Moon, Cooper and Fifer, 1993; Nazzi, Bertoncini and Mehler, 1998; Spence, 1996). Newborn babies may not yet recognize their fathers' voices (DeCasper and Prescott, 1984) while they prefer and recognize their mothers' voices (DeCasper and Fifer, 1980). They may prefer female voices to male voices (Giovanelli et al., 1990). In addition, infants, differently from adults in perceiving registers, prefer higher register since their sensitivity to lower register is lower. Infants gain the ability to recognize registers towards the end of the second year (Aslin, Jusczyk and Pisoni, 1998).

Speaking that parents carry out towards the infant can be more effective and remarkable for the infants due to its prosodic characteristics such as ton, vowel sounds, pause (Fernald, 1985). This mutual interaction between the caretaker and infant is an important factor in speaking perception and it urges the infant to speak. Infants pay their attention to the speaking people. In a study, it was seen that mothers looking at their faces without speaking causes infants to feel disturbance and cry (Weinberg and Tronick, 1996). Even when they are born a very short time ago, infants can detect where the sound is coming from. Nearly in five-six months their ability to establish the place of the sound, listening by preferring one to the other develops (Saffran, Werker and Werner, 2006). In a study conducted with four month-old infants, it was seen that infants could match the faces and voices that were given with each other (Bahrick, Netto and Hernandez-Keif, 1998). Very high and very low frequency sounds which do not belong to people may cause special reactions in newborn infants and can affect their emotional conditions negatively (Hutt et al., 1968). Repetitive auditory stimulants such as heartbeat, sounds with fast rhythm and lullabies have tranquilizer effect on infants (Tulloch et al., 1964). Between four and seven months, infants pay attention to musical transitions, intonations and rhythms. In a different study, it was seen that they preferred Mozart pieces which have regular melodic, harmonious and rhythmic structure instead of songs with unstable intervals (Krumhansl and Jusczyk, 1990). Infants on nearly seven months and more can perceive the temporal structure and measure of music. They can distinguish tunes with different rhythmic orders from one another.
Suggestions for Supporting Infants’ Hearing Sense

Various sounds with prosodic characteristics can be used in order to develop hearing sense of infants. Infant’s stimulation can be urged through musical toys with repetitive sounds and high tones. Music with different rhythms can be played while taking bath. Activities such as making the infant look at the direction where the sound comes by calling her/his name from various parts of the room or making her/him listen to the sound from below and over where the infant lies down. Time can be given and after that the other question can be passed to as if we are waiting for answers from her/him by posing questions in order to develop her/his abilities to react to questions. Various animal sounds can be said by stressing or extending with high and low register. Exercises such as clapping or finger clicking with different numbers twice or thrice consonant with the song being listened. Sounds that come out by urging the infant to squeeze the sere with her/his hands can be listened. Materials that produce sounds such as stone, branch, marble can be hit to one another by adults. Small rings, wrinkled newspapers and bags that produce sounds can be put in pillows or blankets. Using musical instruments such as xylophone, herringbone, drum can be urged. Poems, songs, rhymes and stories can be read by using rhymed words. Similar sound production activities can be conducted with the infant by listening to sounds such as bird sounds, car horn sound, leaf sound during jogging in the nature. Dancing with the infant consonant with the rhythm by playing a song is also an option (Moyes, 2010).

Sense of Taste

Tasting warns concerning poisonous food, helps to arrange food selection and generally taking nutrition. It is related with flavor lines and parts of the brain that control hunger. Infants use tasting obviously in searching the world and infants' mouths are important source of knowledge in learning physical characteristics of objects. Taste bud starts being formed at the 8th week of pregnancy and sense of taste is formed at the 14th week (Casler, 2002). Therefore, the newborn come to the world with the ability to distinguish various flavors. Researchers saw that newborn infants show facial expressions different and similar to adults when different materials are placed on their tongues (Crook, 1978; Steiner, 1979; Rosenstein and Oster, 1988). This shows that infants can distinguish five distinct tastes - sweet, sour, hot, salty and neutral – with facial expressions. They show different special reactions to every taste such as bottom lip to a sour taste, relaxation to a sweet taste and generally smiling, opening mouth to a hot taste (Steiner, 1979). Some tastes might cause different effects on infants. In a study, it was seen that her/his cries and heartbeats diminished and calmed down when a taste comprising sweet is given to infants that face circumcision or from whom blood from heel was taken (Blass and Hoffmayer, 1991).

Infants reveal their taste preferences with longer and slower sucking (Blass and Ciaramitaro, 1994). When infants are newborn, they prefer sweet to salty, however this preference starts changing after the fourth month. This period coincides with
the passage to solid nutrition (Santrock, 2016; Berk, 2015). Tasting sense can be affected by heredity (Makin and Porter, 1989) and experience (Porter and Winberg, 1999). In the recent studies it is revealed that sense education has positive effect on arranging eating habits of infants and children (Popper and Kroll, 2004; Reverdy et al., 2008).

**Suggestions for Supporting Infants’ Taste Sense:**

In order to develop infants' tasting sense, food comprising different tastes (vegetable, fruit, spice etc.) suitable to the month group can be used. After six months, teat can be sunk into yogurt, vegetable soup, fruit pastes can be given to the infant. Nutrition to be given to the infant must be given one by one, without being mixed. Saying the name of the food that is put to mouth helps infant to make a taste-name classification. Tooth biscuits, macaroni and carrot can be made try to the infant based on the teeth period. Foods with different smells can be given. Name is told by making smell the fruit and then tasting practice can be carried out (Moyes, 2010).

**Sense of Smell**

Just like many animal species, humans also use smell in order to recognize and define the other humans. Although the organization of taste's central neural system has many similarities with other sense systems, smell's neural system is different from other systems from many aspects. Smelling ways have strong and direct reflections on limbic structures. Therefore, smelling displays an important effect in emotional, sexual and other fundamental physical functions (Moller, 2003). Just as tasting, smelling is also one of the soonest developing senses. Beginning from the moment of birth, infants can distinguish between liked and disliked odors (Case, Repacholi and Stevenson, 2006). They can shake their heads to both sides in order to avoid the source of the odors and disliked odors (Rosenstein and Oster, 1988). Smelling sense which helps them to go on their lives enable them to avoid from foods (rotten) with malodor (Lipsett et al., 1963) and to prefer their mothers' smell/liked (nutrition and affiliation) (Cernoch and Porter, 1985). Newborn infants prefer sweet and saltless liquids to other tastes and this enables them to suck breast milk (Trawick Swith, 2014).

In nourishment of infant’s early development, smelling and tasting are important senses in their eating and distinguishing their family members from strangers. Moreover, smelling and tasting are protective senses. They help continuation of trust by providing acquaintance and by means of this acquaintance defining foods for nourishment for the infants. Infants can distinguish their mothers’ odor from other women and infants just a couple of days old prefer their mothers’ odor to other women's odor. That female children prefer more than male children reveals the differences of olfaction sensitivity between sexes (Doucet et al. 2007; Porter and Winberg, 1999; Rattaz, Goubet and Bullinger, 2005). Some odors help decrease of negative feelings that infants experience. In studies for a infant, who experiences pain or stress, to calm down, it is seen that the odor of breast milk of her/his own mother is more effective than odor of other mothers' breast milk or odor
of fast infant food (Rattaz, Goubet and Bullinger, 2005; Nishitani et al., 2009; Badiee, Asghari and Mohammadizadeh, 2013). In another conducted study, infants who took bath with lavender flavored oil are calmer and they fall asleep more easily (Field et al., 2008).

**Suggestions for Supporting Infants' Smell Sense:**

In order to develop infants' olfaction, odor sacs (sharp and soft), fruit, spice and flower odors can be used. When taking bath, the infant can be made smell different soaps with odors such as rose, lavender. Odor-name match task can be done by making her/him first smell then telling its name. She/he can be made smell herbs such as rose, lavender, linden, mint that are picked from the garden or forest (Einon, 2000).

**Sense of Tactile**

Touching gives information on temperature, pressure, shape, dimension and fiber through stimulants it receives from the skin. It starts to develop before the birth. Neural system develops at the third week of pregnancy and following it sensory nerves develop on the 9th week. On the 20th week of the pregnancy, fetus becomes sensitive to touching and heat. Newborn babies are born sensitive to pain. Since circumcised infants are too young, anesthesia is not applied to them. Therefore, that infant feels the pain is seen through reactions such as heartbeat, blood pressure and muscle strain (Warnock and Sandrin, 2004). Sensitivity of the touching system at birth shows itself in the reflexive reactions of newborn babies. Reflexes such as searching, sucking get the infant to survive as helping infant's nourishment. Reflexes reacts against touching. Especially areas such as circumoral, palms, soles are sensitive to touching. In palm touch, infant holding the caretaker's hand, provides a positive interaction between mother-father and the infant (Trawick Smith, 2014).

Physical contact between the newborn babies and their parents can provide a reassuring sense. System of touching sense makes one feel hot/cold, sharp/plain, rough/smooth. It helps infants to find objects by touching and distinguishing them. Infants can distinguish the heat change and they can react to fibers on the surface of fabric of dresses and blankets or bed and ground (Emmons and Anderson, 2006; Berk, 2015). Tactile stimulants contribute positively to the emotional development by means of providing stimulation or appeasement of the infants. Establishing interaction by touching of the caretaker contributes to the development of emotion regulation skills of the infant (Weller and Feldman, 2003). Parents use physical contact in order to establish a sensitive bond with their newborn babies. Nevertheless, this physical contact that infants establish with their infants can show cultural differences. For instance, African mothers do their daily household while their infants are tied to their bodies and therefore they are in a more physical contact with their infants (Small, 1999; LeVine and LeVine, 1988).

Touching sense has an important function in perceiving herself/himself and her/his surrounding. When touching, as a tool to explore is used along with other senses, perception of objects takes place. Eight month-old infants identify shapes
and fibers through touching the objects (Sann and Steri, 2008). Until the maturation of eyesight, infants perceive their surrounding via touching and smelling. In the periods that eyesight is not developed completely, infants can recognize their mother through touching. In a study, it is seen that while infants one to four days old can recognize their mothers by touching, mothers can also recognize their infants by touching (Kaitz et al. 1992).

**Suggestions for Supporting Infants' Tactile Sense:**

Fibers of various surfaces can be used in order to develop infants' touching sense. Infant can be made touch the picked leaves' surface. Infant can be encouraged to play materials having various fibers and softness such as potty putty, water, sand, sponge by touching and squeezing. Touching blankets and books can be used. A touching book, by sticking animal pictures to a hard board or taking colored prints, by putting soft fabric or feathers on specific places of these pictures, for the infant can be composed. In order to provide tactile stimulation, massage can be done to the infant. Walking on bare foot exercises can be done on walking stones, soil, grass, water. The infant can be provided with the opportunity to feel the fiber of the blanket via sitting on a blanket with soft feature, touching with hand, leg or head, rolling or she/he can be given the opportunity to play with plush toys with mat, polar, satin, silk fabric (Einon, 2000).

**Sense of Proprioceptive**

Proprioceptive sense, which is the strength to perceive the body in a location (perception of body's position- proprioception), informs where the body's parts are to the concerned location of the brain and gives information as to how much power is to be used. It works with other senses. Proprioceptive sense is composed of the merger of many signals coming from sensual signals that are received from the skin in addition to signals transmitted from knuckles and muscles, eyesight and vestibular system from the inner ear (Emmons and Anderson, 2006; Birmingham et al., 2001).

Mechanoreceptors comprise the proprioceptive sense and touching sense. It is on the skin and ear. Signals coming from these mechanoreceptor neural crests are gathered at the central neural system. All of the stimulants gathered here are named as proprioceptive sense, also known as proprioception/position. Proprioceptors (location receptor), which are enabling the body to be stimulated from within the body, are located in the muscle, knuckle and the vestibular part of inner ear and they are triggered by body movements. After the information on the conditions of knuckles, tendons and muscles being perceived and interpreted in the central neural system, how the movements are going to be is transmitted to the knuckles and muscles (Aktümsek, 2012). Information taken with the help of muscles, knuckles and tendons enable the body to perceive the location and parts (Bundy, Lane and Murray, 2002). Proprioceptors, along with the input taken from eyesight, touching sense and vestibular system, help infants to crawl, lean and walk. They support many talents such as standing without falling to the ground, walking, sitting on the chair properly, jumping, leaping, pencil holding, arranging hugging pressure
Problems encountered in proprioceptive sense might cause the risk to fall down (DeMott et al. 2007). In the studies conducted, it is seen that the proprioceptive sense is negatively affected as a result of injuries and there is a loss of proprioceptive functions (Lepart et al., 1997; Swanik et al., 1997). In addition, there is a decrease in postural control skills. In the soft tissue damage that compose the knuckles, receptors that are there are effected. Proprioceptive sense receptors show faster adaptation by means of suitable exercise programs, compose a more sensitive message and enable a more balanced movement composition in the knuckle (Ashton Miller et al., 2001). In order for the proprioceptive sense to be reactivated, musculoskeletal system must gain its functions completely. Except for the infants who show normal development, there can be insufficiencies in disabled infants' big and small muscle systems. They have difficulties to understand the awareness concerning the body position in which they are. For instance, in children with autism spectrum disorder, problems such as frequent falling, maladjustment of limbs while dressing and undressing, inability to carry something heavy (Fazlıoğlu, 2004).

Suggestions for Supporting Infants' Proprioceptive Sense:

In order to develop infant's proprioceptive sense, activities such as lifting weights that are worn on hand, foot, waist and back or making the infant play with balls that have various weights and plush toys, creeping, getting to know the body by naming, games of ground direction finding can be conducted. Infant can be given the opportunity to crawl under the table, in the wardrobe and on the bed. One can help the infant to jump on the ground by holding from her/his waist. Exercises of walking with barrow, small trolley can be carried out. Activity of creeping between two lines that are drawn on the ground can be conducted. The infant can be encouraged to play with pushing and pulling toys by applying different powers such as rope and car. Activities such as riding bicycle suitable to her/his age of development. Tasks of getting on and off on/to toys that are small and on which one can get on, stairs covered with rug can be conducted (Emmons and Anderson, 2006).

Sense of Vestibular

Sense of vestibular (movement) is also named as vestibular system input (Casler, 2002). Inner ear, which is a part of vestibular system, comprises the balance receptors. Besides, it organizes some sense organs and works with other organs. Balance receptors are located in the inner ear which is composed of semicircular canals, utricle and saccules (Aktümsek, 2012). Vestibular system oversees the counterbalance of the body to the gravity and preserves it; it arranges body positions such as turning, accelerating and slowdown. Vestibular system transmits to the brain where the human's body is, what it is doing, what is necessary by interacting with proprioceptive system (Eliot, 2000). Vestibular system coordinates eye and head movements, body to understand where it is in the space and body movements. It helps one to equilibrate, ride on a swing, coordinate both sides of the body, stand properly while sitting and walking, catch the body while
falling. That vestibular sense works properly gets one to move forward gradually and properly on development levels. Infant’s crawling, standing up by holding to a furniture and standing, moving forwards all along the furniture, walking without holding anything is closely tied to her/his vestibular sense work together with other senses. It conveys some movement activities to the cerebral cortex by blending information coming from eyesight and touching, by this means body's position and modifications in body's position are perceived. Development of both eyesight, proprioceptive and vestibular senses go together. Development of senses effects one another's development. Besides, more than one sense can be used altogether. That infant sees the distance to the armchair and sits without falling down by perceiving the location of her/his own body in the space takes place by proprioceptive and vestibular senses working together (Emmons and Anderson, 2006).

Vestibular system starts to develop from the fifth week of the pregnancy. Fetus reacts to the movement stimulant on nearly the tenth week. Vestibular organs complete their development on the 20th week of the pregnancy. Balancing function and movements continue to grow after the birth. Gaining competencies such as head control, standing, walking orderly and language skills with respect to spatial development, vestibular system is an important sense for the infant (Eliot, 2000). Vestibular sense shows change during the whole life. Balance problems are seen especially in the infancy and senility (Magarinos, Contreras and Varela Nieto, 2014).

Suggestions for Supporting Infants’ Vestibular Sense

In order to develop infant's vestibular sense, infant can be swung rhythmically on parents' knee or on mother's bosom. Infant can be encouraged to turn right or left by putting toys (sound, color etc.) that can draw her/his attention from where she/he lies. In order for her/him to balance, tasks such as crawling on the balance board, on various cushions can be conducted. Walking by holding and by putting together the furniture activity durations of infants can be increased. Pull-push toys that support her/his walking can be used. Tools with different jumping dimensions can be used by holding the infant by the adult. Music that get her/him to dance can be used or the adult can be taken as a model. Game of riding horse on the other adult's back by being held by the adult can be played. In order for her/him to establish balance, tasks such as walking on balance board and walking stones and standing can be conducted. She/he can be swung on swing, hammock or lap. Her/his skills of using balance and coordination by using body socks can be developed (Kranowitz, 2005).

Consequently, infancy is named as the period when the building blocks of life are being composed. A newborn baby strives to continue her/his life by using her/his senses and to explore her/his surroundings. That infant gains the skill to rule her/his movement and body in relation to her/his development, enables her/his interaction with herself/himself and her/his surrounding to increase. This interaction is tied to the healthy development of senses and brain and the arrangement of environments with rich stimulants and that these senses to be stimulated. Supporting the senses starting in the prenatal period contributes to the cognitive, psychomotor, language, social and emotional developments of the infant. While
adults support sensory development, they should pay attention to take the necessary security measures during the application and to applying activities by using various materials with a view to especially infants' development levels. It can be suggested that sensory education programs, in which various senses are embraced including deep and movement senses and which are to be prepared practically, be widely extended especially in the infancy period in the future.

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Chapter 40

Investigation of Richard Bach’s Work Named Seagull
Jonathan Livingston in point of Elements Given in Daniel Goleman’s Study “Emotional Intelligence”12

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INTRODUCTION

Embodied with language material; “the main theme of literature which aims to express emotions and thoughts, human and social life in an effective, beautiful, striking way; is human. Every literature work introduces human to human. Reflects the relations of human with human, human with himself/herself, human with nature and social environment (Özdemir, 1979: 7-9).” Literature, which reflects the realities of the social life in an artistic style, is also an important means of transcending social, cultural and moral values. While virtues such as justice, friendship, generosity and kindness are inspired by the heroes who represent these concepts, the difficulties of life and ways of coping with these difficulties are tried to be given to the reader in the fictional plane. In addition to its contribution to the education of values, "Literary products have a great share in the establishment and development of a human emotion world (Uygur, 1975: 156-158).” It is through such works that many more senses such as love, fear, jealousy and sadness are closely recognized, affirmative sentiments are adopted and destructive ones are tried to be restrained. In recent years, emotional education begins to take part in textbooks as an achievement; has become supportive in the relationship between literature and education. “In addition, the word "edeb", which is the root of the word of literature and which means 'nurture = education', clearly shows the connection between the two disciplines (Kavcar, 1999: 2).”

As Eyupoğlu (1989: 76) indicated in Turkish education derived from verb stem eğ-, eğ(mek), which means, bending, practice, teach, nurture, develop, dominate, vanquish, crush, break, direct and in general described as “the process of changing and evaluating the behavior of the person at will, (Sönmez, 1996: 43)” real purpose is to give humans a proper shape. Here “shape” means “personality”. According to Kavcar’ (1999:4) personality, is one of the most discussed topics in education today. The development of the individual according to his/her own tendencies and abilities is important in terms of personality development in choosing the way he will follow according to the new circumstances he/she is facing in life:

The value of literature in terms of education is to give people various examples of hearing, thinking and acting. This is the only way

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a person gains the freedom to choose the way that suits him in such an environment. Even reading a single novel is enough to show us how different people are in terms of character structure, social status, emotion and thought. In a good novel, a person acts according to his personality traits (Kavcar, 1999:4).

The difference in hereditary and environmental factors underlying the personality reveals individual differences and personality in the natural process; because "Personality is regarded as the whole of the physical, mental and spiritual features that distinguish man from others (Köknel, 1982: 23).” In every man's own attitude, behavior, feelings, and thoughts; learning perception is at the base of their talents and skills. “Intelligence” comes first at the beginning of the things that makes learning easy or hard. “The concept of intelligence, defined as "the ability of the mind to learn, to benefit from the learners, to adapt to new situations" (Dönmez, 1997: 173), is directly or indirectly related to human-based specialists. Over time research and developed perspectives have led to the conclusion that success should not be limited to academic intelligence. Psychologist Howard Gardner is one of the head architects of this concept. In Gardner’s work “Frames of Mind” (2004); argues that human beings must be viewed in a multifaceted way by challenging the classical sense of intelligence that thinks only verbal and mathematical-logical predisposition is enough to succeed in life. Gardner tries to examine the educational effects of multiple intelligence theory through the measures developed from biological and anthropological evidence. The thinker who says that it is important to reveal the intellectual profile of an individual from an early age, argues that correct use of this information will improve opportunities and options in the educational life of the person. The types of intelligence that Gardner sees as the cause of individual differences and defines each separately are linguistic intelligence, logic-mathematical intelligence, space intelligence, musical intelligence, bodily-kinesthetic intelligence and personal intelligence. Personal intelligence, divided into two as introverted and extroverted intelligence. The relationship between people and others, and their intelligence for their behavior, their emotions, is defined as personal intelligence, while the inner intelligence, which is the gateways of one's own world, is expressed as:

“Inner intelligence means that a person can enter his own emotional life; to be able to see the differences between these feelings, to give them symbolic codes and to understand and direct their behavior (Gardner, 2004: 344).”

As Gardner points out in his work on Mind Frames, the ability to express himself in interpersonal relationships and empathically communicate with his inner self with the inner intelligence that distinguishes basic emotions such as pain and happiness from each other and classifies and expresses the most complex mixed emotions (Aydın, 2001: 242) briefly known as "personal intelligence". This concept is directly related to the expression of emotional intelligence, which is laid down by John Mayer and Peter Salovey (Goleman, 2007: 11) and is widespread with Goleman. By putting his teaching on a scientific basis, trying to explain the effects of emotions on human psychology with neurological findings, Goleman explains that the plural intelligence, while accepting that the theory is fundamental; this
theory suggests a superficial approach to expressing emotions:

In Gardner's reviews, there is a roughly cited, but slightly researched dimension of personal intelligence: the role of feelings. Perhaps the reason for this is that Gardner's work, as he told me, was heavily influenced by the mind's cognitive-science model. Although Gardner's personal intelligence portrayed the role and skillfulness of emotions quite a lot Gardner et al. did not look at the role of effect on intelligence in detail, but on cognition about emotion (Goleman, 2007: 69-70).

The basic idea that Gardner aimed to realize with Goleman's "Emotional Intelligence", which links the psychological model of the time that shapes his views of the cognitive elements of personal intelligence; that man forms a unity with the mind and the emotion; how emotional intelligence can be taught and improved, as well as academic intelligence, emotional intelligence should also be considered:

We have two minds, two brains, and two kinds of intelligence, to be rational and emotional. How we live is determined with these two minds. - not only IQ, but also emotional intelligence. In fact, intelligence can not work efficiently without emotional intelligence ...

We are not trying to put intelligence instead of sensation like Erasmus, but trying to find the intelligent balance between the two. The old paradigm contained a mind ideal that is independent of the attraction of emotions. The new paradigm is forcing us to maintain mind-heart harmony (Goleman, 2007: 57-58).

Gardner, in his same work; with admitting that he does not refer to human psychology, stated that his theory intersected with this field in some ways and that it was not formed on a completely separate platform, argued that the theory of multiple intelligence is not established to complement research fields such as social psychology, personality psychology, disposition psychology, effect or emotion psychology or character development.

The types of intelligence seen as the product of an understanding that saves the boundaries of man's nature from narrow molds; to be transformed into actions and gain meaning; one has to want for the goal which he/she primarily directed. This desire is a strong voice that enables her inner world to reach its destination. It is not enough to be equipped with skills to achieve success. The desire to exhibit these talents and the desire to enjoy it are also important.

This suggests that emotional intelligence triggers other types of intelligence; leads to an inner world full of peace and happiness; helps to have an outer world focused on success and built with solid ties. According to Tarhan (2011: 22), having emotional qualities opens the doors of happiness and success. The marriage and friendship of such people who are at peace with life is also good. The optimists who choose to compromise with people, the ones who persevere in the face of difficulties, the ones who do not refrain from problem solving and the high adaptability skills are emotionally intelligent.

When considered from this point of view, it can be said that the emotional intelligence skills are believed to be the keys of success and happiness for human
life, as well as strengthening social relations, contribute to personality and social integrity.

The teaching of emotional intelligence is built on the word "emotion" belonging to humanity and thus universal in nature. Goleman, in his theory, first tries to connect the role of emotion with the etymology of the word "emotion".

In fact, all feelings are the impulses that enable us to move on; evolution has programmed us to make an urgent plan so that we can cope with life. Motere is the root of word emotion (duygu). When the prefix "e" is introduced in the Latin word meaning "movement", the meaning becomes "move away", which gives the idea that every sensation leads to an action (Goleman, 2007: 32).

According to Goleman (2007: 32-257), emotional intelligence, which is described as self-empowerment, to be able to keep going despite the inconveniences, control the urges, regulate the mood, do not allow obstacles to stop thinking, being able to put oneself in the place of others and to feed hope, is built on its own perceptions and relationships in social life and is a characteristic winner. There are researches that can explain this in the light of neurological findings. The work of LeDoux separates itself from others by putting the amygdala in the center.

Amygdala (from the word meaning "almond" in Greek) is an almond-shaped mass of human interrelated structures on the brain stem, near the bottom of the limbic ring. There are two amygdalas near the side of the head, one on each side of the brain. Limbic structures carry out most of the brain's learning and recall processes from that day onwards; amygdala is an expert in emotional situations. If amygdala separates from the rest of the brain, there is an incredible inability to evaluate the emotional meaning of events, even a situation called "emotional blindness" will occur (Goleman, 2007: 41-42).

**Purpose**

In this study, the elements seen as the basis of emotional intelligence—Trust, Curiosity, Purpose, Self-Control, Relationship, Communication Ability, and Collaboration—were studied from the work of American writer Richard Bach "Seagull Jonathan Livingston". The author, a pilot in real life, has attempted to identify flight curiosity with the desire to "reach the highest" of an entity created in a fictional world (Seagull Jonathan). Seagull Jonathan Livingston is a book in terms of language, because it translates into many languages, and because of its rich content, it is also a value in terms of education. Looking at the field literature, Demir and Demirel’s (2009) investigations on the language are noteworthy. The researchers evaluated the equivalence relationship between Richard Bach's original text of the "Seagull Jonathan Livingston" narrative and the Turkish translation.

Yalçın Özdílek and Okur (2010) discussed the book in terms of educational philosophy and stated that the statements taken from the book have overlapped with the principles of the restructuring philosophy. According to the researchers, the Seagull Jonathan and the seagulls who followed him developed new flight styles by using what they learned from the past, while other seagulls flew just like ordinary
seagulls to feed their belly; taught them in other ways and thus showed that they are always open to innovations. In this study, the subject of the research was examined in terms of both personal development and literature-education relationship. Research is important in this regard.

**MATERIAL AND METHODS**

"Social events and phenomena in the study were revealed as unchanged. Therefore, a screening model which aims to explain what objects are, concepts are, what events and facts are, and to present current situations and properties as they are, is given (Arslantürk, 2001: 101)". He tried to explain freedom instead of certain limitations; originality instead of ordinary; hope instead of hopelessness and acceptance with empirical examples from some works which he thinks that might contribute emotional skills and emotional intelligence education.

Things described in the work; triggered by curiosity and determination; patience and faith in the achievement of success can be reached is one of the stories. Before proceeding to the examination, the messages in the work will be given. This situation, together with giving information about the subject; the reader will be able to help with the quality of the messages.

**RESULTS**

In the results, the main idea and auxiliary ideas of "Seagull Jonathan Livingston" were given first, and then the work was examined in terms of basic concepts of emotional intelligence.

The work is based on human-human and human-values conflict. Jonathan took his place as a seagull; in reality, trying to tell the people who are trying to go beyond their talents, and who are willing to reach the horizon of success all the time. Although Seagull Jonathan is a unique hero with a different posture and philosophy of life, it does not pass more than a type because it does not have psychological depth. Already at the beginning of his work, the writer said that he dedicated this work to Seagull Jonathans inside of us.

a. **Main Idea**

Despite all the obstacles one must push the boundaries of the talents he/she have and aim to achieve success.

b. **Supporting Ideas**

1. People succeed with perseverance, patience and vigor., 2. Some people may not be discreet in the face of failure, and they may dream of death./ 3. Each creature should give life-war suitable for its nature./ 4. Sometimes being ordinary can also give people peace and happiness./ 5. Thinking differently, being different, feeling different can give people a privileged status./ 6. Satisfying our belly is not the only reason to live. / 7. Life is full of surprises. Sometimes we can face annoying, unexpected situations./ 8. Every success wants to be applauded. We should appreciate the people who achieved success./ 9. Success is achieved by overcoming oneself and reaching perfection./ 10. If nothing has been learned from the past, the next life will be the same as before./ 11. Numbers set boundaries; good, perfect has
no bound./ 12. Heaven is learning and perfection./ 13. When the man realizes what he/she is doing, he/she always succeeds./ 14. Mankind should not neglect love./ 15. The highest flying seagull is can see the fairest./ 16. It is a virtue to forgive those who do evil to themselves and to extend their helping hand to them./ 17. Teaching makes it necessary to descend to the level of the learner./ 18. We must get rid of the chains of our thoughts and bodies./ 19. Freedom is the nature of mankind. The tradition of restricting freedom, superstition, limitations ... should be left./ 20. The right law will lead us to freedom. This freedom is like being no other; that is, "being yourself"./ 21. It is necessary to reach the awareness of the learned with intuition, not with eyes./ 22. Life is based on good and evil (God-Devil)./ 23. Learning and teaching don't have an age. Teaching becomes even more meaningful if it leads to the assets that they need.

As you can see, the work is based on a strong main idea and rich helpful thoughts that support it. In addition, it has many elements to contribute to emotional intelligence.

An Analysis of the story Seagull Jonathan Livingston in terms of Daniel Goleman's “Emotional Intelligence”

Goleman supports these items (2007: 256), each of which is related to emotional intelligence, with a report from the National Center for Clinical Infant Programs (Heart Start, 1992). According to this report, the determinants of a child's success are largely emotional and social measures of early development of knowledge or reading ability. Almost all children who fail at school are missing one or more of these emotional intelligence elements. The emotional skills that children will later acquire are based on what they received in the first years and form the basis of everything learned. According to the author, these concepts, which provide a kind of emotion structure and determinant in the individual's later life, are important in terms of the individual's personal and social integrity and express that education should start from the heart, not from the head.

Trust

Daniel Goleman wants to tell with the word “confidence” both the confidence to oneself and others. This concept means; "Knowing that the person controls and dominates his body, his behavior, and his world; the child is more likely to succeed, and the belief that adults can help him (Goleman, 2007: 257)”; is an internal force that allows one to overcome obstacles in front of others and achieve their goal. Richard Bach’s in his work Seagull Jonathan Livingston, it seems that this value is also emphasized.

Jonathan, the main hero of the work, has a different personality than any other seagulls around him:

Most seagulls only fly to find food, leave the beach and return again. They do not try to learn anything other than that, there is nothing they want to learn. The only meaning for them to fly is to be able to feed their bellies. Whereas for seagull Jonathan flying is important, not the food. Seagull Jonathan loved the flight with great passion (Bach, 1997: 11-12).
At first, his desire to fly to higher heights and deeps results in disappointment, and this situation hurts his self-confidence. According to Hambly (1997: 73) mankind can fail in different areas of his life. This situation makes the individual lose self-confidence. The frustrated self in every business he has entered has to ask firstly the reasons for his failures. Maybe he is not the right person for the job or he can not perform the desired performance. Knowing these things does not hurt self-confidence even if it does not change the end result.

Failure that leads to despair in the mood of the hero, after a while, helps him to recognize his own nature and achieve his consciousness. Jonathan decides to be an ordinary seagull in the herd. This makes him feel good. Compromising his goals has helped harmonize with the outside world, but he could not recover from the voice of his own conceit. Because escape, resentment and acceptance are emotions that have no place in its nature, and the desire for success in the heart of Seagull Jonathan has not yet been fully extinguished. The hero begins his flying studies again due to his belief in his own self and eventually breaks the flight record he desires. His success story, which uniquely captures his source, also contributes to bringing important lessons about life at the same time:

There are a lot of reasons to live. There are reasons to live other than routine, boring circulating around fishing boats. We can break our ignorance, find ourselves using our skills, talents and intelligence, we can be ourselves (Bach, 1997: 25).

Seagull Jonathan Livingston has also found himself with self-confidence, patience, faith, and effort. Being aware of "self-discovery", or self-awareness, is the basic principles of emotional intelligence. According to Altular (2007: 22), who has worked on emotional intelligence, it is self-conscious that people can read and recognize their own feelings, have a solid understanding of their own values and talents, and understand the difference between feelings and movements.

**Curiosity**

The second step of emotional intelligence is the concept of "curiosity". According to Daniel Goleman (2007: 257), this feeling, which means "feeling that finding something is a positive and enjoyable experience," has driven the history of humanity. Thanks to the curiosity, mankind that lives in the cave and continues his life with hunting and gathering; reached the depths of space and improving the quality of life with various technological tools. Success is the result of the curiosity for the achieved.

Seagull Jonathan Livingston is always curious about the desire to fly to higher heights and what experiences he can do with it. One of the topics that the hero is curious about is; if seagulls fly in the dark or not. As a result of long efforts, he finally finds the answer to his question:

Short wings! The short wings of a falcon!

Here is the answer! Of how stupid I am. The only thing I need is small wings. All I have to do is stick my wings to the body and just fly with my wing tips. Short wings! (Bach, 1997: 22).

Jonathan, clinging his wings to his torso, rising only with wing tips,
raises his hourly speed to five hundred from two hundred feet. But he is not very pleased with this situation, because he cannot perform acrobatic movements in high-speed dives, and also cannot break speed. It is inevitable that he hit the fishing boat or the seagull crowd over the road. Young hero; spend his days thinking about how to turn at high speed without any life-threatening and failure. Flight experiments and learning on the subject helps to answer questions in his head.

**Pursue a Goal**

"Goal" is an important qualification for emotional development, which means "to persevere to live a life with the desire and ability to make an impact, make it persistent" (Goleman, 2007: 257). Pursuing a goal, in other words "self-motivation; to gather emotions in the direction of a goal, to be active, to be self-sufficient, and to be competent for creativity. People with this skill are productive and influential in their work (Altılar, 2007: 64)."

There is also concern and anticipation of the cultural touch that people have in their personal preferences in their orientation towards specific goals and realizing them. The outside world sometimes shields its norms while extending its helping hand to an entity that wants to transform its goals into reality.

The hero who realizes his talents and realizes his existence with the belief that he has succeeded, finally gets happiness and peace. He wants to share the peace he acquired in his inner world with people around him. Hero; in this direction, begin to give flying lessons to his friend Seagull Fletcher and others who cannot enjoy flying at highs but desire it so much. First; the seagulls who think that it is impossible, live with the happiness and proud of reaching perfection from their fear and worries by their teachers' encouraging words. Thus; belief, respect, confidence in an individual's self; causes to blow wind of peace in the inner world and directs towards the friends.

The most important thing in each of their lives is to overcome themselves and to excel in flying their loved ones more than anything else. They were all amazing birds. Every day they spent all their time trying out the methods they developed and doing flight studies (Bach, 1997: 55).

**Self-Regulation**

According to Goleman (2007: 257), "self-control", an inner experience, is to adjust and control his own movements in a manner appropriate to his or her age. This concept is directly related to self-consciousness, because good supervision requires knowledge of the properties of existence. Restraining negative feelings such as anger, jealousy, hate, arrogance, and correct mental states with self-consciousness. People with this mechanism are usually those who are aware of their weak and strong sides and know what they want. They are masters of their emotions, not slaves. The odds of making mistakes and fail are lower than those who do not. So it is not the burden of regret and conscience penalty; they carry a source of happiness that takes its source from inside peace and shines around it.

Like Seagull Jonathan Livingston, Seagull Fletcher is sentenced to loneliness
and exclusion by other seagulls on the council because he does not want to seek food for days but to fly at higher altitudes. During the time he is separated from the seagull herd, he comes to a fairly good level, pushing the boundaries of his ability to fly. But he cannot erase the injustice that his herd has made to him, and he says will make terms with them in one day.

Seagull Fletcher was also removed from the herd because of a simple handicap, and was left alone with his loneliness. It is a sign that you are able to overcome feelings of anger and hate as you face many negative situations such as injustices, being misunderstood, being disappointed, being mocked ... and being able to cope with emotions by being optimistic, from pessimism to optimism, from jealousy to appreciation.

Seagull Jonathan, the main hero of the work, helps his friend to shake him from such negative emotions:

Do not be so cruel to them Seagull Fletcher. Other seagulls have only hurt themselves by excluding you from the herd and believe that one day they will understand. One day they will see what you see. Forgive them and help them understand the truth (Bach, 1997: 65-66).

**Forging Relationships**

Humans are social beings. Depends on being able to become a good son, student, friend, mother, father, citizen, manager and establish good and solid relations with other people. Although these relationships are first given in the family, they are tried to be developed with school, friends, business life. “Forging a relationship, defined as "being able to understand others and connect with others with that feeling" (Goleman, 2007: 257), is an important value for both individuals and society. It is possible to see reflections of the importance of forging relationships.

Other seagulls in the herd; they do not give the right to defend Seagull Jonathan, who finds the concepts of learning, discovering, freeing the meaning of life instead of catching fish like their own, and clearly states that they cut ties with him. Seagull Jonathan, who had to leave his own herd, never falls into despair and helplessness. Elsewhere he thinks there will be seagulls who will understand him at another time and justify him. Optimistic thoughts help him to achieve his goal by fundamentally building strong relationships:

In the days to come, Jonathan realized how much more he learned about flight in the world he had left behind, so he also had to learn it here. But there was a difference; the seagulls here were thinking like himself ... They were all magnificent birds (Bach, 1997: 55).

**Communication Skills**

Daniel Goleman's sixth key item on emotional intelligence is “communication ability” derived from the Latin word "communicare"; the main aim of communicating with others is communicating information, sharing information, spreading, generalizing to the majority, ensuring everyone's sharing and utilization, giving everyone a share (Köknel, 2005: 34-375).” Through this
talent, they can convey emotions and thoughts to others, and it is understandable that what they want to give. There are many means of communication. The most important of these are talking and using body language. Supporting the words used with appropriate gestures and mimics adds a dimension to the quality of communication to embellish with beautiful values such as love, peace, respect, and courtesy. Two other important aspects of this dimension are tolerance and empathy. Tolerance defined as “To endure and accept to be different or accustomed; respect and attention to people who are strangers to us with their appearance, thoughts, and way of life (Pighin, 2005: 88)” and empathy that means feeling like someone else for a while; ties the hearts that are stiffened by the cold winds; ie understanding and empathy; opens to the door to friendship. Thus, a healthy communication that is filtered out of the virtues and is carried out in accordance with the language possibilities, enables the emergence of healthy relationships, and therefore individuals who are able to understand each other and succeed in empathizing themselves with others.

Unlike seagulls trying to find food all day around fishing boats, Jonathan is struggling to fly higher, dive well and control his wings. However, the Seagull Council does not seem satisfied with this situation; his different actions and attitudes are perceived as breaking the law.

"Seagull Jonathan Livingston," said the President. "Come out in front of your friends' eyes, to give the answer of your disgrace"

With this recklessness and irresponsibility, you acted against the traditions and customs of the Seagull Family, and dishonored us, "he said, (Bach, 1997: 32).

All the seagulls that make up the Council, instead of admiring Jonathan's achievements, they finish their brotherhood and excludes him. However, Seagull Jonathan is not only about satisfying his hunger; he lived for his purposes, his dreams, his aspirations, and finally succeeded in discovering the boundaries of perfection. Even though the reaction and punishment of those who do not think like him or do not want to understand hurts him, the young hero is quick to shake out of this situation and continues to work to learn, to discover, to be free.

It is seen that after a long encounter, the hero has finally raised the curtain of solitude through his new friends who understand him and approach each other with the language of love. Seagull Jonathan is now with people who hear the voice of his heart and respect the philosophy of life. Chiang, despite his advanced age, is the best flying seagull of the herd. Stating that there are no boundaries of perfection, suggests to young seagulls that they should go for good. Sharing experiences, encouraging declines to overcome obstacles, raise him to a beloved and respected position in the eyes of other seagulls.

**Ability to Cooperate**

Cooperation: “Within a group of activities, the ability to balance others with their own needs (Goleman, 2007: 257)” is actually a skill based on mutual trust and good intention. Sharing responsibilities and fulfilling obligations is the basic principle of this team, called team or group work. Eight friends whom Seagull
Jonathan was in, left the herd because they did not obey the rules, where they know they should not go back where they were fired; they take a bold decision and go back. The fearless and self-confident attitudes of these eight friends, who face up to about eight thousand seagulls, cause a great confusion among the seagulls who have taken their fronts against them:

“If we struggle, we will need each other more there than here …”

The group cut the monotonous hustle and bustle of the daily life of the herd like a giant knife. Eight thousand seagulls watched them without even blinking. One by one, the eight of them landed at the beach, jogging around the seagulls that seemed dead. As if it were part of an everyday event, Seagull Jonathan immediately went on criticism of the flight (Bach, 1997: 78).

CONCLUSIONS

With his book Mind Frames, that there are other intelligence besides verbal and numerical intelligence; Gardner, who defends that the skills and abilities of the individual should not be confined to classical intelligence alone, indicates that the child needs to be multifaceted. Emotional intelligence concept based on inner intelligence: entered our lives with Daniel Goleman's wide-reaching work; at the same time, it has become the subject of psychologists, educators, and researchers as the product of this understanding that makes people out of compressed patterns. This concept has been taken into the curriculum of many countries:

“What is most pleasing to me is that this concept has been adopted by educators as part of "social and emotional learning" programs (SEL / social and emotional learning). In 1995, I found only a handful of such programs that taught children about emotional intelligence skills. Ten years later, tens of thousands of schools around the world offer children social and emotional learning. In 2002, UNESCO initiated a worldwide initiative to promote the SEL and sent a declaration of ten basic principles for the implementation of SEL by the education ministries of 140 countries.”

In his work, Goleman evaluated his world in the light of scientific findings; aims to give children the bases of emotional intelligence by combining mind and heart while trying to explain what emotions mean by intelligence combining and how it can be.

In this study, human skills - trust, curiosity, goal-perseverance, self-control, relationship building, communication ability, cooperativeness-are explained individually, which is the source of other existing talent and the core of emotional intelligence and these principles have been tried to relate to the personality of Seagull Jonathan Livingston as well as to what he lives. People with emotional intelligence generally recognize “... their own feelings and thoughts well, evaluate themselves, and succeed in creating goals. Successful when they work alone. They respect themselves likes to think about themselves, they have a specific and realistic goal. Successfully expresses feelings and thoughts clearly. They like being alone
and their freedom.” (Titiz, 2005: 68) based on the examination which expressed by these sentences; It is possible to say that Seagull Jonathan overlaps with Livingston's spiritual portrait.

One is the concept of emotional intelligence that plays a role in helping to build good relationships with others by preparing them for their life, by enriching their life skills by recognizing their emotional needs, by recognizing and correctly naming their emotions, by managing their feelings well and by emphasizing themselves with others, it can be seen as a rising value in personality development and in social relations as well.

Kavcar's "Literature and education are two complementary, interrelated areas in dealing with human and human societies. Because both literature's and education's topic is people. (1999: 2)” there is a strong connection and interaction between these two disciplines centered on human beings; because heroes at work become models for the reader with their observations, emotions and thoughts.

As a result of the inevitable interaction of the literature and education field, these concepts, which are thought to constitute the basis of the emotional world of the subject; it is possible to say that it will contribute to the skills in this area by responding to the emotional needs of the person.

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Chapter 41

Preschool Children and Problem Solving

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INTRODUCTION

Problem is defined as an obstacle encountered by individuals in the process that they undertake in order to attain their target or to move to a preferred environment or condition (Bingham, 1983, p. 2; Öğülmüş, 2004, p. 4). People constantly seek solutions to the problems they come across in order to gain self-knowledge and establish positive relationships. Problem solving is a behavioral and cognitive process in which differences between the present situation and desired target are perceived and effort is made to remove these differences (Öğülmüş, 2006, p.10).

Problem solving is the basis for learning at early ages. Hence, it is important to provide children with relevant skills such as forming cause-effect relationships, scientific thinking and problem-solving. Development of problem-solving skills at early ages will facilitate children’s adaptation to real life and ensure that children can solve their own problems in the future through reasoning (Zembat & Unutkan, 2003, p.225).

Human beings can produce solutions to problems through the power of thinking. Thinking is the act of making inferences and linking concepts and propositions (Duman, 2009, p. 353). It is necessary to improve children’s thinking and problem solving skills since they do not yet possess the ability to think like adults. The first step to get children accustomed to thinking is to have them come across problems where they can use thinking skills. When children encounter a problem situation, their minds start to work and their thinking abilities come into play. The most effective method to develop children’s problem solving skills is to realize the problem solving steps correctly during practices. Otherwise, it would be inefficacious to avoid practicing problem solving with children and leaving them alone to face problems that they have not experienced before. Like the skills acquired with the help of others such as writing and painting, thinking and problem solving skills can also be learned with the help of others (Binbaşioğlu, 1995, p. 308-309).

Problem solving for pre-school children is not a new concept or a new field of study. Problem solving is a lifelong necessity which is related effective direction towards desired results (Griffin, 2005).

Interest and curiosity are seen as important factors in problem solving. Thus,
problem solving helps children to adjust to their surroundings. Almost every day individuals face various problems. Failing to solve problems can create a sense of inefficacy that hinders learning in some individuals. Children’s problem-solving abilities develop better in environments where their curiosity is supported, their thoughts are discussed, their emotions are taken into consideration and their personal needs are met. Children who live in such environments and feel the positive impact of problems solving skills in their lives begin to realize the necessity of problem solving skills in various settings and in different situations (Bingham, 1983, p. 87).

Problems are likened to games in a sense and the reason for the emergence of problems is related to the sense of enjoyment people get from solving them. Problems encountered in real life usually appear as obstacles that get in the way of individuals (Adair, 2000, p. 34). Problem solving has benefits to people who are good at solving problems. Problem solver can take precautions by foreseeing some problems, solve problems more easily and quickly, experience less stress when solving problems, have more control over certain points of life, and have increased personal satisfaction and confidence. Problem-solving process must be well understood and analyzed to gain the ability to produce different solutions for different situations (Stevens, 1998).

Since problems are seen as cases that need to be solved, problem-solving process is regarded to be important. Problems in the educational process are considered as important learning opportunities for children. Children’s academic self-perceptions develop as they produce solutions to existing and potential problems. As is the case in many approaches, school based theoretical knowledge can be reflected to social life based on realistic foundations with the use of case study, discussion, project, reasoning, problem based approaches. It is necessary to form hypotheses, produce solutions and solve problems in order to ensure effective, active, logical and accurate problem solving (Duman, 2009, p. 441-445).

Children explore and develop their skills through opportunities that allow problem solving. Children should be encouraged to find solutions to the obstacles they encounter rather than waiting for someone else to make decisions. Thus, children have the opportunity to use their knowledge, skills, understanding and needs while solving their problems. Problem solving is a method that helps children to learn how to use internal and external resources. Problem solving accelerates the development of the children’s abilities, self-esteem and self-confidence (Bingham, 2004, p.12). Using problem solving strategies improves behavioral adaptation and peer relations for children and may be beneficial in emotional development of the child (Shure, 1981, p.158-160).

While describing the problem solving model in preschool classes, Britz (1993) notes that young children can solve problems both individually and as a group. However, he believes that problem solving as a group is more important for young children because more ideas can be generated in this environment. Gaining mastery in problem solving requires the following sequential steps. These steps are:

- Defining the problem
- Brainstorming about various solutions
• Selecting a solution and testing it
• Evaluating the results.

In general, the most difficult one among these steps is problem identification. The problem that needs to be solved for Bill who is crying about the fact that "Alice has pushed him," is not his friend’s action but the reasons underlying this action. Hence, causes should be taken into consideration in problem solving rather than their effects. Brain storming provides practice for children in communication, negotiation and cooperation skills. It is important for children to express their individual ideas in a community. By selecting and testing a solution, children develop empathy, reach consensus and share responsibility for decision. By evaluating the problem-solving process, they evaluate their choices and mistakes and have the authority to make independent assessments of their work (Britz, 1993).

One of the main objectives of pre-school education programs is to improve children's creative thinking skills. Inclusion of problem solving in preschool education programs supports the formation of a training program free from prejudice. Children learn to stand up to unfair treatment against themselves and others with the help of problem-solving skills that they have acquired. Once this approach has been established, it is ensured that children will act comfortably even in situations where they feel uncomfortable (Dinwiddie, 1994).

2013 Pre-school Education Program prepared by the Ministry of National Education includes problem solving among the learning outcomes and indicators under cognitive development field.

Learning Outcome 19: Produces solutions to problem situations. (Indicators: Expresses the problem, suggests various solutions to the problem, selects one of the solutions, explains the rationale for selecting the specific solution, tests the selected solution, selects another solution when the previous selection fails, suggests creative solutions to the problem) (MEB, 2013, p. 70). The fact that problem-solving is defined as a separate learning outcome in pre-school education programs in Turkey shows that problem-solving skills have a significant place in both the education policy of the country and educational goals to train advanced individuals.

Zembat and Unutkan (2003) list the benefits of using the problem-solving approach for children as follows:
• Using the problem-solving approach provides opportunities for children that motivate them to solve problems.
• Children experience uncertainty when they begin to solve problems and this uncertainty leads them think about decision-making, predicting, and investigation. This can lead to increased curiosity, exploration, research, etc. in children.
• Using the problem-solving approach ensures active participation of the child.
• In this approach, children have lengthier perception and retention.
• It allows children to acquire methods of solutions that can be used in the future.
• It improves children's sense of responsibility.
• It ensures that children learn as a result of engagement and motivates them.
• Children learn how to think independently in order to obtain results.
• As children produce alternative solutions, they become more inclined come
up with unordinary solutions.

Children may need time to solve their problems. During this time, the child has the opportunity to try, retry and repeat the opportunities with awareness (Bullock, 1988). According to Piaget, children better understand what they have discovered on their own. The discoveries in the problem-solving process are also regarded as important tools for children's learning (Britz, 1993). Developing problem solving skills is seen as one of the most important goals of education. For this reason, Erden and Akman (2011) suggest the following for teachers to improve children's problem solving skills:

1. Individuals need to have prior knowledge and organize this knowledge to solve problems. The information that exists in the mind of the individual facilitates problem solving. For this reason, it is important to create accurate schematics for students in teaching concepts and principles.

2. Students’ ability to solve problems quickly and accurately depends on ready solutions to problems they encounter in daily life. Therefore, various different problems should be solved as practice in the educational environment.

3. Problems that will arouse curiosity should be selected to encourage students to solve problems and they should be supported during problem solving to ensure achievement.

4. During problem solving, students should be supported to understand the problems and it should be ensured that students comprehend the relationship between the purpose of the problem and the means to use to attain this purpose (p. 210).

Role of Parents on Children’s Problem Solving Ability

The ability to produce solutions to problem situations includes the processes that are beyond children's basic cognitive competence (Thornton, 1995, p. 1-8). It is very difficult for the child to reach this cognitive competence alone. For this reason, the family factor, which affects children's problem solving skills, has an important place in the acquisition of problem solving skills and habits. According to Erkan (2010), the family is defined as the first educational institution in which children begin to gain their first experiences and start to learn about life, self, and other individuals (p. 41). The most effective guide that accompanies individuals in each step of life starting with their birth is their parents. The family is a small community that acts as a bridge between the child and the society and it is the most effective institution that provides children’s adaptation to society from the time of birth. During early childhood, the children spend the majority of their time with their families. Therefore, parents have an important place in their children's learning and they are the first and most important educators in their children’s lives. In terms of child development, parents usually set up activities to improve their children’s problem-solving skills by taking into account their ages, learning and developmental levels. In such cases, parents will decide whether an activity is defined as a 'problem' for their children and will use their knowledge about their children's abilities in these areas to expand or limit their children's knowledge and
Parental impact on children’s problem-solving skills can start at any stage from children’s viewing a situation as a problem to producing solutions. Children who have a more limited control on their surroundings compared to adults can especially be limited at younger ages in their ability to select and to influence outcomes. For instance, a child who attends a pre-school institution may be able to select a toy to play, but in the evening the same child may not be able to extend his play time beyond what is allowed by his/her parents. Thus, parents can guide many of the preferences for their children in the home environment. Family characteristics are influential on problem-solving approaches due to children’s inadequacy compared to adults in terms of self-sufficiency. Mothers who focus on the basic needs of their children (for example, nutritional needs or difficulty of care) sometimes may not be sufficiently attentive to their children’s cognitive skills. Family support in solving problems is very important for young children who are largely dependent on the participation of their families (Manassis, 2012, p. 3-29).

Pre-school period is a time when children learn basic concepts, where qualified learning takes place and their development is fast. The ability to come up with solutions to future problems depends on the skills children gain in this period. Therefore, children who acquire problem solving skills during this period will be productive and efficient individuals in the future. Problem-solving skills are also the foundation of learning. Children can focus on a particular topic in the problem-solving process, produce possible solutions, and can form cause and effect relationships. Problem solving allows children to meet their needs and discover their abilities (Erden & Akman, 2011). In addition, individual decision-making skills improve children’s self-confidence by improving entrepreneurship skills, cooperation, mathematical thinking skills, taking responsibility, social leadership, independence and sense of curiosity (MacNaughton & Williams, 2008, p. 311). All these developments take place in accordance with the circumstances and conditions in which children have experienced since birth. For this reason, family environment in which the child is born and raised has an important influence in the acquisition of problem-solving skills.

Individuals’ problems increase as their age progresses. It is necessary to educate individuals in accordance with the current era. Family environment is also an important factor in training individuals. Education provided to children by their families should support children’s cognitive abilities, thinking and inquiry skills. It is necessary to teach children learning to learn, a skill that can be used at the present and in the future, because individuals who learn to learn will have all the knowledge and skills they need to solve the problems they will face in the future.

Individuals are affected by their families since the day they are born. The influence of family on the behaviors of individuals can be attributed to many factors (such as number of siblings, level of educational). It is generally assumed that parents shape the lives of their children. It is known that parents have impact on many variables such as the development of their children, their personality and individual differences (Neyen, 2016). Parent-child interaction that starts with the birth of the child has been the topic of many studies some of which reported...
significant relationships between mother-child interactions and their development and underlined the significance of parent-child interactions (Horodynski & Gibbons, 2004; Mahoney et al., 1998; Ö. Diken et al., 2009). The interaction mother and the child contributes to learning as well as supporting the development of the child. Skills that the children gain as a result of the opportunities offered to them in daily life help them overcome the obstacles they face. Hence, parental interactions with children guide their thinking styles as well and enable them to solve the problems they face.

It is possible to create various learning opportunities in the home environment in order to improve children’s problem-solving skills. For instance, giving children opportunities to stir the food when cooking at home, washing the dishes together, tasting the food and grouping the laundry will provide various experiences in problem solving by presenting problem situations. For this reason, parents should be able to transform any household objects into learning materials for children (Aydoğan, 2006). Therefore, the guidance provided by parents is important for developing children’s problem solving. Every object in the home environment and every situation that occurs can be turned into a learning opportunity.

According to Gordon, the biggest mistake parents make is to assume responsibility for their children's problems and resolve them on their behalf. Parents often unnecessarily undertake their children's problems, adopt and solve them themselves rather than letting their children come up with solutions. This causes dependence in the children and they cannot improve their problem-solving skills (Öğülmüş, 2004, p. 60-61). The children should be allowed to solve problems on their own in problem situations. Parents should leave the sole responsibility for problem solving to their children and only support them in their endeavors. The fact that they may not always have someone to take care of their problems in the future demonstrates how important it is to give children the opportunity at early ages.

The significance of parents in the development of problem solving skills cannot be ignored. Children need supportive relationships with their parents to resolve more complex problems. Parental support should be limited to preparing the appropriate environment that will support their children to solve problems without intervention. When children encounter problems, parents should be able to provide their children with the necessary skills starting from identification of the problem to the details relevant to the solution. Parental support that allows children to achieve something new they have not been able to do on their own previously, is very important in this respect. Such support will give children more improved skills (Thornton, 1998, p. 56).

Parents’ role in the development of good future problem solvers by presenting problem solving experiences to their children, their knowledge and skills, comprehension, competences, attitudes and beliefs in regards to problem solving are crucial. The thinking that underlies the supportive attitudes that a teacher or an adult should have are listed as follows:

- Knowing and accepting that each child may have different problems,
- Believing that the problems children encounter are important to them,
- Recognizing the importance of guiding children in solving their problems,
Believing that different experiences and discoveries are important in solving children's problems,
Knowing that the opportunities created for problem solving and academic progress are not mutually exclusive,
Believing that qualified learning will be achieved through problem solving,
Taking into consideration the developmental characteristics and developmental stages when presenting new problems to children,
Taking individual differences into consideration in regards to problem solving and encouraging problem solving by bolstering children,
Knowing the importance of children's experiences of success and failure,
Being aware of the distinction between problem solving for children and problem solving by children,
Believing in the fact that interacting with parents is beneficial to children in terms of creativity and problem solving,
Believing in the need for constant cultivation of their own understanding and beliefs about problem solving (Bingham 1983,59-62; Casey, 1990; Ömeroğlu, 2012).

Even though children are believed to come to this world fully equipped with problem solving skills, these skills can be learned as well. Therefore, children should regularly solve problems in order to be successful problem solvers. Children are not confronted with problem situations only in the school environment; they may face problems at every stage of their lives. For this reason, parents should feel immense responsibility to help improve their children’s problem-solving skills and support their children’s development in this field (Aydoğan, 2006, Bingham, 2004, p. 50-53).

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Chapter 42

A Study on the Language Skills of Pre-School Children: Story in Dreams\textsuperscript{13}

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INTRODUCTION

The language that forms the basis of social communication is a key element for children in learning by exploring their environment, in acquiring social and cultural values and in expressing thoughts by supporting their cognitive development (Bekir, 2004, Dodson, 1997). Certainly, the ability of children to express their thoughts correctly, to communicate more healthily and to use the language effectively is dependent on having a rich vocabulary (Yağcı, Katrancı, Erdoğan & Uygun, 2012). It shows the importance of language development in early childhood period that it is the fastest period for children's vocabulary development and that children aged 2 to 3 years have vocabulary composed of approximately 1000 words (Kinsler, 2005; Saussure, 1995).

One of the most important factors affecting language development is the social environment being around the child. Babies learn their mother tongue through verbal communication established by their surroundings from, even before, the birth (Berk, 2013; Dağabakan & Dağabakan, 2007; Bayhan & Artan, 2004; Karakuş, 1997). In this case, it is important to talk to the child for his/her language development, and as the verbal stimuli that the caregivers build with the baby increases, the baby's language development becomes enriched. Therefore, language development is delayed in children who have rarely been spoken to themselves and whose caregiver, or mother, has communicated with them less verbally (Yağcı, 2010). Parallely, researches in the literature show that the language development of babies growing up in the social services and child protection agencies is lower than other children (MacLean, 2003; Şahin, 1994). The reason of this is simply the lack of stimulus (Gölcük, Okur & Berument, 2015). Television can also be added to the situations in which the caregivers barely speaking and there is little verbal contact with the baby. Even if they do not speak to their children, parents who think television will provide language development of the child have problems in their

\textsuperscript{13}This study was presented at the 5th International Preschool Education Congress held in Ankara in 2017.
children's language development.

Children’s verbal communication inside and outside the home is important for healthy language learning as well as for their speech development. Most of the adults prefer “baby talk” while talking to their children. Yet, the thing that the baby should learn is the spoken language. That is why, it is important to say the words properly while speaking with children because they determine the baby's language development (Keklik, 2011; Korat, 2009; Hoff, 2006). Moreover, verbal communication with children by using limited words and in a different way than established with adults negatively affects children’s language development. Playing with children and in the meantime speaking to them, giving directions to guide their attention contribute to language development.

Early childhood education and being with the peers in preschool environment positively affect language development. Having a good language development is one of the positive factors that increase the success of the child during the schooling period. Diversity of verbal stimulus, especially provided by the mother apart from the environment, positively affects the language development. The child who has been with the adults for a long time speaks properly. Children growing up in social services show more crying behavior than children growing up in a family environment; but less articulate. They learn to talk later than the others. According to this result, it can be said that personal relationships are important parameters on language development. Healthy relationships among family members, especially the ones between the mother and the child, affect language development positively. The size of the family is also essential in this regard. The only child in the family speaks more quickly and smoothly because s/he is the center of the family’s attention. Encouraging the child to talk, urging him/her to give an answer is important for language development. Talking and playing with children and reading books to them support their language development. Children’s conversations established with the people around them is crucial for their language development. Children’s adult-maintained question-and-answer exchanges enable children to acquire the language structures they do not know (MONE, 2007).

Considering all these features of the early childhood education period, the stimulating environment, the presented toys, educational materials, especially the books are very eminent tools in terms of setting a ground for being an adult (Tür ve Turla, 1999). Children encounter written and visual media from the first years of their lives. Picture books are examples of children’s first experiences associated with the field of literature. For this reason, quality story books prepared by taking children’s age, developmental characteristics, interests and needs into account are very vital educational tools (Tuğrul & Feyman, 2006). Arbuthnot (1964) stated that children's books address children’s needs for achievement, physical relaxation, acquiring knowledge, loving something and being loved, belonging to something or somewhere, development and elegance. (Akt Kocabaş, 1999).

Considering to the fact that the basic habits gained at early ages are influential throughout the life, it is very important for children to meet with books at early ages in order that reading turns into a habit for children and in order for reading success (Gönen et al. 2014; Tanju, 2010; Baker, Mackler, Sonnenschein & Serpell, 2001;
Çakmak & Yılmaz, 2009). Karrass & Braungart-Rieker, 2005, found in the research they conducted that children started to be read from birth were far beyond their peers in language skills. Children in early childhood who do not know how to read and write are introduced to reading activities by their parents, brothers and sisters in their immediate surroundings. Reading a book by the person knowing how to read for a preschooler or a group of preschoolers who do not read, and preschoolers listening what is being read and their joint interactions are described as shared reading (Gonzalez et al. 2013; Hindman, Skibbe, & Foster, 2014). Sénéchal (2012) states that reading together positively affects children's language development, making it easier for children to learn new vocabulary and sentence structures during reading, as books are more complex than the language used in daily life. It has been found out that preschool teachers use story-telling activities in their language activities, preferring communicating with children prior to the story, and asking questions about it after the story in order to examine the strategies of the implication of language activities, aiming to support children's language development (Bay & Alisinanoğlu, 2012, Gönen et al. 2010). As can be seen, teachers usually read stories to children and have various activities before and after reading in order to support the language development of preschool children. In this research with the base of aforementioned ideas, children were asked to explain their imaginary narratives in verbal and pictorial ways, and their stories were examined in depth by content analysis in terms of the protagonist, supporting character, setting, theme and result of them.

**Purpose of the research,**

The purpose of this study is to identify and analyze in depth the original stories of children aged 64-73 months. In response to this objective, the following questions were sought:

How is the fiction (protagonist, setting, plot, result) in children's original stories?

How is the use of language in children's original stories?

**MATERIALS AND METHODS**

In this study, the original stories of preschool children were examined and phenomenology research method, being one of the qualitative research designs was used. Phenomenological researches focus on phenomena that we are aware of but do not fully understand or have an in-depth and detailed understanding (Yıldırım & Şimşek, 2011; Miller, 2003).

**Sample of the Research**

The sample of the study consists of six children, three girls and three boys, who attending an independent kindergarten located in the province of Besiktas in Istanbul. When study groups were created, attention was given to ensure that children were between 64 and 73 months old, non-refugee, or children who had not migrated from any place nearby, had normal development and had no articulation problems. A consent form has been signed to the parents of the participant children, ensuring that in the survey will be done in accordance with ethical principles. The
consent form is a document containing the permission of the child’s parent and the approval of the child related with being a volunteer for the current study. The demographic characteristics of the research participants are presented in the following table.

**Table 1: Demographic information of the participants**

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child age</td>
<td>73 month</td>
<td>72 month</td>
<td>72 month</td>
<td>66 month</td>
<td>67 month</td>
<td>64 month</td>
</tr>
<tr>
<td>Gender</td>
<td>Girl</td>
<td>Boy</td>
<td>Boy</td>
<td>Boy</td>
<td>Girl</td>
<td>Girl</td>
</tr>
<tr>
<td>Sibling</td>
<td>Only child</td>
<td>1 elder</td>
<td>1 elder</td>
<td>1 elder</td>
<td>1 elder</td>
<td>1 younger</td>
</tr>
<tr>
<td></td>
<td>brother</td>
<td>brother</td>
<td>brother</td>
<td>brother</td>
<td>brother</td>
<td>brother</td>
</tr>
<tr>
<td>Mother age</td>
<td>26</td>
<td>38</td>
<td>41</td>
<td>44</td>
<td>38</td>
<td>-</td>
</tr>
<tr>
<td>Edu. of Mother</td>
<td>Bachelor</td>
<td>Bachelor</td>
<td>High</td>
<td>High</td>
<td>Primary</td>
<td>High</td>
</tr>
<tr>
<td>Occupation of Mother</td>
<td>Computer operator</td>
<td>Music teacher</td>
<td>Civil</td>
<td>Computer</td>
<td>Janitor</td>
<td>-</td>
</tr>
<tr>
<td>Father age</td>
<td>34</td>
<td>-</td>
<td>45</td>
<td>Passed on</td>
<td>41</td>
<td>-</td>
</tr>
<tr>
<td>Edu. of Father</td>
<td>High</td>
<td>Bachelor</td>
<td>Associate</td>
<td>-</td>
<td>Primary</td>
<td>Bachelor</td>
</tr>
<tr>
<td>Occupation of father</td>
<td>Worker</td>
<td>Branch</td>
<td>Civil</td>
<td>-</td>
<td>Janitor</td>
<td>Civil</td>
</tr>
<tr>
<td></td>
<td>manager</td>
<td>Servant</td>
<td>Servant</td>
<td>Servant</td>
<td>Servant</td>
<td>Servant</td>
</tr>
</tbody>
</table>

According to the Table-1, it has been seen that the half of the participants were girls, and the half of the participants were boys. When the age range of children was investigated, it has been seen that the youngest was 64 months old and the oldest was 73 months old. When examined in terms of sibling numbers, it has been observed that five of the children were two siblings in total (C2, C3, C4, C5, C6) and the other child was the only child. It has been identified that only one of the children (C6) had a younger brother, and the other four (C2, C3, C4, C5) had elder brothers. Looking at the demographic characteristics of the children’s mothers, it has been seen that the youngest mother was 26 years old and the oldest mother was 44 years old. Regarding the educational status of the mothers, it has been observed that a mother had a primary education (C5), three mothers had high school (C3, C4, C6) and two mothers had a bachelor’s degree (C1, C2). When the professions of the mothers were investigated, it has been seen that they were in different occupational groups such as cleaning staff, music teachers, computer operators and civil servants. When explored in terms of the demographic characteristics of the father, it has been seen that the father with the youngest age was 34 years old and the father with the oldest age was 45 years old. When the educational status of the father was examined, it has been observed that one of the fathers had a degree of primary education (C5), one was with high school degree (C1), one was with associate degree (C3), and the two were with bachelor’s degree (C2, C6). Participant children’s fathers’ occupations were classified as workers, cleaning workers and civil servants. No detailed information was given by the participants since the father of one of the children (C4) died.

**Data Collection and Analysis:** For the collection of qualitative data, The
Semi-Structured Interview Form for The Creation of Children's Original Stories (Appendix-1) developed by researchers was used. The Semi-Structured Interview Form for The Creation of Children's Original Stories was prepared by getting expert opinion and finalized based on feedbacks of the experts. In the interview form, open-ended questions that lead the child to create original stories and allow them to express themselves as they wish were included. The content of the questions was formed in a way that allow the child to build all the elements of the process of story formation himself / herself, which are protagonist, supporting character, setting, the theme, and result. Individual interviews were made with each participant in the study and the answers of the children were recorded with a recorder, at the same time the outline of the story was noted by the interviewer during the recording. Later, the voice recordings were analyzed and converted into written texts. It was aimed to examine in depth the children's original stories gathered via the interviews.

Procedure: Researchers participated as a guest, with the invitations of their teacher, to the classrooms including the children who volunteered to the study. After introducing themselves, the researchers stated their wish to play together and played games for 10-15 minutes with the children. Later, with the approval of the teacher, one of the volunteer children was transferred to an empty room. It was paid attention to the room being quiet and whose door was open. Before starting to the activity, researchers stated to each child that they needed a story and wanted their help for it. Encouraging sentences were directed to them to help them tell the story of their dreams. The researchers asked each volunteer child to tell the story of his/her dream.

The activity started with the question of "What is the name of the story of your dream?" in order for the child to start his own story, and the name of it was created primarily by the child. Then, the answers of the children were collected to the questions about the protagonist, supporting character(s), where the story happened, how it happened and how it was ended (Appendix-1). Each child's original story was tape-recorded during the interview. After storytelling was over, children were asked to create a story book by transforming the story that they had just created into picture(s). With the purpose of making each child create a story book, white drawing papers in different sizes and crayons were offered to them. This process was repeated for six children. Each of the children's paintings were archived by taking their photos.

Analysis of Data

Content analysis was used in the analysis of the data. There are two main reasons for the use of qualitative analysis in the current research:

- It is one of the effective methods for providing data to researchers in the process of examining verbal or written records (Keith, 2005, p. 165)
- It aims to make inferences from the obtained data to grasp social realities (Böke, 2011, p. 343).

Before starting to decode the original stories, children were assigned specific nicknames indicating each of them in a numerical order (for example, C1 for the 1st child and C2 for the second child). Additionally, the stories were also symbolized
(for example, the story of the first child as H1, the story of the second child as H2). Once the numbering process was accomplished, the stories were started to be decoded. Analysis of the children's original stories were conducted under the following headings: the name of the story (Section 1), the protagonist (Section 2), the supporting characters (Section 3), the setting (Section 4), the theme (Section 5). Codes and sub-codes were created related with the subject of each section. The example coding is as follows:

"Adventures of the Rabbit" (C2, H2, 1). "Teddy Bear and Hedgehog" (C2, H2, 3).

(Note: (C2, H2,1). C2: The second child, H2: The second child's story, 1: The name of the story (Section 1).)

Afterwards, the similarities between the children's stories were grouped and the themes were formed accordingly. After the procedure was performed by three different researchers separately, the themes were compared. The inter-rater reliability between the researchers was calculated as 0.85. In cases of differences between viewpoints of them, researchers have reached a consensus by examining the differences in the themes together.

RESULTS

Before starting the analysis of the children's stories, it was calculated how many words each child used while creating the story. The number of words in the stories is presented in Table 2.

Table 2: The total number of words in children's original stories

<table>
<thead>
<tr>
<th>Stories</th>
<th>Total Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>148</td>
</tr>
<tr>
<td>H2</td>
<td>120</td>
</tr>
<tr>
<td>H3</td>
<td>80</td>
</tr>
<tr>
<td>H4</td>
<td>159</td>
</tr>
<tr>
<td>H5</td>
<td>58</td>
</tr>
<tr>
<td>H6</td>
<td>61</td>
</tr>
</tbody>
</table>

When Table 2 was analyzed, it was found that from the first child to the last one, they created stories comprised of 148, 120, 80, 159, 58, and 61 words respectively. Investigating the children's stories, the child producing the story with the maximum number of words created it by using 159 words; while the child producing the story with the minimum number of words constituted a 58-word story.

When the number of words in the stories were examined with respect to their genders, it has been seen that the girls produced stories with 148 (C1), 58 (C5), 61 (C6) words and that boys created stories with 120 (C2), 80 (C3), 159 (C4). Examining vocabulary differences according to gender based on the number of words used by the participants in their stories, it can be said that boys have larger vocabulary.

The analysis of the stories started by examining the titles that children generated. The answers given by children when their stories title was asked to them are presented below:
According to the Table 3, each child gave the following titles: "Fruits and Vegetables" by Child-1 (C1), "Adventures of Rabbit" by Child-2 (C2), "Little Red Riding Hood" by Child-4 (C4), "Polar Bear and Penguin", "Elsa Anna" by Child-5 (C5), and "Elif" by Child-6 (C6). It has been clearly seen that C3, C4 and C5 could not create an original title while the titles of C1, C2 and C6 were formed with a fruit, an animal, or a person name.

When the children were asked their protagonists in their story, the answers they gave to this question are listed in Table 4.

According to Table 4, children (C1, C2, C3, C4, C5, and C6) chose as their protagonists "Watermelon", "Rabbit", "Little Red Riding Hood", "Polar Bear", "The Man (Hero)" and "Father" respectively. It has been seen that the protagonists and titles used by all the participant children were compatible each other. The children were asked who their stories’ supporting characters are. The answers of them are presented in Table 5.

As shown in Table 5, Child-1 (C1) identified "Pear, Carrot, Grape, Orange,
Mandarin, Lemon, Apple, Banana", Child-2 (C2) chose "Bear and Hedgehog" ; Child-3 (C3) thought "Knights, grandmother and wolf", Child-4 (C4) decided "Penguin friends, other polar bears", and Child-6 (C6) determined "Elif, Zeynep" as their supporting characters while the Child-5 (C5) did not identified. When the number of supporting characters is analyzed, all children, except Child-5 (C5), mentioned about at least two of them. It is especially remarkable that Child-1 (C1) specified a total of eight characters with their names, which proves the child’s large vocabulary. Furthermore, it has been seen that all the children, who indicate at least one supporting character, chose characters being compatible with the titles in the story and having similar features with the main character. Another question directed toward children was related with the setting of the story. The answers of them for this question are shown in Table 6.

Table 6: Place where children's original stories occurs

<table>
<thead>
<tr>
<th>Stories</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Playground</td>
</tr>
<tr>
<td>H2</td>
<td>Forest</td>
</tr>
<tr>
<td>H3</td>
<td>Forest</td>
</tr>
<tr>
<td>H4</td>
<td>Ice</td>
</tr>
<tr>
<td>H5</td>
<td>Blue place</td>
</tr>
<tr>
<td>H6</td>
<td>Forest</td>
</tr>
</tbody>
</table>

When the Table 6 was examined, the place where the stories took place were determined by the Child-1 (C1) as "Playground", by Child-5 (C5) as "Blue place". Child-2 (C2), Child-3 (C3) and Child-6 (C6) decided it as "Forest". After asking all the questions and getting answers, the children were asked to tell their stories. When the children's words used at the beginning of the story were examined, it has been seen that the words or phrases, while starting to tell the story, pronounced by Child-1 (C1) was now and one day, by Child-2 (C2) was stone, by Child-3 (C3) was a castle, by Child-4 (C4) was one day, by Child-5 (C5) was blue, and by Child-6 (C6) was yesterday. It has also been found that all children apart from the Child-5 (C5) began to tell the story by using time words or some words being related with the theme of the study. Moreover, it has been detected that some children (C1 and C6) could not use the time expressions (now and yesterday) correctly.

When children’s story themes were analyzed, it was found that the themes stated by the Child-1 (C1) was ‘what the Watermelon and his friends lived’, by the Child-2 (C2) was ‘an adventure of the rabbit’, by the Child-3 (C3) was ‘the things happened to little red riding hood’, by the Child-4 (C4) was ‘the polar bear’s and the penguin’s number hunt’, by the Child-5 (C5) was ‘war of Elsa anna and the man’, by Child-6 (C6) was ‘Elif and her family's picnic memories’. Given attention to the main ideas of the stories, it can be inferred that children’s statements were related with the necessity of being careful at outside (Child-1 (C1)), the beauty of playing with friends and collections and the importance of togetherness (Child-2 (C2)), reaching the result by endeavoring (Child-4 (C4)), intentionally nobody should be harmed (Child-5 (C5)). It can be said that the story of Child-6 (C6) did
not have a main idea because it was a kind of the child’s memory.

Children's stories were analyzed in terms of language and style under the headings of incomplete or inverted sentence use, use of noun sentences and verb sentences, portrayal (description wealth), dialogue frequency. In the story of Child-1 (C1) and Child-5 (C5), incomplete or inverted sentence sentences were not found. However, Child-2 (C2) and Child-3 (C3) were used both. In the stories of Child-4 (C4) and Child-6 (C6), only inverted sentences were encountered. The followings are the sentences existing in their stories:

... They're going to find a stone, a lot different... To play with stones... His new friends cow, chicken, rooster and bird (H2)
...There are knights in it, like that, with horse... They want to attack there, they always wage war like... In the village and kingdom... (H3)
... Once, the polar bear with his penguin friend went on a journey. Closed there (H4)
...He drives also car thus main character (H6)

Another step of analyzing the stories in terms of language and style is the frequency of using noun and verb sentences, being the two types of sentence based on its predicate’s feature. In Turkish, the predicate of a sentence consists of two kinds, namely the name and the verb. The sentences whose predicate conjugated from a predicative (complementary verb) are called noun sentences according to the predicate type. The sentences whose predicate is a finite verb, or a verb group, are called verb sentences according to the predicate type. The analysis of the stories with respect to the use of the noun and verb sentences is presented in the following table.

**Table 7: Analysis of the sentences in the stories according to the predicate types, noun or verb.**

<table>
<thead>
<tr>
<th>Stories</th>
<th>Frequency of the noun sentences</th>
<th>Frequency of the verb sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>H2</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>H3</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>H4</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>H5</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>H6</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
<td>18</td>
</tr>
</tbody>
</table>

When Table 7 was examined carefully, it has been seen that there was a total of 18 noun sentences and a total of 104 verb sentences in the children's original stories. In the stories of children, it has been observed that the usage frequency of the verb sentences was higher comparing to the usage frequency of the noun sentences. The noun sentences were frequency used mostly by the Child-3 (C3) and the Child-4 (C4). When the noun sentences used by these children were investigated, it was observed that the noun sentences formed with the word “var (like there is in English)”, being in a noun form and stating existence in Turkish, and rarely ended with a different predicate (i.e. so many). The children's story is as follows:
There is one castle. In it, there are knights with such horse. There was a king, and then there was also a house. There was grandmother of the red riding hood in it. And then there was a Wolf. The wolves were so many, they always want to attack castle ... "(C3-H3).

When the children's stories were analyzed in terms of description wealth, it has been observed that Child-5 (C5) and Child-6 (C6) formed sentences being weak regarding portrayal, that Child-3 (C3) made relatively better descriptions, and that Child-1, (C1), Child-2(C2), Child-4 (C4) produced rich portrayals compared to the others. When the frequency of dialogues in children's stories was examined, it was mostly found in the story of Child-1 (C1). The followings are the dialogues in the story of the child:

"For example, he first met the pear. Said Good morning to pear. Pear, carrot, grape, orange, mandarin, lemon, apple, banana were his friends. Encountered with pear. The pear said him good morning, they said lets play something. They said lets go to the carrot."(Q1-H1).

When the dialogues in the transcript were examined carefully, it can be seen that the dialogue itself was repetitive although the frequency of Dialogue of Child-1 (Q1) was higher than that of the other children. Another thing that draws attention after the analysis of children's stories in terms of language and style was the question of which word was used mostly in each child's story. As an answer to this question, it has been observed that the word "after" was mostly used in the story of each child. It was used by Child-1 (Q1) six times, by Child-2 (Q2) seven times, by Child-3 (Q3) three times, by Child-4 (C4) 12 times and by Child-6 (C6) six times. Child-5 (Q5) was never used the word “after”. The other frequently used word was “one”. It was used by Child-1 (Q1) four times, by Child-2 (Q2) nine times, by Child-3 (Q3) five times, and by Child-4 (C6) nine times.

When the plots of the children's stories were analyzed, it was seen that the stories could be considered under the headings of environment and nature, animals, living things, friendship, and family-relatives. The following table contains the related codes and sub codes:

<p>| Table 8: Codes in children's stories |</p>
<table>
<thead>
<tr>
<th>Codes</th>
<th>Sub-codes</th>
<th>Sample Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environment and Nature</strong></td>
<td>Island (H4)</td>
<td>...They are going to the ice island together... (H4)</td>
</tr>
<tr>
<td></td>
<td>Forest (H2)(H6)</td>
<td>...They went to playground... (H1)</td>
</tr>
<tr>
<td></td>
<td>Cave (H2)</td>
<td>...Then, they entered in a cave... (H2)</td>
</tr>
<tr>
<td></td>
<td>Playground (H1)</td>
<td>...I went to the forest with my mom... (H6)</td>
</tr>
<tr>
<td></td>
<td>Rabbit (H2)</td>
<td>...Then, they saw apple, grape, orange, lemon and banana... (H1)</td>
</tr>
<tr>
<td></td>
<td>Bear (H2)(H4)</td>
<td>...Hedgehog 'knock knocked’ with his thorn to not to break out... (H2)</td>
</tr>
<tr>
<td></td>
<td>Hedgehog (H2)</td>
<td>...New friends were cow, chicken, rooster and bird... (H2)</td>
</tr>
<tr>
<td></td>
<td>Cow (H2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chicken (H2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cock (H2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bird (H2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Horse (H3)</td>
<td></td>
</tr>
</tbody>
</table>
When Table 8 was examined, it has been seen that the island (H4), forest (H2) (H6), the cave (H2), and the playground (H1) were under the environment and nature title; rabbit (H2), bear (H2) (H4), hedgehog (H2), cow (H2), chicken (H2), rooster (H2), bird (H2), horse (H3), wolf (H3) and penguin (H4) were under the title of animals; watermelon (H1), pear (H1), apple (H1), banana (H1), carrot (H1), grape (H1), orange (H1), spinach (H1) and lemon (H1) were under the title of fruits and vegetables; playing together (H1) and overcoming obstacles the together (H2) were under the title of friendship; informing the family members about themselves and acquiring the related information from the family members were under the family-relative heading. It can be said that the common feature of these titles was that they were the parts of real life. Participant children seem to have no imaginary characters in general, and they seem to personify the characters in their stories. The following sentences can be provided as examples of this:

...Good morning, said to pear ... Arm of pear was broken, hurt a bit. (H1)
...Pear’s mother, father, elder sister and younger brother was informed... (H1)
...The rabbit united the woods. They crossed the bridge. They repaired the woods and crossed. (H2)
...Polar bear and penguin ... They caught up shark with fishing rod .. (H4)

Another thing grasping attention when analyzing the stories was the presence of at least one violent point apart from the half of the participating children’s stories (H1-H2-H6).

They always want to attack castle... they wage war like ... (C3)
The owners then killed polar bear with a shovel... they hit the pole's head ... The bullet fell to the sea ... (Q4)
They made the man war ... he is fighting in Canakkale ... he spilled over cook the war started... (Q5)

The aspects that have a place in the original stories and that can be examined under the title of values education differ with respect to the children. The fact that Child-1 formed a story focusing on friendship, helping, realizing his mistake, being careful and that Child-2 created a story by focusing on friendship, cooperation, problem solving, and endeavoring have been identified. Furthermore, it has been examined that in the story of Child-4, cooperation, finding solutions to problems, endeavoring, helping, and countering evil were focused on. It has been observed that, Child-6 only produced a story containing picnic memories whereas Child-5 created a story about deliberately making mistakes and realizing his fault.

Table 9: Situation of creating conclusion to children's own stories

<table>
<thead>
<tr>
<th>Stories</th>
<th>Forming a Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Conclusion exist</td>
</tr>
<tr>
<td>H2</td>
<td>Conclusion exist</td>
</tr>
<tr>
<td>H3</td>
<td>Conclusion exist</td>
</tr>
<tr>
<td>H4</td>
<td>A clear conclusion does not exist</td>
</tr>
<tr>
<td>H5</td>
<td>Conclusion exist</td>
</tr>
<tr>
<td>H6</td>
<td>Conclusion does not exist</td>
</tr>
</tbody>
</table>

Based on the Table 9, it has been concluded that the story of Child-1 (C1), Child (C2), Child-3 (C3) and Child-5 (C5) included a conclusion part while clear, or obvious, conclusion could not be found in Child-4 (C4)’s story. There was no conclusion part in the story of Child-6. When comparing the number of words used in the stories with existence of a conclusion, it has been observed that the stories with less number of words had a conclusion while the part was not existed, or it was not clear, in the stories with more words and the resultant part was not clear or not clear enough. The only exception to this was the story of Child-5 (C5). However, the rationale behind that fact that the story was concluded in spite of the limited number of words could be that the story briefly and clearly explained because the fiction in this story was a child's faulty behavior.

**DISCUSSION AND CONCLUSIONS**

With this research, original stories of 64-73 month old children who attending a preschool institution were analyzed in depth. Towards this end, the "Semi-structured Interview Form for Children to Generate Original Stories" prepared by the researchers was used. The obtained data was analyzed based on the stories’ characters, setting, plot, and conclusion. In addition, stories of the children were analyzed based on the total number of words, sentence structure, the most frequently used word, the words contain negativity or violence, sentence structure, and the predicate types that children used in their stories.

According to the results obtained within the scope of the research; it has been
found that pre-school children's ability to create original stories varied, that some stories were not sufficiently original and that they preferred more animals in choices of characters in the stories. This result supports the related literature with the claim of the preference of animals as story characters. According to Uğurlu (2013), children are more interested in fables, having songs and plays in which the animals speak and behave like human beings. According to Trupe (2006), children have sympathy for animal characters while the books are being read to them.

All the children participating in the research have positioned the place where the original stories passed outside the house. According to this result obtained; it can be concluded that children want to be outside of their homes, choose places they like, or they impressed. It has been analyzed that children's original stories were generally constructed in a way that they concluded with positive emotions. There are some studies in the related literature that set an example for this result. Lake (2001) and Uzmen (2001) draw attention to the emotional bond that children build with the characters involved in the qualified books by influencing positive, cognitive, language, social, emotional, sexual and moral development positively. The findings of this study are parallel to the related literature.

Another result obtained is; 50% of the participating children (C3, C4, C5) included at least one violent element in their stories. It is ominous that children describe war, bullets, death, beating, etc. in detail. This situation can be interpreted as confronting too much violence in the media or in their daily life, which is very influential on children.

In the current study, only six children's original stories were examined in depth. In different studies, children's ability to create stories should be analyzed and their preferences in accordance with the age groups should be determined and except for the ready-made stories presented to them, environments should be created which offering children the opportunity to create their own stories, especially to develop their language and creative thinking skills. In fact, research findings have shown that children use violent words. Especially, children’s perception of violence and their level of being influenced should be researched with different studies.

REFERENCES
Yaş Grubu Türk Çocuklarına Uygulanan Dil Eğitim Programının Dil Gelişimine Etkisi, Yayınlanmamış Doktora Tezi, Ankara: Gazi Üniversitesi Eğitim Bilimleri Enstitüsü.


APPENDIX 1. INTERVIEW FORM

Semi-structured Interview Form for Children to Generate Original Stories

The researcher meets the child before starting the interview. She converses with the child for a short time. Then, s/he tells the children that s/he searches a different story to tell children later. S/he asks them to help him/her in this matter by stating that s/he could not find a different story. S/he helps the child to fully explain the story, which the child creates in his imagination, with the support of the following questions.

• What is the name of the story in your dream?
• Who is the main character of your story?
• Who are the supporting character(s) of your story?
• Where does your story happen?
• Can you tell me your story?
• What happened at the end of your story?

In addition to these questions, different questions were added based on the child's narrative process.
Chapter 43

The Process of Adopting an Understanding of Quality in Pre-School Education and Establishing Quality Standards: An Analysis on Turkey

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INTRODUCTION

One of the most important quotes on the concept of quality is probably the one that belongs to the British thinker, John Ruskin. Ruskin, who also writes essays and articles on art, politics, economics and social matters states the following: “Quality is never an accident. It is always the result of intelligent effort.” With this quote, he was able to summarise many characteristics of quality concept within one phrase.

Quality in today’s changing and competitive environment is the fundamental condition for all individuals, organisations and institutions to sustain their existence, to be long-lasting, to be able to develop in a sustainable way and to be able to lead a life that is successful and prosperous. Quality is a concept that cannot be clearly and precisely explained, but it can be recognised and perceived immediately. The perception of quality has been put into practice in private and public sector in many countries around the world, thus this approach is also being used in educational institutions with the aim of increasing the quality of education (Barra, 1983).

Within this context, various studies show that high-quality pre-school curricula that are appropriate with developmental stages have short-term and long-term positive effects on children’s cognitive skills such as language, literacy and mathematics; as well as their social and psychological development. Children who attend good quality pre-schools have more academic success and less behavioural problems; they also tend to adapt to school easier than others. In this section, development of quality concept in pre-school education in Turkey and in the global scale has been reviewed.

1. WHAT IS QUALITY?

Quality is a French-oriented word, and its lexical meaning has been expressed as “the feature of something being good or bad” and “superior” (TDK, 2011). Quality according to European Organization for Quality Control (EOQC) is all of the characteristics and specifications that identify the efficiency of good and services for meeting a specific need. The concept of quality derives from the reality of people and systems "making mistakes" and "their drive to reach perfection" (Kovancı, 1999; TDK, 2011; Uysal & Kuzu, 2011).

The concept of quality has been used in different areas and meanings within the historical process. The multi-dimensional characteristic of quality has resulted
in many different definitions of quality, thus there is not only one concept of quality. Quality refers to the superiority of products and services that are provided, and their good properties. Besides, quality is not a one-off effort, and it involves determination, dependence and sustainability (Sheridan, 2001; Ensari, 2002; Tekin, 2006).

In today’s world, quality is a basic concept that is considered as the key to individual, corporate, national and universal success. The basis of quality concept is “human”. Concepts such as “learning individual-learning organisation”, “life-long learning” and “continuous development” have become important, as the correct perception of the quality concept by individuals and organisations and internalising and implementing it with consciousness and stability whilst developing constantly and considering change have become more and more significant in our lives (KalDer Eğitimde TKY Uzmanlık Grubu, 2003).

2. THE UNDERSTANDING OF QUALITY IN EDUCATION-TEACHING SERVICES

The role of educational institutions in information society is changing in today’s world. The primary aim of education in information age is to raise individuals who are creative and innovative. Today, within the scope of contemporary education approaches, emphasize is not on transferring education directly to the individual but to teach the individual how and with what ways to access and receive information. Developing ways of communication and Internet ensures access to information by everyone and creating a difference is only possible with different ways of using information and through creativity. The new task for schools is to educate young people that comprehend the dynamics of change as individuals who can adapt to new situations and who have capacity to lead the change (Ensari, 2002).

Quality in education can be defined as individuals having the desired qualities after they go through an educational process, as an outcome of the educational system. It can also be defined as the appropriateness of characteristics to standards that the individuals acquire during the educational process. According to another definition, quality in education is the degree of realizing the objectives, evaluating success and identifying that the success has been deserved. Accordingly, it is required to identify how well or to what extend activities are implemented in educational institutions, and to analyse how and to what extend they achieve the outcomes. The initial scientific studies on quality of educational and training services can be seen in early 20th Century, parallel to the development of management science. Concerns on the adequacy of educational systems for preparing students to life and work environment in 21st Century have resulted in looking for new ways to re-design educational systems on a global scale. Educationists have established inter-disciplinary relationships in order to increase the quality of educational services and they have tried total quality management as a system for a better education. Just as it is with management theories such as classical theory, human relations theory and system theory; total quality management theory has been developed within industry sector; and in addition it
has affected service areas such as public administration, healthcare management, education management and it has a widespread implementation area. Total quality concept has been developed in the United States and followed the philosophy of continuous development; however it has not drawn much interest in the States. However, it became an approach in Japan, and formed the basis of their success. Japanese people name the approach Kaizen and they have been using the approach in their organisations whilst competing with the Western societies. The approach that was only used within production field and product development has now started to become a life style (Cafoğlu, 1996; Ensari, 2002; Adıgüzel & Sağlam, 2009; Göksoy, 2014).

For total quality management to be successful in educational institutions, organisational culture should be identified. This can only be possible with an intensive communication network between the employees and through informing all employees regarding the work and activities held within the organisation. Activities for developing team spirit are also necessary for setting up common values. Different to other organisations, educational organisations directly address to individuals and therefore human relations should be used as a basis. The aim should be having an environment of trust; where school management has a respectful and reliable communication with teachers, assisting personnel and children, and a ‘win-win’ attitude should be targeted. On the other hand, today’s quality is tomorrow’s assurance; thus encouraging quality in an organisation is assuring its future. For this reason, quality assurance comprises of steps such as establishing quality standards, identifying the appropriateness of quality standards, reach an agreement on quality standards and ensuring the quality assurance (Cafoğlu, 1996; Adıgüzel & Sağlam, 2009).

UNICEF, seeing good quality education as a right for all children, identifies the characteristics of good quality education as follows:
- Students that are healthy, well-fed, ready to learn, and who are supported by their families and societies for learning,
- A learning environment that is healthy, protective, gender sensitive, and that provides adequate resources and opportunities,
- Content that covers the relevant curriculum and related materials in order to acquire basic skills,
- To minimise the inequalities through child-centred teaching approaches used by teachers in well-managed schools and classrooms and evaluating skills in order to facilitate learning,
- National objectives that cover knowledge, skills and attitudes; and ensuring a positive participation to society (Göksoy, 2014).

One of the main determinants of quality and efficiency in education is the quality of teachers that manage the education process; thus one of the main conditions of good quality education is to train good quality teachers. Effective and efficient use of all resources including physical environment, curricula, technology, equipment and materials for reaching the desired outcome depends on teachers and school principals. Accordingly, one cannot expect to have education services that have higher quality than the quality of teachers and school principals. Quality in
teacher training is defined as “the appropriateness level to the aim” or “the appropriateness to standards”. In this sense, national standards identified for the quality of services in teacher training are being used to increase the quality and efficiency of the institutions that provide teacher training and to ensure accreditation. A quality assurance system must be implemented in order to improve the services of institutions that train teachers and in order to develop curricula standards, as well as to accredit the appropriateness of these standards on a regular and sustainable basis. This will also ensure the continuity of quality (Adıgüzel & Sağlam, 2009).

Although all these facts are recognized, most of the individuals perceive the concept of quality in education as the success of schools in various exams and as their adequacy of preparing students to the next level of education. The discussion of quality in pre-school education, as the first formal step of education, is considered important as it is a process that can directly affect individuals’ success in life and other educational institutions.

### 3. THE DEVELOPMENT OF UNDERSTANDING OF QUALITY IN PRE-SCHOOL EDUCATION IN TURKEY

The initial discussions of the quality of pre-school education began in 1950s with the research studies conducted on the best environment to bring up children (home environment or care centres). The widespread opinion during this period was that the best environment to bring up children was the home environment where children are under the supervision and care of their mothers. During those years, it was accepted by some researchers that it would be dangerous to separate a child from his/her mother and it would be harmful for the social and emotional development of future generations to seek care outside of home environment. Even so, educational institutions have existed and the communication process between schools and families went on. During the first 60 years of 20th Century, the relationship with parents was perceived as the “training of parents” by the child pedagogues. Parents were defined as students who needed information and advice on how to support their children’s development. Information flow and influence was from teacher to parent and a different type of situation was hardly seen. In 1960s, a different approach arose in parent-teacher relationships. This approach suggested that parents and teachers should be a support mechanism for each other in order to reach a common aim for the child. As an outcome, it is stated that parents became a partner in decision-making mechanisms. In the later period, with the progress in industry and technology and with women taking more part in labour force, the focus on studies of quality in pre-school education was on structural aspects of quality. These can be listed as the space allocated for children, the quantity of materials that are used, and the ventilation of spaces used by children (Sheridan, 2001).

The positive effects of high-quality pre-school institutions on children’s development and education are obvious, as outlined by relevant research studies. On the other hand, definition and indicators of quality are still being discussed. Different stakeholders such as families, inspectors and managers who would like to
measure quality have defined their own quality indicators. Principal factors such as number of children per adult, size of classroom, educational materials and their variety, security, cleanliness, teacher-child/family relationship are among the general indicators defined by these different stakeholders for identifying school quality. The National Association for the Education of Young Children (NAEYC) is one of the organisations that provide accreditation for pre-school institutions that symbolises quality; and they have set indicators that identify the quality of the institution. During the accreditation process, NAEYC has classified corporate quality in ten areas which are adult-child communication, curriculum, adult-parent communication, teacher competencies, management, employees, physical environment, health and safety, nutrition and meal services and evaluation. Katz (1994), who has a pluralistic approach towards the quality of pre-school institutions classified quality under four main dimensions. The first dimension was named as “top-to-down-researcher-professional perspective” and it includes structural elements such as the number of children in the classroom and the qualities of the teacher. The second dimension is stated as “down-to-top-children’s perspective” and it includes elements such as the comfort of the child in school and child’s level of participation to activities. Third dimension comprises of elements such as the cooperation of employees and management “from inside-out with the perspective of employees”. The last dimension involves “from outside to inside–family perspective”, flexibility of the curricula and family participation. When studies conducted on this subject are reviewed, it can be seen that quality indicators are usually analysed within two main areas, in terms of structural and functional (process) dimensions. Structural dimension deals with issues such as number of children per teacher, education level of teachers, experience of teachers, their wages and indoor space allocation per child; whereas functional process of quality deals with teacher-child relationship, stimulating and rich educational environment and activities. Researchers also found out that structure and process indicators are related to each other and they both affect children’s educational experiences. For instance, as the groups get smaller, teachers have a more positive, supportive and exciting interaction with children (Bekman, 2000; İşıkoğlu Erdoğan, 2007; Ardıç Ünüvar, 2011).

As the perception of quality was adopted in the field of pre-school education, the studies held on this aspect have increased and evaluation tools for monitoring quality have been developed. Early Childhood Environment Rating Scale (ECERS) has been developed by Harms and Clifford in 1980 in order to provide systematic and quantitative data on the structure and process quality of pre-school institutions and the scale has been revised in 1998. The scale has seven sub-scales and it is widely used in related literature and generally accepted. The sub-scales are formed of personal care routines, space and furnishings, language and reasoning experiences, gross and fine motor movements, creative activities, social development and adult needs. Assessment Profile for Early Childhood Programmes (APEC+) has been developed by Abbott-Shim and Sibley in 1987 in order to evaluate the quality of physical learning environments. It has different versions and one of the version is developed to evaluate institutions and the other one is
developed to evaluate homes as they are two different educational environments. The form has been developed further with additions made by Wachs in 1991 and it consists of sub-dimensions identified as physical environment, health and safety, learning environment and curriculum. Arnett has developed Caregiver Interaction Scale (CIS) in 1989. The scale evaluates factors that affect the quality of process such as emotional atmosphere, discipline model and the way the teacher responds. The Classroom Practices Inventory (CPI) developed by Hyson et al in 1990 focuses on the educational attitudes of teachers and the emotional and social atmosphere of the classroom. When the studies on quality of pre-school period are analysed, it can be seen that the focus was on all of the pedagogical activities conducted in preschools in a comprehensive way. The studies usually focus on questions such as “How do teachers communicate with the children?”, “What kind of experiences do children have in pre-school institutions?”, “What kind of values do children establish?”, “What do children learn?”, “To what extent do adults show awareness to children’s needs, rights and interests?”. During this period, researchers considered pre-school education as corporate and institutionalised, thus they conducted studies that emphasize the functionality of this institution. As the idea of a constant change and progress in society began to gain importance and the thought of having parallel activities in pre-school institutions with the change in society began to spread, quality-related studies and research moved one step forward. The idea was not to only focus on what is happening behind the walls of a pre-school and the time spent in pre-schools but also to look at the bigger picture. The pedagogical quality of pre-school institutions were considered and evaluated with the specific culture they are embedded in, the social conditions where children were educated, and the perception of child upbringing in the society and the fundamental values of the society (Buldu & Yılmaz, 2005; Tekmen, 2005).

As these developments occurred on a global scale in the field of pre-school education, Turkish Republic that was founded in early 20th Century was allocating a significant amount of its resources to the development of schooling in primary education. For this reason, the education of pre-school children was considered as the responsibility of families and local authorities. It can be seen that the focus is on the education of girls and housewives among the studies held on childcare and child education in Turkey. The effect of families on child development and education has been scientifically proven in our day. The outcome of these studies on adult education is very valuable for children’s education. Accordingly; "Mobile Courses for Rural Women” have been organised in 1938 in order to educate women living in rural areas and lessons such as "Mother-Child Health, Child Development and Education" were provided to these women. The topic of pre-school education for young children has been discussed in 1949 for the first time in Republic Era, during the 4th National Education Council, and it has been addressed as “the need for emphasizing family education, and making use of different methods for implementing democratic education within the family”. Discussions on establishing pre-school institutions took place within the 5th National Education Council. During the 6th National Education Council held on 1957, pre-schools were classified as ‘optional’ schools that run under the primary school administration. In 1940s, the
allocation from the general budget to National Education was around 6-7%, and in 1960 this rate has doubled to 13%. Significant development and progress on pre-school education in Turkey began after 1960. After the 1961 Constitution, studies on pre-school education have been held and the topic has been discussed in five-year development plans and in National Education Councils; however the implementation and practise has not been at the desired level. Foundation for Developing Pre-School Education was established in 1967, and the aim of the foundation was to enhance pre-school education, monitor the relevant developments on a global scale and implement these practices in Turkey. “Pre-School Education Department” was established in 1977 under the General Directorate of Primary Education within the Ministry of National Education and accordingly, work on establishing nursery classes within primary schools, training teachers for pre-school education and preparation of equipment and materials has accelerated. From 1980 onwards, there was an increase in the number of pre-schools and nursery classes. As a milestone in pre-school education in Turkey, General Directorate of Pre-School Education was established in 1992 under the Ministry of National Education. During the 14th National Education Council held in 1993; sub-commissions on “the importance and enhancement of pre-school education”, “resource procurement and utilisation”, “curriculum and educational materials”, “coordination and cooperation” and “legislation” were established to conduct relevant studies. 1994 was announced as “The Year of Pre-School Education”. It was decided to consider pre-school education models as organisation-centred, family-centred and society-centred. A decision was made on 1996 for the first time to make the first 2 years of pre-school education compulsory, however the decision was not put into practise. Preparation work on Total Quality Management practices began in 1999 with the TQM Implementation Directive and TQM Implementation Project under the Ministry of National Education. Ministry of National Education stated its decision on solving the accumulated problems of the system through total quality management by signing the Declaration of Good Intent in 1999 with Kalder (Turkish Quality Foundation). The definition of quality in education according to MoNE is an approach that gives responsibility to students for their learning as well as giving responsibility to teachers. This approach places the student in the centre, foresees the active participation of the student to learning process, utilises the appropriate educational technology and involves a humane theory for common concepts. TQM philosophy and principles have been accepted and the management of educational institutions are in line with these principles. Work has been ongoing for the enhancement of these practices in all the provinces. An analysis made on the data of Pisa 2003 indicates that one year of pre-school education attended in Turkey has an equal contribution to the individual with a two-year education attended at the age of 15. This means that a child who was able to attend pre-school for a year has the possibility of being 2 years ahead of his/her peer in terms of academic achievement at the age of 15. This refers to a potential of access to a better quality secondary and higher education and a potential of having a higher income. In 2006, during the 17th National Education Council, it was decided pre-school education for children that are 60-72 months old would become compulsory. Pilot
implementation for 100% access was conducted in 32 pilot provinces by MoNE during the education year 2008-2009 for children that are 60-72 months old. Number of pilot provinces was increased in the coming years. MoNE has also initiated the work on “MoNE Strategic Plan for the years 2010-2014” in the beginning of 2007. This work played an important role on establishing the quality culture at central level, organisational level and school level; and the enhancement of “quality assurance system”. With the work held on 2010 and the new investments, schooling rate in pre-school education has been increased to 38%. As it has been on the agenda in many previous National Education Councils; Training, Employment and Professional Development of Teachers, Educational Environments, Organisational Culture and School Leadership has been discussed on the 18th National Education Council (2010). On the 19th National Education Council, Increasing the Quality of Teachers and Managers was included in the agenda as important topics. There has been project work in 2009 and 2010 for developing pre-school education, especially for children and families living in disadvantaged areas, and for increasing the quality of pre-school education and creating community-based models that allow cooperation. Some of the projects that were implemented are “Strengthening Pre-School Education Project”, “First Step Project”, and “No Children Left behind Project”, “Mobile Pre-School Project”, “Parent-Child Training Programme and Summer School Project. Undergrad teacher training programs have been re-organised in the years 1997, 2006 and 2009; in line with the contemporary education approaches. There has been almost 10 years since undergrad teacher training curriculum has been updated. Various research and evaluation studies have been conducted during this period. As an outcome of the evaluation studies and reviews, certain necessities for re-establishing and enhancing profession-related classes for teaching, increasing the time for professional practise, and aligning undergrad curricula with the renewed curricula of MoNE have been identified. Another update has been done in 2018 for all the undergrad teacher training programs in this direction. These developments are indications of an increase in the importance given to educational activities and in the studies conducted on quality. Although there has been a significant increase in studies made on quality concept in pre-school education on a global scale; lack of research and studies in this field is obvious in Turkey. Governments are expected to identify criteria for the pre-school education curricula and to monitor the implementation of these criteria. However, the criteria must be flexible at the same time and must meet different developmental and learning needs of children; taking into account the individual, geographical, social and cultural differences. As an outcome of two separate research studies conducted in Turkey within six years, it was identified that factors such as well-trained teachers, less crowded classrooms, interaction between teacher and students, an enriched environment in terms of language, curricula that is appropriate to the age group, a safe environment and enriched educational materials are among factors that create a positive influence on children. It has been identified that children who attend institutions that do not have these factors at a desired level are affected negatively, and education with less quality does not create a solution for these children. The findings emphasize the value of quality in education; thus
provide guidance to education policies that should be followed during enhancement (Oktay, 1983; Oğuzkan & Oral, 2003; Yılmaz, 2003; Deretarla Gül, 2008; AÇEV, 2009; Altay et al., 2011; Ardiç Ünivar, 2011; Çelen, Çelik & Seferoğlu, 2011; Güçhan Özgül, 2011; OECD, 2016; YÖK, 2018).

CONCLUSION

As a conclusion, pre-school education institutions affect child development in every aspect and form the first step of basic education; and quality service provided by these institutions is very important for children attending school for the first time and their families. The pre-condition for creating young generations that are equipped with specific knowledge and skills, who are open to competition and who can dedicate themselves to their work is to prepare them to future; starting from pre-school education. In addition, individual development of the child should be considered at the highest level during pre-school education and one should not neglect to emphasize awareness of citizenship during this period for children to become individuals who contribute to the future of society. That is to say, with high-quality pre-school education individual potentials of children can be revealed at the highest level; and basic humane and social values such as being innovative, creativity, problem solving, democratic attitude, and participative attitude should not be neglected. Pre-school education should be able to raise new generations that can accept their value judgements as well as the value judgements of and other cultures’; generations that can assess these judgements in favour of themselves and in favour of humanity; creating meaningful outcomes moving from this perspective. When we consider the importance of educating individuals for the social change and development, it is essential and a necessity to establish quality standards for pre-school education and to enhance pre-school education in line with these standards.

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Chapter 44

Considerations on the War Scenes in Muhibbî Divan¹

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INTRODUCTION

In sixteenth century, Ottoman State experienced the brightest era in every aspect in history. Suleiman the Magnificent, who reigned in this period, was the tenth Ottoman sultan and the son of Yavuz Sultan Selim. The facts that he started to rule at the age of twenty-six, he ruled the state for forty-six years and his reign was full of victories and many accomplishments resulted in his moniker, Suleiman the Magnificent (Gökbilgin, 1992).

Most of his reign of 46 years, he was in military campaigns and political and military preparations for these campaigns and material and spiritual development of the conquered lands occupied the whole life of the poet-sultan (Banarlı, 1997). In his long reign, Ottoman armies engaged in several battles throughout Europe, Asia, and Africa and victories extended the empire to three continents (Gökbilgin, 1992)

Suleiman, who proved that he was a great poet with the poems he authored during his reign, wrote his divan with the pseudonym of “Muhibbî.” His voluminous divan makes him a significant poet among other poets of divan. Using the pseudonyms of Muhibbî, Muhîb and Muhib, the sultan ranks the first among the poet-sultans with four thousand hundred odd poems (Yavuz & Yavuz, 2016). The fact that Muhibbî, who spent his life dealing with wars and state affairs, devoted time for poetry and authored verses who survived centuries proves that he was “magnificent” in literature as well (Ak, 2001). Amil Çelebioğlu praised the poetry of the sultan by stating that even if Suleiman was not a sultan, he would be one of the significant poets in our literary history (Çelebioğlu, 1998).

The fifth poet sultan was Suleiman with his poems. Before Suleiman, Murad the 2nd, Mehmed the Conqueror, Bâyezîd the 2nd and his father Yavuz were also interested in poetry (Şentürk & Kartal, 2008). According to Muhibbî, "Poetry is a science and for success, skill and ability are required and poetry should utter the truth" (Tunç, 2000) It is known that Suleiman discussed with other poets, criticized poetry, encouraged poets and parallel poems on his own poems, and wrote parallels on others’ (Karahan, 1980).

The poets of the period who witnessed the reign of Suleiman immortalized the great achievements of the sultan in their poetry. Aşkî is one of these poets and joined the sultan in his campaigns as a soldier for a period of time. The expressions in Aşkî’s poetry are about the victorious sultan (Uzun, 2011)

Mihr istikbble çıksun säh-i devrändur gelen
Devlet ile bu yidi iklime sultändur gelen
Çün gazadan avdet itmiş Āl-i Osmändur gelen
Şäh-i gâzî Hazret-i Sultân Süleymandur gelen

Işki Mur. 59/1
Hūn-ı düşmenden ķılıp rūy-ı zemînî lâle-reng
Ehl-i küfrün başına itdi cihânsı yine teng
Feth idüp niçe hisârî eyledi şâhéne ceng

Şâh-ı gâzî Hażret-i Sultân Süleymândur gelen IşkîMur. 59/7

WAR

It is possible to define the war as hostile intent or act that involves the use of force, which is exercised by states or groups of state through the use of certain or all of the elements of national power, and which is regarded by the parties as warfare (Varlık, 2013). It is a widespread belief among the historians that the raison d’être of the Ottoman State was warfare. For most of the 600 years existence of the Ottoman Empire, warfare was an important element for both the Ottomans and the Europeans. Ottomans proved their superiority on land against their adversaries in the 16th century (Agoston, 2009). Verses such as “And fight against the disbelievers collectively as they fight against you collectively” (Tawbah, 9/36), “And strive for Allah with the striving due to Him” (Haj, 22/78), and “O you who have believed, if you support Allah, He will support you and plant firmly your feet” (Mohammad, 47/7) are among the factors that increased the Ottoman military power. Aşkî was the witness of the epoque (Uzun, 2011):

Hayme vü hargāh ile pür oldı deşt ü kühsâr
Al bayraıklar cihān bâğını ķılıdî lalezâr
Ceyş-i Osmâni taşûp çuʃ itdi mânend-i bihâr
Şâh-ı gâzî yine leşker çekdi küffâr üstine Işkî Mur. 60/2

1. War - Campaigns

Campaigns to Belgrade, Rhodes, Mohacs, Vienna, Germany, Iraqi Lands, Italy, Moldova, Buda, Esztergom, Second Iran, Nakhichevan, Szigetvar were conducted during Suleiman’s lifetime. Suleiman reflected these campaigns in his work. The eastern campaign of Suleiman can also be traced in his poems. Following the pact with Austria, the sultan turned his interest towards the east in 1534-35 and considered it a duty to fight against Shiite Iranians, who were called Rafizis, as a strict Sunni emperor. He did not congratulate the new Safavid sovereign Tahmasp, son of Shah Ismail, sent a threatening letter. There are certain evidences that he wanted to start a campaign to Iran before the Mohacs campaign. However, at that time, there were other events that led to his decision to start a campaign. The first was the defection of Sharaf Bey, one of the Kurdish beys and a member of Sharaf Hans that governed the region since 13th century, to the Shah, disavowing the Ottoman sovereignty that they acknowledged during the reign of Sultan Selim. The second reason was the fact that Azerbaijani ruler Ulama was alienated from Shah Tahmasap and offered allegiance to Suleiman the Magnificent (Gökbilgin, 1992). In the following couplets, Muhibbî narrated the eastern campaign as follows: "Let us call the name of God, let us fly the sultanate sanjak. Let us gather from all and move the soldiers to the east":

Allah Allah diyelüm sancak-ı sâhi çekelêm
Yuriyüp her yaneden Şarka sipâhî çekelêm (C.A) (G.1890/1)^2
“Let us wear the belt of effort in two parts; let us be a part of the dust and soil and bear this road”:
İki yirden kuşanalum yine gayret kuşagın
Buluşup toz ile topraga bu râhı çekelüm (C.A) (G.1890/2)
“Let us trample the land of qizilbash. Let us tinge their eyes with black smoke instead of the tinge”:
Pây-mâl eyleyelüm kişverini surh-serün
Gözine sürme diyü düd-i siyâhi çekelüm (C.A) (G.1890/3)
“It is our religious duty to watch over Islam, how could be remain passive and fall into sin”:
Bize farz olmış iken olmaz İslâma zâhir
Nice bir oturalum bunca günâhı çekelüm (C.A) (G.1890/4)
“Oh Muhibbî, let’s walk and move the soldiers over to the east (Iran). I hope that Abu-Bakr and Omar would be our guide”:
Umaram rehber ola bize Ebûbekr ü ‘Ömer
Ey Muhibbî yürüyüüp Şarka sipâhi çekelüm (C.A) (G.1890/5)
Also, in another couplet, Muhibbî stated that “(he) raised the flag of the black mole and the soldier of hair and walked through the lands, in fact, (his) intent was the land of Iran,” mentioning the Iranian campaign using the beauty marks of the sweetheart:
Şâm-ı hattun leşker-i zulfün livâsin kaldurup
Yüridi yir yir meger kasdı anun İrânedür (C.A) (G.451/3)
He explained the necessity of the conquest of Tabriz with the following couplet: “O Muhibbî, since you traveled the world, it is now time to visit Tabriz”:
Muhibbî gešt kildun ālemini čün
Olupdur vakt idesin ‘azm-i Tebrîz (C.A) (G.1119/5)
Suleiman used the word of war in several forms. Words such as rezm (quarrel), ceng (battle), yağma (plunder), gavga (fight), arbede (brawl) and mareke (battle field) were used to mean war in his divan. At time of war, it is required to hold the sword in one hand and the head on the other:
Muḥibbî merd olana rezm içinde
Bir elde tīģ [u] bir elde gerek baş (K.Y-O.Y) G.1436/7
The sultan, who knows how to turn others’ world to black, knows how to fight and have fun. So much so that, he is like Alexander during the war and a socialite in the court:
Ālemi gešt eleyüüp geh Gülşen içre câ kılup
Rezm-ile Iskender’üz bezm-ile gâhī Cemlerüz (C.A) (G.1125/3)
1. a. War - enemy
Suleiman expressed his warrior soul as follows: “When the enemy soldiers take a stand against someone, if he would not wage war and run away, that one is a vile coward”:
Leşker-i a’da eger karşısında tura sâf sâf
Key katı nā-merd ola ol giinde itmeyen mesâff (C.A) (Müfred. 85)
When the subject matter is warfare and the poet is the sultan of the universe, it would be inevitable that the enemy’s blood is wine and the enemy’s head is the chalice:
Hasmnun kanın çarâb u kellesin sâgar kılup
Sohbet-i hâs itmeğe meydân oluptur yirîmüz (C.A) (G.1143/4)
The spears are always ready at hand to pick up the enemy’s head on the ground:
Kellesin kaldurmaga yirden ‘adûnuñ her zaman
Komaz elden nîzeler hâzir tutar her birûmüz (C.A) (G.1143/3)
When the enemy turns and runs away, it would be caught immediately. Because it is a wounded prey now:

Yüz çevirse kaçsa düşmen yine tız girür ele
Çünkü olmuşdur bizüm bir yäreli nahcırümüz (C.A) (G.1143/5)

When Muhibbî is adorned with the quiver bravely with the God’s chastity, he has the power to break the enemy’s heart, albeit iron:

Kalb-i a’dâyı Muhibbî sıya ger āhen ise
Fazl-ı hakk ile kaçan kuşana merdâne sadak (C.A) (G. 1388/7)

The great sultan of the universe, Suleiman does not care about the number of his enemies. Because, even the world is full of enemies, being with his sweetheart is enough for him:

Eğer başdan başa düşmen olursa baña ger âlem
Benümle yân ola yârum cihânda çekmeye dil ğam (K.Y-O.Y)(G.3877/1)

1. b. Battle ground

In the battle ground, the brave men continuously spill the blood of enemies. For this blood, the largest of chalices is required. Because, the volume of the enemy blood spilled during war is obvious:

Rezmgâh içre Muhibbî merd olanlara müdām
Hūn-ı düşmen mi gerekdür kāse hā- yi ser kadeh (C.A) (G.303/5)

The great sultan of the universe, referring to bravery and heroism, expresses his happiness in the battlefield as follows: “It would not be surprising if Muhibbî is content on the day of adventure. Because, battlefield is an entertainment venue for an adult”:

Çün rezm-gâh er kişinün bezm-gâhîdur
Olsa ne tan Muhibbî ferah mäcerâ güni (C.A) (G.2719/5)

1. c. War - blood

Blood is the first thing that comes to mind in a battlefield. Couplets on the beauty features of the sanguinary lover such as eyes and eyelashes or about the poet himself are significant. The person whose discretion is to drink blood in the battlefield is the sultan of the universe, Suleiman:

Teşneyüz hūn içmege biz bir nice hūnîlerüz
Ma’rēke güninde dâyım bölledür tedbîrîmüz (C.A) (G.1143/2)

Blood is not only spilled on the battlefield. The sweetheart’s eyelashes are sufficient to spill blood from the liver:

Tîr-i müjgâni ile turmaz akar hûn-ı eiger
Bu iki hûnîlerün kîme savâ shin yenemez (C.A) (G.1135/3)

The lover’s blood in the liver continuously spills because of the sweetheart’s eyelashes. It is obvious that no one can prevent the war between these two sanguinaries:

Kirptgüm sâflar dizüp oldı arada kan revân
Heybet aldı ehl-i ʿışk olan savâşumdan benüm (C.A) (G.1851/3)

In the couplet constructed to demonstrate the ability to spill blood of the quiver, Muhibbî writes “If the quiver is thirsty of blood and enters the battlefield, most leave their loved ones and their heads for battle”:

Niceler terk ide rezm içre yine cân- ila baş
Kana ger teşne olup kaso ide meydâne şadak (C.A) (G.1388/4)
2. War - Sweetheart:

It is possible to hear the strong voice of the sultan, who spent his life in campaigns and battlefields, when he is addressing his sweetheart. Because, he addresses her using the invaluable beauties of the lands he owns and almost equates her to the value of all these lands (Ak, 1987: 1-27). On other occasions, Muhibbî complains about the warrior identity of the lover who never sets aside the weapon of reproach and mentions that his sweetheart never even looked at him:

Kılma baña nazâr âh bir tüünd-hûyi sevdüm
Tığ-i sitem elinde bir ceng-cûyi sevdüm (K.Y-O.Y)(G.2103/1)

If the lover would look at him once, she would see that Muhibbî’s heart continuously fights for the beauty of his lover:

Niçe yıldur hüsnüñ içün ceng iderler cân u dil
Döstüm gel bir nær luťf eyle ol savaşa bak (K.Y-O.Y) (G.1633/5)
The end of the war fought to unite with the lover is separation:

Ceng itseñ ol şanemle vişâlin Muḥibbiyâ
Firḳat girer miyânumuza bizi aralar (K.Y-O.Y) (G.3997/5)

In certain couplets, the lover is addressed directly. Wars fought for the lover existed since the ancient times. And the heart is not ashamed of such a war:

Tan degüldür ceng iderse cân u dil sen hüb içün ü
Olıgelmişdüñ ezel mahbûb içün savâşlar (C.A) (G.956/2)

War is either among the beautiful features of the lover or directly related to her. Lover is always victorious in the war related to the sweetheart. Often, it is necessary to fight for the face, hair, fluff, eyelashes, dimple, eyes, and the mouth of the sweetheart:

2. a. Face

The face is among the most significant beauty features of the sweetheart. Based on color, the face is bright, the sun, the moon, and the hair is black. From the perspective of mysticism, face is uniqueness and hair is abundance. Muhibbî likens the war between the face and hair of the lover to the Mohacs battle. The Mohacs battle between the Ottoman Empire and the Kingdom of Hungary, which resulted in the Ottoman domination of a large part of Hungary, occurred as follows on August 29, 1526:

There was no movement on both sides in the Mohacs Plain until noon. The Hungarian cavalry started the attack against the Ottoman army, which slowly moved in in the afternoon, with the cries of "Jesus". The war started when the sultan wore his armored battle dress. Since the Hungarians did not know the plan of the Ottoman army, they attacked the center of the Ottoman army with armored cavalry of 60,000 soldiers. What the Ottoman army wanted was to attract the Hungarians to the center, then to destroy the Hungarian army, which was taken intensively from behind and from the sides. Indeed, that was what happened. The Hungarian commanders Pier Pereney and Father Pol Thomori attacked the Rumeli troops with all their forces, however the Ottoman soldiers started a retreat and engulfed the Hungarian army in the middle and place them across the cannons. Hungarians, thinking that they won the
battle, advanced towards the interiors of Ottoman lines. However, the Hungarian army was surrounded by the forces of Bali Bey. The Ottoman plan was working perfectly, and when the Hungarian army, which was surrounded according to the plan, faced the cannons, 300 cannons fired at once. The Hungarian Army began to retreat to the right and left in defeat, and even the king was injured. The wounded king's body was found in the swamp after the battle (İşık, 2012)

This battle is mentioned as follows in the divan of the poet sultan: “I though they were fighting in the battlefield when I saw your hair on your cheeks. Those who do not know should look (at your face) and learn what Mohacs battle was like”:

Ruhlarunla zülfüni gördüm iderler ārbede
Görmeyen kilsun nazar blirüs neddür ceng-i Mohāç   (C.A) (G.283/3)

The battle between the cheek and the hair of the sweetheart is similar to the war between the Ottoman sultan and the Frank monarch:

Haddi ile zülfini gördüm iderler ārbede
Rūm şahı ile ceng ider sankim Efreng ile   (C.A) (G.2503/4)

Another example on facial beauty is as follows: “To see the sunny face of the sweetheart, the lover has to fight with his own shadow that follows him as well”:

Gün yüzün görmek diler sem sāyem ardumca gelür
Bana lāzım geldi dönüp idem anunla savaş   (C.A) (G.1267/4)

2. b. Lines

Initially, the fluffs are lighter and yellow. The color of the sweetheart changes with age and becomes darker. They are observed on the upper cheeks and around the lips. Muhibbî mentioned the blackness of the fluffs on the face of the lover and likened these to the Ethiopian sultan who came to fight the Romeos.

Dirler yüzinde cā-be-cā belürdi ḫaṭṭi dilberüñ
Didüm ki sulṭān-ı Ḥabeş Rum’a gelüpdür ceng içün   (K.Y-O.Y) G.274

There is a war between the fluffs and the face. The fluffs that emerge on lover’s face are infidels since they are black, however the face where they emerge is Muslim. And these two fight a religious war:

Ḫaṭṭ[i] kāfirdür ḫurūc itmek dīn ḳaṣdına
Ruḫlaruñ müslim geçer göster anuñla cengüñi   (K.Y-O.Y) (G.3291/4)

2. c. Hair

The hair color, its shape and its smell are among the most addressed beauty features of the sweetheart. It is normal if the eyes get angry with the hair. The tiger eyebrow starts fighting when it sees the bow:

Zülfine ḫışm eylese tañ mı gözi
Ceng ider ebrū kaçan gőrse peleng   (C.A) (G.1485/3)

The hair and fluffs imagined as an army and soldiers that march to the battle are among the beauty features of the lover that cause chaos and instigation. When there are hair, black flag, fluffs and soldiers in the land of beauty, there will always be chaos and rumble as well:

Kūfr-i zülfüñi livā kılup ḥaṭuñ leşker çeküp
2. d. Eyelashes

Another beauty feature is the eyelashes. Eyelashes injure. They are similar to arrows. The example on eyelashes is as follows: The eyelashes form lines and the hair bangs always placate. Thus, it hurts the lovers’ feelings and leads a war once in three days:

Kirpügi sāflar dizüp durmaz dil alur perçemi
Kalb-i ‘uşşākı sıyup eyler savāş üç günde bir (C.A) (G.632/3)
The heart should beware of the eyelashes. Because, when one sees the battle lines, one hides:

Hazer kıl çeşmi müjgānından ey dil
Girfz eyler kişi görse saf-i ceng (C.A) (G.1480/6)

2. e. Dimple

The dimple is placating, injuring. It is perhaps the most important weapon of the sweetheart. The lover is helpless against the dimple. The desire of the lover to fight is in vain. Because, it is obvious that the dimple will shed the lover’s blood. With whom the soldier would fight when the leer forms a line. In fact, all the world and the beauties are the slaves of the sultan:

Cihān halkı mutī‘ündür senün ey husrev-i hūbān
Kimünle sāf tutup gamzen çeküp leşker mesāf eyler (C.A) (G.754/4)
The most significant feature of the dimple is the fact that it is murderous and sanguinary. Thus, in a way, it is Rustem, giving no quarter to his opponent.

Ḳatlıme ġançer çeküp ǧamzeñ emān virmez amān
Sanki Rüstemendür gelür ceng itmege Suhrāb-ila (K.Y-O.Y) (G.3137/4)

2. f. Eye

Eye is cruel and pitiless. It is necessary to spill the lover’s blood. The eye is drunk. The drunken eye is always at war with the heart of the lovers using its dagger:

Destine mestāne çeşmün dōstum hançer virüp
Kalb-i ‘uşşāk ile her lahza savaş itmek neden (C.A) (G.2222/2)

Ceng-i cūy-i çeşmün iñi mest itdüñ iy ḫūnī yine
Ḳatlı ider uşşāk durmaz itdügi arbededür (K.Y-O.Y) (G. 900/4)
When the eye is drunk, it starts the fight and jeers the lover calling him silly:

İder mest oldi çeşmün yine cengi
Atar dīvāne diyü bana sengi (C.A)(G.2710/1)
The whole universe had submitted to the lover. Thus, the battle of the eye is futile:

Ḳatlı çeşmün hemān yok yirlere ceng (C.A) G.1619/2

2. g. Mouth

In divan poetry, the target of the lover is often the mouth. The mouth is secret, shut and a rosebud. The mouth is used in the divan poetry mostly due to its narrow shape and small size. It is even known to not exist. Thus, the struggle of the heart for the mouth is futile:
Muhibbi acted like Ferhad, who carved through the mountain, for the sweet lips and pretty eyes of the sweetheart:

Ferhād ṣıfat ceng iderem seng-ile her dem
Şekker-leb [ü] širën suhenkāruñ elinden

Muhibbi used the war metaphor for the lover, adversary, love, mind, nafs and the earth and was influenced by the war scenes that he experienced in these metaphors.

3. War - Opponent:

The word war was also used about the opponent. The lover fights the greatest war for the sweetheart against the opponent. Thus, the war against the opponent is always a fight for honor. Muhibbi argues with the dogs around him. Because, it is customary for all to fight for office:

İtleriyle nola itsem ʿarbede kūyında ben
Olgelmişdür ider her kişi sadr için savaş
One cannot be reluctant to lose one’s head in the war against the opponent. Muhibbi desires to wage war against his opponent, he secretly wishes to give his head:

Muhibī’nün murādıdur rakibüne gazā kılmak
Anun içün ki gönlinde olur azm-i serüm peydā

4. War - Love:

Love is another significant topic narrated in battle scenes. Love is the most important conflict and casus belli between lovers. The lover has to fight both against himself and against others for love. However, it is not easy to stand the troubles and calamities of love. Muhibbi talks about the fight for love as follows: “Naturally, the war of troubles and grief is not easy. Even if one is Rustem, he cannot fight against love”:

Sanma āsān dilā maʿreke-i derd ü gamı
Işk ile ceng idemesin olasin Rüstem-i Zāl
Muhibbi was also among those who are in love with love. He is ready to pay the price for that. Muhibbi, who always chose love, is ready to lose his life and head in war:

İhtiyār eylemişem ışkını be ruz-i ezel
Baş u cân terkin urur içine giren savaşun
Gönül, aşık için yapılan savaşın galibidir. Çünkü aşık akıl değil, gönül işidir.
Aşığın gözü ve gönlü aşk savaşında durmaksızın savaşır ve bu savaşın galibi göze boyun eğdiren gönuldür:

Işk içinde eyler gözüm gönlüm benüm turmaz savaş
Gâlib oldı gönlüm ähr egdi gözüm ana baş
Both the heart and the spirit thrive for love. Muhibbi admires the war between them:

Işkı cân eyler taleb bir yaradan dahi gönül
Arada hayrân kaldum anlarun savaşına
The war of love is dangerous:

Uşşāka didüm tehlikedür maʿreke-i ışk
Çoklar güzerān eylediler bu ŝaherimden
It is difficult to be brave in the war of love. It is necessary to let go the cure and accept the trouble: 
Dermānı kodum ışḳ-ila kıldum ḳabdūl-i derd
Kimdūr dimeye mareke-i ışḳda baña merd (K.Y-O.Y) 374/1
Love is like a battlefield. Whoever enters the battlefield knows that he would lose
his head. Thus, whoever walks into the battlefield should let his head go:
Her kim basa ışḳa ḳadem evvel gerekdür terk-i ser
Baş terkini urmak gerek meydāna giren ceng için (K.Y-O.Y) (G.2747/6)
Some sacrifice their lives, some their heads for the shah of love:
Şāh-ı ışḳa kimisi baş u kimi cân iletür

5. War -Mind:

The divan poet, who is a lover and reckless, considers himself always a man of
heart. The love is against the mind and the poet considers love as superior.

There is a war against the mind and the fight is tremendous. Muhibbî, who uses his
abilities at war against his mind, likens the mind to the cavalry and the love to the
soldier, and hollers as follows with an attitude worthy of a universal sultan: “The
cavalry of the mind should not oppose the soldier of love, he should be scared of my
war and run away”:

Işk leşkerine turmaya bu ʔakl sipāhi
Eyleye girfż-heybét oludpür savaşumdan (C.A) (G.2134/3

Poet sultan Muhibbî stresses the superiority of love as follows: “The sultan of mind
would run when the sultan of love would arrive. It is not possible for me to fight
against him”:

Sultan-ı ışk gelse kaçar padişah-ı ʔakl
Mümkin degül ki ben anunla savaşem (C.A) (G.1785/6)

Muhibbî is always at war with the mind and his friend is the soldier of sorrow:

Dāyimā ʔakl ile çün ʔarbedeler kārumdur
Gam degül leşker-ı gam bile benüm yārumdur (C.A) (G.389/1)

6. War - Nafs (Self):

The nafs, which is referred to as the source of evil and sin, is considered to be the
co-conspirator of the devil in mysticism. Ascetic life prioritizes continuous opposition
to nafs and never make peace with it and it is believed that it is necessary overcome it
for benevolence and salvation. It considered more dangerous when compared to devil.
Because, the devil uses the tool of nafs to cause humans to sin. It is possible to redress
and discipline the nafs no matter how hard. To discipline the nafs, a life of severe
struggle and abstinence is required. According to the mystics, there is only a single nafs
in the body; ordering evil (emmâre), condemning evil (levvâme), achieving confidence
(mutmainne), acquiescence (raziyye), and acceptance (marziyye) are the attributes of
this single nafs. In the so-called the cults of names (Ēsma tarîki), there are seven orders
and attributes of the nafs. These are emmâre, levmâme, mülhîme, mutmainne, râziye,
marziyye, and zekiyе / kamîle. This ranking is called "atvâr-ı seb'a" (Uludağ, 2006)

The scenes on the battle against nafs include the traces of a real war. The ways to
be freed from nafs are searched. It is possible to understand how difficult this battle was
in the following couplets. According to the couplet below, in order to fight against the
nafs that leads the individual to lust and sapidity, the ones with heart shed tears and
wear armor:
Ey Muhibbî nefs-i emmâre ile ceng itmege
Ehl-i diller gözyaşın döküp zirih-püş oldular (C.A) (G.558/5)
Muhîbbî is sure about one thing; his war against the nafs was ongoing. In this war, the eye is full of tears and the bosom full of wounds:

Bilmédüm ahvâlîmi gerçi ne hâl üstindedür
Şol kadar bildüm ki nefs-ı cidâl üstindedür (C.A) (G.946/1)

Yaş-ıla gözüm tolu bagrumda baş
The war against nafs does not seem to end soon, it is expected to last a lifetime:
Hamdülillâh gâlib olup nefs-ı şûma ])**äkibet
Nice yıllar gerçi kim anun ile ceng eyledüm (C.A) (G.1818/4)

7. War - The World

The war is also mentioned in the couplets on the world. One should not rely on the mortal, transient and deceiving world. Because, this world does not belong to anyone. Thus, there is no point in fighting for the world. Muhibbî expresses this as follows:

“O my heart, do not desire the world since it is not eternal. You know it would not be yours. So, what good is to fight (for it)”:

Çün degül bâkî cihâna eyleme ey dil tama
Sana kalmaz çün bilürsin yâ nedür ceng ü cidâl (C.A) (G.1726/4)
When Muhibbî wrote “The bosom of the rose is shredded, and the nightingale is suffering in the rose garden, which fights for the world, the rose or the nightingale?” he means that suffering and sorrow are always a part of the struggle for the world:

Sînesi gül çâk ü gülşen içre bülbül derd-nâk
Dehr ile iden savaş güldür bülbül müdür (C.A) (G.997/2)
Muhibbî wrote “One should not be deceived by the vanity of the world. Because, the world is a battlefield for warriors,” hinting that he is a warrior sultan in real life as well:

Ey Muhibbî sakın aldanma cihânun alma
Şöyle tut kendi ki kim şârk ehlinün darâbîdur (C.A) (G.440/6)
Even when Muhibbî wrote “The heart is a warrior in the battlefield of love. The mountains are a mirror, and the bosom is his shield,” this was a reflection of his warrior soul:

Işk meydânında gönlüm bir mubârizdêtir bugûn
Daglar âyîneler sûmün anun kalkandûr (C.A) (G.719/3)

CONCLUSIONS

In conclusion, other sub-topics such as military campaigns, the enemy, battlefield and blood were addressed under the topic of war. The properties of the couplets that contained the word "war" were influential in the formation of the above topics. The second item was about the sweetheart. The poet, who authored his poems based on the divan tradition, his struggle with his sweetheart is the way it should be. Everyone should feel pain when facing the lover, independent of who he is. Because this is the most important feature of the lower: inflicting pain on the lover. It is the same even when the poet is Suleiman. Muhibbî utilized certain metaphors when addressing the
beauty elements of the sweetheart. For example, the battle between the hair and face of the sweetheart is likened to the Battle of the Mohacs.

The beauty elements of the sweetheart such as the face, the fluff, hair, eyelashes, dimple, eyes and the mouth were addressed and exemplified within the context of war. The third item was about the opponent. The opponent is perhaps the most important factor that the lover should fight. In fact, the reason for the anger the lover feels for the opponent is the fact that the sweetheart eyes the opponent, not the lover. Thus, Muhibbî would act similar to other divan poets and take a position against the opponent. The fourth item is about love. This is the whole problem, is not it? Love. It is a major reason for contention and war among lovers. The fifth item includes the mind of man against his heart. The mind is a space for struggle for the poet who is a man of heart. The sixth item is about the nafs. It is known as the cause of evil and the source of sin. It is necessary for man to discipline his nafs. This is where the war enters the stage. Because, it is not easy to be free from the nafs. It would be very difficult for individuals to fight against nafs. The final and seventh item is the fight of the lover against the world. The world is transient and a mortal. The world should not be relied upon. Because, the world would belong to no one.

In the light of all the above assessments, it can be argued that the poet sultan reflected his real life in his poetry while he authored his poems within the established tradition. War scenes that occupied a significant space in his life would live forever in his poems within this reality.

Notes

1. This study is the edited and extended version of a proceeding presented in 6th Classical Turkish Literature conference held in Kayseri, Turkey on November 25-27, 2010 (on behalf of Prof. Dr. Mine Mengi).

2. First parenthesis: (C.A) means that the couplet was selected from “Muhibbi Divan” by Coşkun Ak, (K.Y-O.Y) means that the couplet was selected from “Muhibbî Divanı Bütün Şiirleri” by Kemal Yavuz and Orhan Yavuz. Second parenthesis depicts the original ode and the couplet number.

REFERENCES

Chapter 45

Pervasive Developmental Disorder

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INTRODUCTION

Autism spectrum disorders are used as synonymous with pervasive developmental disorders. Autism spectrum disorder is a spectrum disorder which includes delays in development of basic functions such as socialization and communication. Autism spectrum disorders ranges from a serious case called autistic case to a lighter disorder named Asperger (Şahin, 2011).

The disorder, known as autism spectrum disorder today, was established as a result of American psychiatrist, Leo Kanner, in 1943, and defined as a disorder characterized with disorder in social relations and persistence in separation, and entered in the medical literature as “early infancy autism” (NAC, 2011; Şahin, 2011).

For years, it was asserted that it stemmed from parents’ attitude; therefore, it was estimated to have emerged in relation with psychological reasons, and parents were seriously criticized for this reason. However, with B. Rimland’s study carried out in 1966, the neurobiological nature of autism attracted attention (Akduman, 2015; Korkmaz, 2003).

According to Special Education Services Regulation of National Education Ministry of Turkey, autism spectrum disorder is a pervasive developmental disorder detected at the age range of 3-4in individuals with limited communication, restricted socializing and social relations, and emerging with insufficiencies to show up his/her interests and talents, and with inability to express himself/herself (Akduman, 2015).

The Features of Pervasive Developmental Disorders

Autism spectrum disorder is a neuropsychiatric, pervasive developmental disorder case, which is defined within the first three years of an individual, and shows itself with difficulties in socialization and establishing communication and with stereotype or repeating behaviours, and continues its obvious effect throughout individual’s life (Korkmaz, 2003; Christensen et al., 2013).

Autism is a developmental disorder which shows itself as restrictions in insufficiencies in mutual social communication and interactions and in interests and activities and repeating behaviours. The autistics on one hand may exhibit
insufficiencies in very simple skills of everyday life, on the other hand, they may possess superior talents in some limited fields of art (in some music branches) or numbers (Mathematical processes) (Akduman, 2015; Korkmaz, 2003).

The features that separate children of autism from the others are these: They use language either very little or none, and they are not sufficient in establishing individual relations or in social interactions, and they are unable to share their interests and wishes besides their emotions and thoughts, and they have very limited interest field (Bee and Boyd, 2009; Aydoğan et al., 2015).

Today, autism is defined as insufficiencies in life and socialization, and difficulties in communication, and restricted, regenerative and stereotype behaviour forms, and a non-neurological developmental insufficiency that does not have any certain characteristics. Although the features of autism and its severity change, they are seen as independent of socio-cultural properties, and they show differences with individuals of all ages as an insufficiency that lasts lifelong (Crosland and Dunlap, 2012).

**Prevalence of Pervasive Developmental Disorders**

Numerous studies about describing the factors causing autism have been carried out over years; however, the reason for its prevalence has not been determined not only in Turkey but also in the world. Autism, when especially its light and atypical forms are considered, is a quite frequently encountered disorder. While 1 in 2500 has typical autism in average, 1 in 500 exhibits autistic behaviours (Korkmaz, 2003). In previous years, it was stated that prevalence of pervasive developmental disorder was established to be seen in 1 in 500 individuals, according to recent researches, it has been considered that the disorder affects 1 in 500 children in average (Şahin, 2011). The studies about prevalence of pervasive developmental disorder have published significant reports about its prevalence in the world. These are 1 in 88 individuals in America, nearly 1% of all population in Asia and Europe. In a study carried out on pre-school children of 2,5-6,5 years of ages in England, it was reported that there was pervasive developmental disorder at a rate of 16,8 in 10.000. In addition, in the schools in South Korea, by means of a study, where pervasive developmental disorder was tried to be found out, this rate was determined to be 2,6%. In Turkey, it is reported that of different developmental groups, autism makes up 9,7% of them (Akduman, 2015). Besides, when examined in terms of gender, it is established that its prevalence in boys turn out to be four times more compared to the girls (Şahin, 2011).

**The Reasons of Pervasive Developmental Disorders**

Autism is dealt with as a neuro developmental disorder with genetic origin affecting more than one development field. Yet, it is not possible to tell what factors cause autism since they have not been definitely established. Therefore, it is beneficial to refer to the risk factors of autism rather than its reasons (Akoğlu, 2015).

**Genetic and Neuro-genetic Risk Factors**

In recent years, in the studies conducted for determination of the reasons of
autism, immunology, neuro-anatomy and neuro-chemistry have been focused on and the genetic basis of autism has been investigated. By expressing that present abnormalities could be clarified with cognitive insufficiencies in chemical structures taking place in neurological structure and in functional neurological structure, and that the symptoms could lead to a number of problems in unusually reacting to constant stimulants and in focusing on management and processing types of stimulants, the researchers have explained autism spectrum disorder within the framework of these details (Gardener et al., 2011).

According to the studies carried out these days about neuro genetic origins of autism, it has been determined that this disorder has been witnessed in boys more than girls (Ladrian, 2010). Moreover, studies performed on single egg and fraternal twins present findings in line with supporting the genetic causes of autism. In some studies carried out, when autism was witnessed with one of the single egg twins, it was expressed that it is 93% possible to encounter the disorder with the other as well. This rate is reported to range from 0% to 24% with fraternal twins (Magyar, 2010).

**Environmental Risk Factors**

The studies examining the causes of autism are not only limited to the studies investigating the possible genetic factors. There are also studies examining the relation between autism and environmental factors in relation with antenatal period, during delivery and post-natal processes. Although the results of the studies exhibit differences, it is stated that there is relation between autism and using oral contraceptives and smoking when conceived (Juul-Dam et al., 2001) and using drugs consisting of thalidomide during antenatal period (Bailey et al., 1995) and illnesses experienced during pregnancy such as measles (Chess, 1971) and problems that the infant live during delivery and post-natal period (asphyxiation, hyper bilirubinaemia etc.) and low birth weight (Chess, 1971; Croen et al., 2007), and having frequent infection in the first month of birth and disorders about immune system (Korkmaz, 2010). In addition to all these, if mother is 35 years old and more, when compared to mothers of 20-34, the possibility to have an autistic child increases (Bilder et al.2009).

**The Possible Effects of Cognitive Features**

Increase in the number of studies investigating the relation between development of mind theory and autism necessitates taking significant steps in order that complex cognitive nature of autism can be understood. The process of becoming aware of emotions, thoughts, ambitions and the existence of human reactions in individual life is accepted as expressions explaining the theory of mind (Korkmaz, 2011). Significant differences were found between children with autism diagnosis and children exhibiting normal development in several studies examining the development of mind theory, which is one of the approaches trying to explain problems about social interaction and symbolic game lived in autism (Kaysılı, 2013). He stated that mind theory necessitates some management functioning skills such as following kinaesthetic development of life and individuals in social
environment and at the same time, integrating his/her environment and changes during socialization process and being able to plan and the changing attention. He suggested that the difficulties autism diagnosed children exhibit related with these functions could be specific. Furthermore, he reported that repeating behaviour patterns and limited interest fields taking place in diagnostic criteria stemmed from the lack of managers’ functions; and emphasized that mind theory should be handled again in terms of these criteria. Nevertheless, in some studies carried out later, results about the outcomes related to development of mind theory were found not be universal as well (Tager-Flushberg, 1999).

Based on the information above, it is not correct to say that the variables possibly leading to autism/autism spectrum disorder have been determined definitely today. Therefore, it is a plain truth that a number of comprehensive investigations about the issue should be performed. However, it is possible to express that knowing the risk factors, which have been put forward depending on the results of scientific studies, will provide contributions to develop a “preventive” perspective about autism (Akoğlu, 2015).

**The Diagnostic Criteria of Autism and Their Classification**

Autism is evident from various behaviours such as unusually abstaining from social interactions and mutual conversation and inability to share his/her interests, emotions and affection and incapability to start social interactions and not taking part in social interactions. With these properties, autism can be defined as lack of social emotional reciprocity (Aydoğan et al., 2015). The distinguishing symptoms observed in infants exhibiting autistic disorders are as follows: Limitations or full insufficiency in language skills, inadequacy in obeying the socialization and social norms and deprivation of expressing his/her interests and talents (Bee and Boyd, 2009).

In the definition process of autism spectrum disorder, there are no criteria which can be explained in terms of human chemistry. For this reason, some distinct behavioural diagnostic criteria have been established among the experts in order to build consensus.

1. Distinct expression disorders during the process of socialization,
2. Insufficiency in verbal and non-verbal communication, interactive and communicative skills and deprivation from imagination and rich game playing skills,
3. Obsessive, recurrent behaviours and limitations in cases related to talent and interest (Korkmaz, 2003).

When current approaches are taken as basis to define autism, it is seen that the structure sheltering similar conditions compared to old definitions is defined more comprehensively. In the fourth edition of American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders (DSM), (DSM-IV) has put forward more acceptable criteria to define social, lingual and behavioural properties of autism. In DSM-IV, autism has taken place as follows under the umbrella term “Pervasive Developmental Disorders”:

- Asperger Syndrome
- Not otherwise specified (NOS) “Pervasive Developmental Disorders”
- Rett Syndrome
- The Disintegrative Disorder of Infancy (Akoğlu, 2015).

**Autism/Autistic Disorder/Autism Spectrum Disorder**

In DSM-IV-TR, autism is named as “autistic disorder”, while it is named as “Autism Spectrum Disorder” by DSM-V. Throughout this part, the term “autism” is used with its pervasive usage. Autism, as mentioned before, is characterized with significant difficulties lived in the fields related to communication, social skills and behaviours. However, though they take place under the same diagnostic group, the general developmental features and speed of children with autism diagnosis differ according to the age when the diagnosis is made, participation level of early intervention, existence or non-existence of any other developmental differences or deficiencies (mental deficiency, hearing loss, visual impairment etc.) and the difficulty level that autism creates on the life of the individual (Russel, 1997). Yet, as required by the nature of autism, social development and language development constitute the primary developmental areas. When considered that the areas are related to one another, it is necessary not to forget that the differences and/or inadequacies of specified fields will have significant effects on other developmental fields (Akoğlu, 2015).

**Features related to communication skills**

- Delays and differences in communication with children of autism are observed. However, there might not be delays with every autistic child; and every child whose utterance is delayed may not with autism disorder. Some autistic children may never speak (Ersan, 2013).
- Problems related to language are lived from the time when language starts to develop. For example, it is frequently observed that repetitive expressions are used to get in contact. These expressions can sometimes be the expressions heard from television and sometimes from people around and even sometimes they can be meaningless (Lord and Bishop, 2010).
- Some children with autism speak echoingly (echo speech). In this speaking style, the infant repeats the words or sentences like a parrot as soon as s/he hears or later (Fazlıoğlu and Yurdakul, 2007).
- Significant difficulties are usually observed in his/her commencing a talk and in joining in chat to his/her peers. Similar situation is the case when it is needed to end up a conversation.
- It is observed that he/she cannot respond open ended questions or he/she experience difficulty in answering such questions.
- Significant delays are observed in game skills which have great importance in terms of development. It is generally witnessed that they prefer unaccompanied games which depend on simple imitations and are not compatible with their chronological ages rather than symbolic and complex games (Lord and Bishop, 2010).
Features related with social skills

- The point is that s/he has a general weakness to make an eye contact. In addition, s/he can be observed to make an eye contact for a short time and for some specific situations. For instance, while s/he can establish an eye contact with family members, it may be the point that s/he may almost never make an eye contact with his/her peers or others.

- It may be a matter of question that s/he can live a general difficulty to understand facial expressions of others and to express his/her feelings through his/her facial expressions. Besides, even if different facial expressions are used, it is great likely that such behaviour as abstaining from establishing an eye contact with the person facing him/her and turning his/her body to another direction can be observed with him/her.

- Some difficulties may be observed in using non-verbal communication skills. For instance, it is possible to observe that s/he has difficulty in using his/her hands mimics and other body movements simultaneously. It is great likely that they may be ignored by their peers due to their difficulties in managing social interactions.

- It is possible that they may experience difficulties in commencing friendships and making friends. It is observed that they prefer not to take part in group games, so they play alone. They are mostly observed to play computer games alone or create game configurations constituted in a complex way and in which action figures are present but others cannot participate.

- Depending on difficulty in understanding his/her personal limitations, it is probable that s/he can exhibit behaviours like staying far away or very close to the person facing him/her. This may make it difficult to establish friendship relations. They often have difficulty in situations that require getting in a queue.

- There are significant difficulties in understanding the emotional state of the person facing them, empathizing and arranging their behaviours according to the person's feelings and behaviours.

- Difficulties in understanding the roles in social relations are observed (NAC, 2009; Fazlıoğlu and Yurdakul, 2007; Ersan, 2013).

Features related to behaviours (Restricted, repetitive, non-functional behavioural patterns)

- It may be possible that s/he pay intensive attention to an issue or object. For example, s/he may wish to have information about marine life in detail.

- An extreme resistance is observed with the issues such as timing and daily routines. Particularly, displaying unwanted reactions and temper tantrum are frequently encountered incidents in cases such as change in daily routines. Similar resistance is valid for games as well. Behaviours such as repeating the actions in the game in the same order strictly and getting angry or becoming introverted are frequently observed when the process of the game is changed by someone else. Besides, the same resistance is valid about the issues nutrition, dressing routines and the locations of the objects around (Aras, 2003).

- In some children with autism, some behaviour such as turning around, walking
on their tip toes or flapping their hands like wings, wagging their hands, fixing their body parts such as hands and feet unusually, swaying can be observed (Ersan, 2013).

- It is possible that they become disturbed from heat, sound, and smell especially from some sounds and smells stimulating extreme sensitivity.

- Game based behaviours can be often observed unusually. For example, turning the tyres instead of driving the car and classifying the toys according to some properties. In addition, following the repeating actions (water dropping from tap, bouncing ball etc.) and whirling objects for long time are often observed (Aras, 2003).

**Asperger Syndrome/Disorder**

- Asperger syndrome is defined with problems which are lived during socialization process and which emerge with characteristic features of autism (such as limited interest field and deprivation of social interaction) and inadequacies in interest fields. However, it is seen that this syndrome does not reflect all specific qualities witnessed in autism spectrum disorders (echolalia, delayed speech, mental problems, indifference to the living environment, and inadequacies in self-care etc.) (Dalmış, 2013; Klin, 2006).

- In some individual who are diagnosed with Asperger syndrome, it is stated that emotional and behavioural disorders are observed distinctly apart from routine Asperger syndrome symptoms (such as depression, attention deficit, anxiety) (Dalmış, 2013; Berney, 2004). Although the existence of different opinions about the definition of this syndrome makes an obstacle in front of it to exactly know how pervasive it is, it is mentioned that it is seen with 2 or 4 individuals out of 1000 (Fombonne and Tidmarsh, 2003; Klin, 2006).

- In those individuals who have extraordinary social features, they have the peculiarities such as carrying out long, detailed and boring conversations related to their restricted interest field and generally trying to talk to adults and desiring to be with people, but being indifferent to their feelings, thoughts, interests and wishes and not being able to understand the words of abstract and metaphorical meaning (Dalmış, 2013; Klin, 2006).

**Nos (Not Otherwise Specified) Pervasive Developmental Disorder**

According to DSM-IV-TR, NOS (Not Otherwise Specified) Pervasive Developmental Disorder was used for children not meeting the diagnosis criteria of Asperger Syndrome or Autism but specific to autism features. Nevertheless, Not Otherwise Specified-Pervasive Developmental Disorder in DSM-V does not take place under a different diagnosis category, but takes place under the diagnosis of ‘Autism Spectrum Disorder’. With the arrangement that is done with DSM-V, it is reported that it will be probable to eliminate uncertainty related to this diagnosis group and the possibility of establishing different diagnoses by various clinicians. Moreover, the children, who do not meet the typical criteria such as the start of symptoms before the age of three which takes place among the diagnosis of autism, yet, in establishing social relations specific to autism, and in irregularities in
mutuality of these relations and during the communication process which is expressed verbally or non-verbally; and deterioration in game and drama activities, and when one of these differences is observed in children of different features in terms of development such as limited interest field, and who do not have any differences from the other developmental features uttered, are handled in this group (Wong et al., 2013; Şahin, 2011).

**Rett Syndrome/Disorder**

It is a developmental disorder especially seen in girls. It was at first defined by Dr. Andreas Rett in 1966 (Şahin, 2011). It is known that this rarely seen disorder appears in girls more often than boys (Metin and Yükselen, 2016). The most prominent feature of Rett Syndrome is the discovery of regressing in size of normal head measurements from the fifth month after birth of individuals exhibiting normal development (Korkmaz, 2003). Stereotype, repeating and aimless hand gestures (twisting, washing) start instead of purposeful hand gestures. Irregular walking and body movements emerge and body posture deteriorates (Erol, 2005). Social communication spoils within two years after birth and as the age progresses, if they are able to walk, deteriorations occur in their walking. In the children with this syndrome, epileptic attacks are frequently witnessed. As a result of the studies carried out, a gene causing this syndrome has been found in recent years (Korkmaz, 2003).

Rett Syndrome as well is one of the disorders handled under the title of pervasive developmental disorders in DSM-IV-TR. Due to its genetic substructure; it is handled as a different diagnostic category. This disorder exhibits a more serious table compared to autism and other disorders mentioned above and its influence on daily life is bigger. As well as similar features with autism, there are studies displaying that this disorder has some different features, though. In children diagnosed with Rett Syndrome, repetitive hand gestures similar to autism are mostly observed. This is at a level to hinder the hands to be used functionally. It is known that this quite rarely seen disorder occurs more in girls than boys (Wong et al., 2013).

**Disintegrative Disorder Of Childhood**

The disintegrative disorder of childhood, similar to Rett Syndrome, points to heavier tables where acquired skills are lost and a serious deterioration in social interaction emerges following a normal developmental period according to DSM-IV-TR. This disorder, quite rarely seen compared to Rett Syndrome, is characterized with regression at a level to effect communicative, social and behavioural skills at nearly 3-4 ages of normal continuing development of the first two years of life (Wong et al., 2013). In the group of this diagnosis, it is seen that verbal language gradually regresses and finally disappears. The disorder, in which a gradual social isolation and introversion are witnessed, displays itself with developmental losses in adaptive skills, walking functions and various self-care skills (nutrition, toilet etc.) (Akoğlu, 2015).

In a number of studies that have been carried out from past up to this time, the
features of autism spectrum disorders have been tried to be defined; and the presence of difficulties related with communication, socialization and behaviour fields have formed the focus point of the definitions made. However, there is benefit that the diagnosis of autism/autism spectrum disorder represents a quite heterogenic group. In other words, though they take part in the same diagnosis group, children with autism may vary in terms of communicative, cognitive skills and adaptive behaviours. Also, autism can affect the functions of individuals related to their home, school and social lives at different levels (Akoğlu, 2015).

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Chapter 46

A General View of “Health and Safety in Schools” In Turkey within the Context of Occupational Health and Safety

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INTRODUCTION

Education of individuals begin from very early ages onward and goes on for a lifetime, enriched by the accumulation of experiences gathered in various learning environments. Learning experiences that are gained in early stages and acquired by doing and living become permanent through internalising. One of the primary duties of governments should be accepted as establishing the maximum level of health and safety in any type of environment where individuals may be, including the family as the smallest unit of society.

Another important step for establishing healthy societies is to create healthy and safe living spaces such as schools to accelerate and facilitate the process of bringing out the potential of individuals through structured environments. As it is with most of the areas of service sector; identifying risks in educational environments that might cause a threat to healthy life and safety and developing measures to prevent these risks relate to many components including social and economic dimensions of the society. Therefore, it is essential to re-organise educational services within the context of “occupational health and safety” and it is required to take necessary measures to eliminate problems that may require more information, labour, time and cost. Accordingly, all the work that is done and that is planned to be done has to be structured with this understanding.

THE DEFINITION AND IMPORTANCE OF OCCUPATIONAL HEALTH

In the strict sense, occupational health is the systematic work and activities that is being done to eliminate or minimise all of the risks that employees face during the course of work in the workplace. In a broad sense, occupational health is not only limited to the workplace and employee, but also covers all of the social segment that is effected by the activities of that corporation. Within this context, the concept of occupational health also involves work on eliminating or minimising risks and factors that may cause exposure for employees, visitors, customers and for the society in a wider perspective (Çiçek & Öçal, 2016).

The widely accepted definition for occupational health is the definition by WHO and ILO. Occupational health is to maximise the prosperity of employees in terms of their physical, psychological, social being; to maintain their well-being, to prevent impairment of health due to work-related problems, to protect them from
risks that may be unhealthy and caused by their line of work and to employ them in the most appropriate jobs in accordance with their physiological and psychological characteristics. It is important for individuals to work at jobs appropriate to their physiological and psychological characteristics; because if they are not compatible with their work, then this would result in loss of efficiency, various health problems, and delay in output times and lack of harmony in the workplace. Within this context, occupational health and safety has social and economic dimensions. Individuals who have occupational-work accidents and various negative situations lose some or all of their labour force for a certain time. This means that they would lose all or most of their income. Therefore, the productive individual becomes a consumer; and maybe dependent on others. It is inevitable for these problems not to be reflected to the family environment. In this respect, ensuring health and safety of employees is the concern of society as a whole; in terms of social context and peace. On the other hand, employees who lose their lives or lose their capacity due to an occupational-work accident or an occupational illness cause various losses on the economies of institutions and countries. These are losses on manpower (labour), the loss of production and income that would be generated by the individual, and the loss of expenditure and spend on education to educate the individual. Consequently, institutions may face various negative situations unless they conduct systematic and planned activities on occupational health and safety. These negative consequences may involve an increase on losses of labour power among employees, an increase in costs of repair and maintenance, increase of losses in raw/ materials, increase in health-care spending, material/immaterial compensation that should be paid to victims, increase in court expenses, increase in training and insurance expenses for individuals who have been employed to cover the employees who have temporary incapacity to work, shutting down the workplace or going out of business, penalties and imprisonment, losing market shares and qualified labour leaving the work (Kılıkış, 2014; Çiçek & Öçal, 2016).

With the exchange and sharing of information and experiences on occupational health and safety in various service sectors, the issue of adjustment and adaptation of occupational health and safety to education was brought to agenda and many initiatives have been taken in regards to this matter. The section below looks into the current implementations in Turkey on “occupational health and safety” within the scope of educational-training services.

**WORK ON “SCHOOL HEALTH AND SAFETY” IN TURKEY WITHIN THE SCOPE OF “OCCUPATIONAL HEALTH AND SAFETY”**

European Agency for Safety and Health at Work has ongoing activities since 2002 on adjusting and adapting occupational health and safety to education. One of these initiatives is ENETOSH. The European Network Education and Training in Occupational Safety and Health (ENETOSH) offers a platform for systematic knowledge-sharing on issues concerning education and training in occupational safety and health, and Turkish Ministry of Labour and Social Security, General Directorate of Occupational Health and Safety is within this network. The activities within the scope of this project aim at life-long learning, in other words the
continuation of education from pre-school until the period of retirement. It has been planned to train children and youngsters on preventing dangers and risks; and also introducing approaches on health and safety through projects. Thus, it is aimed to develop a culture of occupational health and safety in schools and other institutions.

Within the context of occupational health and safety, the primary aim that is adopted in educational services is to establish secure school environments. In general, “school safety” involves the arrangements made within the school grounds and the surrounding area; and it covers activities that are aimed at increasing the engagement of school employees, students and parents to school. School safety is defined as ensuring the life safety of students and school employees against unwanted behaviours such as crime, violence, aggression, bullying, theft, vandalism, alcohol-use, tobacco-use, drug abuse, sexual and racial harassment and in case of an extraordinary incident that may cause a crisis situation (such as armed assault, fire, earthquake etc.). Dönmez & Güven (2002) define school safety as students, teachers and other employees feeling themselves free in terms of their physical, psychological and emotional state; Ögel, Tarı & Yılmazçetin Eke (2006) see it as a set of positive relationships between teachers and students, and their ability to form positive relationships with each other; Stephens (1995) defines it as the realisation of learning in the school as intended; Çelik (2000) sees it as a focus on student achievement and providing opportunities to students where they can display their social skills; Kadel (1995) defines this as the opportunity given to students and teachers on decision-making processes. Giving importance to the mental health of students, making students and teachers feel that they are in a safe environment, ensuring that students and teachers enjoy the school environment, motivating the school community and making success a focus for students are among the aims of school safety.

Based upon the definitions and objectives mentioned above, the sub-goals to reach these objectives can be listed as below:

- To constitute and comply to school’s health and safety policies,
- To identify and evaluate risks, to get these risks under control and to eliminate them,
- To ensure that employees, students and other individuals are informed sufficiently about these risks, preparing instructions when needed, providing support to them through training activities and to ensure supervision when needed,
- To provide a well-managed communication link to ensure discussion and debate on health and safety issues,
- To monitor and review the efficiency of relevant regulations of the school on health and safety, and to make improvements and amendments when necessary,
- To prepare policy paper on school administration; to ensure cooperation during the practise for providing a healthy and safe work environment for the individuals, and to act in line with the rules and necessities that the policy requires,
- To fulfil the legal conditions as much as possible, and to be in line with the legislation.

A safe school is also an effective school and certain qualities. First of all, these
schools have strong leaders. The physical surrounding of the school is safe and policies at school-level are developed by setting an example through responsible behaviours. Prevention and intervention programs regarding school security are wide-ranging, coordinated and consistent. Interventions are based on a thorough evaluation of student needs and approaches are evidence-based. Training and support is provided for staff, in order for them to implement the foreseen approaches (Çelik, 2000; Dönmez & Güven, 2002; Ögel, Tari & Yılmazçetin Eke, 2006; as cited in Çankaya & Bakır Arabacı, 2010).

Law No 6331 on Occupational Health and Safety was introduced in Turkey in 2012, as a response to occupational accidents by public opinion; and as a necessity for the process of accessing the European Union. This law has brought many important changes to work life. One of the most important innovation was to include public institutions and employees under the occupational health and safety regulation. According to Law No 6331 on Occupational Health and Safety; all the institutions hold the responsibility of identifying situations that may cause risks and taking the necessary measures. The term ‘risk’ is defined for situations that have the potential to cause harm. Law No 6331 on Occupational Health and Safety not only has provisions for work places, but also for schools. Within this context, educational institutions have an obligation to take the necessary actions. School principals acting as employers and teachers acting as employees have the duty to implement the law and legislation and its contents. Accordingly, all the situations that may happen/take place in the school are identified with the “Risk Assessment Report” used for the identification and analysis of situations that may cause harm and danger; in accordance with Law No 6331. Although occupational health and safety practices create an additional workload on schools, they are very important for featuring health and safety dimension which is crucial for human life (Akt, 2013; Anonymous 2014).

Apart from that, and in addition to the Law No 6331 on Occupational Health and Safety, the laws and legislations in regards to occupational health, school health and safety are Law No 4857 of Turkish Employment Agency, Law No 4904 of Turkish Employment Agency, Law No 4447 on unemployment insurance, Law No 1739 on National Education, Law No 3308 on Vocational Education, as well as Ministry of National Education’s (MoNE) regulations on Secondary School Institutions, Primary School Institutions, Pre-School Education Institutions, Non-Formal Education Institutions and regulations on Private Schools.

According to the Law No 6331 on Occupational Health and Safety; “Board of Occupational Health and Safety at School Level” (OSGK) has been established for the administration of health and safety in schools. The school principal is responsible for conducting health and safety activities. Establishment of the Board is in accordance with the 6th Clause of Regulation on Boards of Occupational Health and Safety. It is obligatory to have the Board in work places where there is more than fifty employees and ongoing work for more than six months. The Board ensures that the reports are analysed at least once in every three months, by technical staff and experts. The secretariat of the Board is run by the Deputy Manager. OSGK consists of the employer or the Vice Principal (School Principal),
occupational safety specialist, on-site doctor, human resources, staff, an authorised individual who is responsible for doing the administrative work and financial work (Deputy Manager), civil defence expert where available, an employee representative and a headworker where available. OSGK, established in schools, is the control mechanism for “occupational health and safety”. Schools make evaluations based on the Occupational Health and Safety School Guide prepared by Ministry of National Education. The responsibility not only lies with the school administration; but also with all the teachers. Evaluation on various situations have to be done in order to identify all the risks that can be foreseen and prevented in school environment, and in order to take necessary measures. Besides, according to the 7th Clause of the relevant regulation, training seminars on duties and authorities of the Board is provided to members on national regulations and standards on occupational health and safety, common occupational-work accidents and reasons of dangerous incidents, basic principles of labour hygiene, communication techniques, emergency measures, occupational-vocational diseases, specific risks regarding the workplaces and risk assessment (Anonymous, 2014; Bilir, 2016).

Below, you will find several explanations stated in Occupational Health and Safety School Guide prepared by Ministry of National Education, which can be used in evaluating various situations that may happen in school environment:

1. Emergency Exits

OSGK reviews what needs to be done in case of an emergency, the current situation of the direction signs and the exits in accordance with the number of people; then the identified defects are eliminated together with the School’s Civil Defence Club.

2. Accidents

Accidents and incidents are always investigated by the members of OSGK, and the school/institution manager is always informed. Reporting accidents is the duty of the manager.

3. First Aid

In an emergency, the first contact should be made with individuals who have first aid certificate and these individuals are members of OSGK on a voluntary basis. Names of the individuals who have first aid certificate and their phone numbers should be announced on all of the health and security announcement boards and their contact details should be shared with the school administration and with OSGK members.

4. Building Services

Various services on maintenance and repair of gas, water and electricity installations inside the building can only be administered by authorised personnel; in line with the instructions provided by OSGK.

5. Laboratories and workshops

Laboratories and workshops should be supervised at all times. Staff and students should be trained if needed. Teachers are expected to monitor students’
work and inspect students through observation. Measures taken for preventing electrical leakage that may be caused by electrical appliances in all the laboratories and workshops should be checked on a regular basis.

6. Visitors
There should be an allocated area for visitors inside the school and records of visitors must be kept.

7. Surveillance
Individuals should behave secure at all times, in accordance with the school policy. They should conduct their duties in line with the safety instructions.

8. Use of school outside of working hours
OSGK identifies instructions for conditions, duration and the limitations in regards to the use of school for the whole year in line with the official health and safety regulations and permissions are given as a document; and access is arranged accordingly.

9. Training
Training activities for employees and students that are required as preventive measures against occupational health and safety risks are identified by “Field Health and Safety Board” (ASGK), and submitted to OSGK. OSGK ensures that the identified training needs are met inside the institution, or in cooperation with the relevant institution.

10. Secure use of tools and equipment
Tools and equipment used in departments, workshops and laboratories should be used in accordance with the instructions provided by the supplier and in line with the intended design. Instructions and training on how to use the equipment should be provided before using the tools and equipment. Regular maintenance of tools and equipment that are used in school workshop and laboratory should be conducted by ASGK; and the paperwork/documentation on the maintenance work should be kept. All of the materials used during the maintenance work should be in accordance with Turkish Standards Institute (TSE) norms.

11. Grounding
Grounding should be done in line with the relevant standards and regulations for all the tools and equipment. There should definitely be a lightning rod system in place.

12. Office work
Appropriate lighting, air-conditioning and ergonomic factors should be considered for the working environment in order to prevent health issues and occupational illnesses that may occur during office work and arrangements should be made accordingly.

13. Measurements and tests
OSGK should ensure that measurements and tests are conducted for the whole school once a year or whenever required; on gas, dust, rumble, lighting, thermal
comfort etc. Insufficiencies or identified problems should be resolved accordingly.

14. Surveillance of the work environment

Group teacher should check the machinery and equipment as well as the work environment before starting work and after finishing work. Factors that affect occupational safety negatively should be identified and necessary measures should be taken.

15. Personal protective equipment

Personal protective equipment should be selected in accordance with the work. Teachers, students and other employees should be using personal protective equipment in workshops and laboratories, against possible risks.

16. Staircases

Fire-escape stairs: There has to be fire-escape stairs, in addition to staircases for general use. The location of staircases should be specified sketches. Staircases must be accessible at all times for emergencies.

Standard staircases: Staircases for general use should always be ready to be utilised, clean, and well-maintained and equipped for safety. There should be 90 cm safety rails on the sides of staircases. If the gaps between the staircases are too wide, then this gap should be secured with a net etc. to prevent children from falling.

Portable ladders: Portable ladders that are kept for necessary work should be in accordance with the standards and the regular checks on these ladders should be conducted once in every six months by OSGK. Necessary maintenance work on the ladders should be done when required.

17. Lighting

The necessary lighting should be evaluated by OSGK and ASGK for the general areas within the school and the work spaces; and appropriate lighting should be provided accordingly.

18. Ambient temperature

The ambient temperature should be in accordance with the intended purpose. The school administration and OSGK should work in cooperation to take the necessary measures to ensure this.

19. Ventilation

Regular checks should be done to identify if the appropriate ventilation is in place for the workspace, and OSGK and ASGK should ensure that additional measures are taken if necessary.

20. Settlement Plan

Settlement plans must be established under the coordination of OSGK, for all the areas within the school grounds, including the intended purpose of use. These plans must be displayed openly in relevant areas; and must be checked by OSGK within the year.
21. Order and cleanliness

The environment should be clean and proper, and in accordance with the settlement plan, after the work has been finalised. Warning signs should be placed on the slippery grounds during cleaning and access to the slippery ground should be restrained.

22. Working at height

Areas where there is hazard of falling should be identified, and necessary measures for working at height must be taken (such as scaffold, safety rail, warning signs etc.). Training on working at height must be provided.

23. Pedestrian crossing, vehicle traffic and work spaces in open areas

Inbound and outbound routes inside and outside school compound should be identified, trafficable areas and roads should be identified and relevant road signs should be in place.

24. Fire instructions

OSGK evaluates the physical condition of the school in cooperation with School’s Civil Defence Club and examines the fire risks; then takes the necessary measures and prepares instructions. OSGK also creates fire scenarios and conducts the necessary exercises in order to develop behaviours of individuals.

25. Disabled individuals

When the settlement plan is established, physical conditions of the building should be examined for the disabled individuals, and their ability to move inside the school compound should be considered. OSGK should evaluate the disabled individuals in the school respectively, and ensure that additional measures are taken for occupational health and safety in regards to these individuals.

26. Technical visits, internships and skills education in institutions

OSGK should identify the health and safety measures for the activities conducted outside of school, and should cooperate with School Excursion & Research Club and with other relevant organisations in order to identify the conditions on transportation and accommodation.

27. Health and safety signs

Safety signs, information on first aid, instructions on restrictions, rules and health should be displayed in line with the relevant regulations, in areas and locations where necessary and where emergency exits are; in order to ensure occupational health and safety. Students and teachers who will receive skills education, and who will do their internship in enterprises should be informed on occupational health and safety.

Despite the legislation on occupational health and safety in Turkey and all the well-intentioned approaches; the findings of research study conducted by Bülbül (2016) on the legal obligations of Occupational Health and Safety Law on schools indicate that relevant work on occupational health and safety has not been initiated on time and properly by MoNE; and there are uncertainties and deficiencies in schools due to the law itself. It is also stated that Law No 6331 has not affected
MoNE’s policy papers and regulations adequately. In addition to this, there are no
documents, records or archive indicating the current status of occupational health
and safety in education sector. However, statistical indicators are needed for data
organisation, for identifying the needs and for establishing the necessary policies in
line with the relevant findings. Various incidents and losses can happen in schools
from time to time, due to the unhealthy and unsafe conditions. It is very important
to be aware of the risk areas in order to prevent losses. It is possible to monitor risks
and danger in the environment by establishing a Risk Inventory for the working and
living spaces and evaluate risks in accordance. The phrase “When risks and hazards
are known, they can be prevented and minimised with the appropriate measures” is
a phrase commonly used for enterprises where there is various production activities;
however it is more applicable to schools where children and youngsters receive
training. School environments where students who are going through adolescence
require more care and attention in regards to health and safety (Anonymous, 2014;
Bülbül, 2016).

Within this context, the lack of interest on occupational health and safety in
schools has been also reflected to the academic research studies conducted in
Turkey. When the database of the Council of Higher Education (YÖK) and other
research databases are reviewed, it can be seen that there has been several research
studies conducted on Law No 6331 of Occupational Health and Safety and its
implementation on different sectors; however there has not been any research
studies on education sector. In addition, there are research studies in Turkey
conducted on “health in schools” and “school safety” as separate topics. For
instance; according to a research study conducted by Bahçeşehir University (BAU)
and CSG (City Security Group) Security Company in 2013 on “School Safety in
Turkey”, and as an outcome of face-to-face interviews with 1000 individuals;
findings indicate that the majority of parents are worried about the security
environment in schools. As the level of education and income increase, the worry of
safety and the negative perception on environment of trust in schools also increase.
Three parents out of four are worried about the safety of their children during their
time in school and their worry of safety increase with their level of income. Six
parents out of ten believe that children engage in violence in schools and threaten
each other verbally. 64% of the parents are worried about the traffic and road safety
while their children are travelling to school. This rate is around 80% for parents
whose children go to school by walking or by using public transportation. Half of
the parents whose children use school busses are worried about the road safety. One
individual out of two who live in Istanbul believe that school principals and
teachers do not have sufficient information and experience on safety. 81% of the
participants believe that private security guards are required in schools. This rate is
85% for individuals who have children attending pre-school. 80% of the parents
who participated to the study think that private security guards will be helpful in
preventing crime in schools (Bülbül, 2016; URL 1)

CONCLUSION

As it can be seen in the given example above, research studies conducted in
Turkey on this topic is generally focused on student health and safety; and not much attention is given to the health and safety of the employees. However, it is possible to monitor the risky situations in the environment and to take the necessary measures before these situations occur. “Prevention” work in regards to occupational health and safety in educational services, as it is with the other service sectors such as health, should be structured as primary, secondary and tertiary measures. The target group in primary preventive work should involve all the employers and employees; and school principal, teachers and assisting staff in schools. The target group should also involve students and families. By this way, efforts on minimising and eliminating possible problems in education regarding “occupational health and safety” can be realised. Secondary prevention measures can be planned as efforts to prevent the increase in numbers and durations of incidents that have occurred; and the tertiary measures should be considered as decreasing the negativity and deficiencies that occurred as an outcome of these problems.

As a conclusion, occupational health and safety should become a concept that is well-known by all layers of the society and should be considered as an important matter. Individuals who are suppliers and consumers in various fields of service sector should be considerate of their rights in terms of “health” and “safety”, and should pay sufficient attention to the required obligations.

REFERENCES
Chapter 47

Turkish Air Force Officer and Non Commissioned Officer Training: A Research on Hidden Curriculum as to School Climate*

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INTRODUCTION

All the societies throughout the history have fulfilled educational requirements to maintain their own existence, transfer their cultural legacy to the coming generations, and create the citizen model expected by the majority of the community. What these expected individual qualities are and how they can be gained by the individuals are within the scope of educational and instructional curriculum.

During practice, the curricula are influenced and shaped by factors such as the physical conditions of the school and the classrooms, believes, expectations, and attitudes of administrators and teachers, and student characteristics (Yüksel, 2004). Consequently, students acquire knowledge, skills, attitude, and values that are not included in the curriculum, or they acquire them in different ways. Along with the formal curriculum developed by the government and administered by the Ministry of Education, students obviously perform learning as a consequence of an unwritten and inexplicit program (Sönmez, 2012). This program, which is sometimes even more effective than the formal curriculum, is called as the hidden curriculum (Yüksel, 2002, Tezcan, 2003; Demirel, 2004).

The students are believed to be influenced by this program, which is different from the formal one followed by educational institutions, a program based on social and societal interactions and the administrative or methodological variations or uniqueness of the institutions. Within hidden curriculum, the students are more likely to gain skills about attitudes, values, and habits. The messages informally and implicitly delivered by the school order, rules, physical and psychological atmosphere, and the teachers and the administrators constitute the hidden curriculum, which acts as a medium for students to demonstrate the right behaviors for the social life, the state ideology, and the institutions’ expectations and interests (Yüksel, 2004).

Mariani (1999), a researcher who has concentrated on school curricula, resembles what we know and design about a program (objectives, content, time, *

This study is the summary of the unpublished master thesis completed by the first author under the supervision of the second author.

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methods etc.), and what we do not know about it to an iceberg. Indeed, the researcher resorts to this metaphor to refer to hidden curriculum, which is symbolized by the major part of the iceberg invisible beneath the water. A distinct quality of hidden curriculum is that concepts related to “believes, attitudes, motivations, personal style, intelligence, skills, aptitude, and learning processes” that lead to the achievement of the learning goals, or development of the desired behavioral changes are important in the unseen part of the iceberg, rather than the “products, performance, and outcomes”.

Because of the very nature of the hidden curriculum, it is quite difficult to identify its dimensions and what they entail. The present study focuses on the aspect of the school climate, which is one of the categories in Yüksel’s classification (2004). School climate refers to all kinds of physical, administrative, communicative, and instructional arrangements and practices within and around the school that lead students to acquire learning that is not formally specified in the curriculum (Yüksel, 2004; Veznedaroğlu, 2007).

Today, it is widely believed that the hidden curriculum exists in all educational institutions with varying degrees (Anderson, 2001; Tuncel, 2008; Yüksel, 2004; Boztaş and Tezci, 2015). Wherever there is an educational institution, a hidden curriculum is believed to exist alongside its formal curriculum organizing the instructional activities there. There are numerous institutions of Turkish Armed Forces, training military personnel. These institutions produce remarkable outcomes at the end of the learning process, which are not only in the cognitive and psychomotor domain but also, and predominantly, in the affective domain, which renders hidden curriculum and its function all the more important.

Turkish Air Force-Officer and Non Commissioned Officer Training School is one of the training institutions operating under Turkish Armed Forces (TAF). The school trains officers and noncommissioned officers recruited for Air Forces Command from external sources (civil universities, faculties/higher education schools or vocational schools). The school’s main objective is to help them gain the main military dynamics as well as the mentality of officer and noncommissioned officer mentality. An analysis of the qualities that are expected of every military member described by Turkish Armed Forces-Internal Service Law and Regulation and the officer and noncommissioned officer characteristics defined by official training programs shows that most of them are related to attitudes and values considered in the affective domain. Some of these qualities are being ready to sacrifice one’s life, getting along well with others, altruism, loyalty to the Republic of Turkey, the country, and the nation, obedience, trustworthiness, and being ethical and orderly. Although these are indicated in a formal curriculum, they are often gained through hidden curriculum. Indeed, a variety of studies have revealed results showing that hidden curriculum is more effective than formal curriculum in gaining students attitude and value based qualities (Mariani, 1999; Tezcan, 2003; Yüksel, 2002, 2004; Sarı, 2007; Boztaş and Tezci, 2015).

The study intends to explore the extent of hidden curriculum at Turkish Air Force-Officer and Non Commissioned Officer Training School with particular emphasis on school climate, and is thought to have particular significance for
trainings delivered by Turkish Armed Forces training institutions, especially for those strictly focusing on the acquisition of learning objectives from the affective domain (attitude, values, internalization, etc.) such as Officer and Non Commissioned Officer Training.

Few studies on hidden curriculum have been carried out in Turkey, and almost all of them have been conducted at schools operating under the Ministry of Education (MOE) and at universities under The Council of Higher Education (Yüksel, 2004; Veznedaroğlu, 2007; Sarı, 2007; Boztaş and Tezci, 2015). No research exists focusing on hidden curriculum in institutions training military personnel for the Turkish Armed Forces. Therefore, the present study has significance in that it will fill a theoretical gap in the field of educational sciences and a practical gap in military education, and pave way for further research.

This study intends to analyze the scope of hidden curriculum at Turkish Air Force Officer and Non Commissioned Officer Training School as regards school climate. Thus, the following research questions have been formulated.

1. What behaviors are performed by the school staff (administrators and teachers) and students as part of the school climate dimension of hidden curriculum at Officer and Non Commissioned Officer Training School?
2. How do the school staff (administrators and teachers) and students perceive the school climate dimension of hidden curriculum at Officer and Non Commissioned Officer Training School?
3. How do the school staff’s (administrators and teachers) and students’ perceptions differ about the school climate dimension of hidden curriculum at Officer and Non Commissioned Officer Training School?

METHOD

Research Design: This is a qualitative research which intends to analyze the scope of the hidden curriculum at Turkish Air Force Officer and Non Commissioned Officer Training School in terms of school climate and classroom climate. The main data collection instruments are observation and interviews.

It has a case study design. Case studies are in depth analysis of a concept or phenomenon by means of documents seeking answers to “what”, “how”, and “why” questions, direct or participatory observations, interviews, or physical objects (Yıldırım and Şimşek 2004). Throughout the process of the case study, the answer to the question “what” was sought for by identifying the qualities that the officer and noncommissioned officer training programs aim to transfer to their students and the hidden curriculum elements that emerged during the implementation of the program. To this end, observation technique was employed. The interviews with the teachers, administrators, and students aimed to identify the interactions at the end of which hidden curriculum elements form, thus seeking answers to the questions “how” and “why”.

The Study Group: Maximum variation sampling and convenience sampling techniques were used in forming the study group. Therefore, four officers and four high ranking officers from the school personnel (teachers and administrative staff), and eight officer trainees and eight noncommissioned officer trainees were planned
to be interviewed.

**Data Collection Tools:** The answers to the main and sub-research questions were sought for by means of observation and interview. More than one technique was used to ensure data diversity and to compensate for the limitation of one technique by another.

The main data collection method is observation. An observation form was prepared based on the categories that belong to the conceptual framework. It falls into the category of ‘external observation’ in terms of the distance between the observer and the observed and is usually geared towards the physical environment of the school and its activities (e.g., what takes place in the school building and the corridors, what ceremonies are held at school). The school climate observation form was formed based on the main and subcategories defined in the conceptual framework, yet it is not simply a check list, so it is considered semi-structured.

While the observation forms were prepared, a literature review was conducted to identify the dimensions of hidden curriculum and to establish the conceptual framework, based on which categories, subcategories, and concepts were formed. In addition, expert opinion and research were utilized. The main factor behind the formation of items in the school climate observation form was the main and subcategories of the conceptual framework. Observation forms were finalized after necessary revisions based on expert opinion.

Interview is the other tool employed in the data collection process. “Semi-structured one-to-one interviews” were conducted with school staff and students, and individual interviews were preferred because of the number of interviewers. Each and every staff and student in the study group was interviewed in a comfortable and suitable condition with the aim of obtaining in-depth data from the participants. A staff interview form and a student interview form were prepared based on the conceptual framework used.

In the preparation phase of the interview forms, first the questions to be included in the form were designed based on the main and sub-categories of the conceptual framework. The initial version of these forms were then subjected to expert review. Then, the necessary revisions were made based on the expert comments, and the form was finalized.

**Data Collection Process:** The fact that the school was a boarding school made it possible to carry out an extensive and multi-faceted observation, with particular emphasis on school climate. Indeed, the student activities that take place after the end of the school day were also included to the observation scope, as well as the goings-on between the start of the morning shift and end of the evening shift. Thus, in-depth data could be collected about different areas pertaining to school climate, such as the school building, architecture, the area surrounding the school, corridors, administrative offices, conditions of the classrooms, military education and physical training spaces, sleeping places, and cafeterias. At the same time, the events and phenomena that take place in these environments, and the behaviors of school staff and students were observed sometimes by unobtrusive outsider observers and sometimes by partial participant observers for at least three class hours.

The interviews were conducted by two target groups: school staff and students
enrolled in that school. In the interviews with the school staff, the data source was 8 members of staff: 4 officers and 4 high ranking officers. In these interviews, semi-structured “school staff interview form” was used.

In the second phase, students were interviewed. As the officer and noncommissioned officer training took place in different periods, the student interviews, that is those with the officer and noncommissioned officer candidates, were made at different times. Totally 16 students, 8 officer and 8 noncommissioned officer trainees, were interviewed. Likewise, semi structured student interview forms were used.

**Data Analysis and Interpretation:** Having obtained data to explore the research questions, content analysis and descriptive analysis techniques were used to analyze it. Some categories and subcategories pertaining to the conceptual framework of hidden curriculum required the use of descriptive analysis and some content analysis, so both techniques were used in the study.

Several sources on qualitative data analysis were analyzed and expert opinion was obtained before the steps of data analysis were followed (establishment of the conceptual framework, analysis of data based on this, presentation and interpretation of data).

**Validity and Reliability:** Due to the unique nature of qualitative analysis, reliability and validity concepts had to be attached different meanings (Türnüklü, 2000; Yıldırım and Şimşek, 2004; Veznedaroğlu, 2007). Strategies to ensure reliability and validity of the study are explained below.

The assessment tools, and the questions and items in the observation and interview forms were prepared in accordance with the main and subcategories of the hidden curriculum conceptual framework (content-scope validity). Thus, the quality that was intended to be measured was operationalized, which was based on validity. Moreover, the forms developed were revised and finalized based on opinion of experts and other researchers who had previously done research in this field. In addition, the interview and observation forms used by Veznedaroğlu (2007), and Boztash and Tezci (2015), who performed studies with similar focus, proved valid results, thus were comparatively analyzed in the present study.

Triangulating data to seek an answer to the same research question by using different data collection techniques is important to ensure both validity and reliability (Türnüklü, 2000; Ekiz, 2004; Şencan, 2005; Veznedaroğlu, 2007). Diversified data was collected in the present study by means of observation and interview forms that include parallel sections and items.

Extensive and in-depth observation of the school climate was carried out through the school building and the surrounding area, classrooms and corridors, the cafeteria, boarding rooms, and other student living spaces such as military and physical training halls. During interviews with the students and school staff, the researchers tried to avoid using the formal language inherent in military professions to ensure a genuine atmosphere during data collection. During these interviews, the questions posed to students and staff were directed in the same order, nearly with the same wording and manner to avoid possible misunderstandings.

Data recorded during observations and interviews were transferred to
electronic medium the same day, and later were coded according to relevant categories used in content analysis. Thus, possible problems that may arise form a time gap between the collection and electronic storage of data were minimized.

A major technique used in qualitative studies to ensure reliability is to achieve consistency in the analysis of the recorded data. To this end, a certain portion of data should be analyzed by the same researcher at different times. The agreement percentage formula can be used in the calculation of this consistency (Miles and Huberman, 1994, Tavşancıl and Aslan, 2001).

These records obtained by means of observation and interview forms were analyzed twice by the same researcher with a one month interval in between. The consistency coefficient of the analysis was calculated using the above formula. Two analyses performed on the observation form produced the consistency percentage of 0.89, and those on the interview form 0.92. In this formula, a value below 70% shows that the research has reliability (Tavşancıl and Aslan, 2001; Yıldırım and Şimşek, 2004).

DISCUSSION AND CONCLUSION

The salient results of data analysis are summarized as follows.

The research findings revealed that there are informal rules at this school. The main source of these informal rules was found to be institutional culture, and the education and work background of the school staff. According to these informal rules, students are expected to respect, be in order, avoid bad habits (smoking, gambling, using slang, etc.), be at the meeting place 3 minutes in advance, and regularly report to the person in charge about the fulfillment of orders. According to Jackson (1968), if students pursue success, they not only need to obey the formal rules of the school, but also the informal rules, norms, and the conduct, which are made permanent by the socialization process. The extent of the informal rules in the school studied is in agreement with Jackson’s (1968) ideas. The students came to know that they also have to obey the informal rules to be successful at school.

Yüksel (2004) asserted that the rules that cannot be flexed are more important than the other elements of the hidden curriculum, for they reveal the criteria and values that the school attaches great value. The research revealed that the school has certain rules to exert, about which it accepts no compromise. These are the basic dynamics of the military (obeying the orders, communication rules in the relations between noncommissioned and higher order officers, guard duties, confidentiality), sincerity/honesty, respect, accountability and punctuality. There are no rules constantly compromised. Compromising a rule may vary according to such factors as the frequency of the need to compromise, students’ past records of conduct, and the duration of the disobedience. The students are aware of the rules about which an exception can or cannot be made.

Another finding of the study was that students are fully aware of the fact that they can be perceived as “good students” by their superiors or they can receive awards or admiration if and only if they are obedient and compatible. They are aware of the link between ‘obeying the rules’, ‘being a good student’, ‘being a bad student’, ‘getting approval’, ‘receiving too much punishment’ and the
discipline/opinion score influencing the graduating performance averages. They know that the reflection of these behaviors will be in the form of good grades from higher ranking supervisors. Official rewards (such as certificate of appreciation, thank you notes, written texts, high opinion grades) are more effective than unofficial rewards; they are given great importance by the students.

The research has revealed some formal and informal punishments and sanctions at the school. The students know that if they fail to obey the rules they will be subject to some interconnected formal sanctions/punishments (defense submission, warning, penalty, cancelled off-days, deducted discipline score). Formal punishments are more effective than informal ones. Yüksel (2004) indicated that informal punishment lies within the scope of hidden curriculum. Rare as they are, informal forms of punishment practiced at school include verbal warning, show of resentment, reprimand, and having the student write texts about obeying the rules. Gözütok (1993) pointed out that the hidden curriculum of schools which apply physical, psychological, and verbal mobbing onto disobedient students have oppressive, authoritarian, and violent elements. The school which was the subject in this research was found to have a hidden curriculum with authoritarian, if not oppressive and violence, elements.

Veznedaroğlu (2007) found out that in atmospheres wherein people listen to each other and respect each other’s ideas, there is usually a hidden curriculum through which students are delivered messages to this end. The school in the present research was also analyzed from this point of view, and it was seen that the school has generally a positive atmosphere. This is mainly attributed to sharing common space and time, a natural consequence of the spirit of class friends/battle buddies, and boarding school, and to the positive attitude of personnel towards students. Despite this truly positive communicative atmosphere, students regard the school personnel as the authority. According to the school personnel, this is perfectly normal; the students have to behave as expected to maintain the discipline no matter how friendly they are. Tezcan (2003) stated that in cases of school communication that takes place in an authoritarian atmosphere, students are given messages that authority, hierarchy, and obeying the superiors is important through hidden curriculum. The school in the present research has a hidden curriculum with the function of promoting hierarchy and obedience to superiors, for after all it is a school training military personnel.

The results demonstrated competition among the students exists amid a positive atmosphere. The main source of the competition among students is accepted to be the award system within the education process and the ordering/ranking of students at the end of the instructional period. Sarı (2007) found that in the school environment which encourages competition, there is usually a hidden curriculum through which students may reach conclusions that others’ failure may be something good, or anything and everything can be done to succeed. Although the competition based atmosphere in the present study is somewhat similar to the one described in Sarı’s (2007) research, it did not reveal the same findings; the competitive atmosphere brings about such tendencies as treating each other badly, resorting to rudeness and physical violence, and having a desire for
others’ failure. The education and maturity levels of the students are thought to be the source of this situation. Students have learned to compete with other students, get good grades, and be compatible with others so as to graduate with a good degree. Nevertheless, the study has not revealed a tendency among students to justify any path to the goal.

Ceremonies are regarded as important events at school. The oath ceremony and the graduation ceremony are grand ceremonies. As relations of students (family members, relatives, and friends) attend these ceremonies, these events are an important source of motivation for students and their relations. Patch ceremony, monthly birthday celebrations, award ceremonies, flag ceremonies, national holiday ceremonies, religious holiday celebrations are other ritual activities. Through the hidden curriculum, students are influenced by the ceremonies the school organizes, the kind of celebrations or congratulations performed in national and religious bayrams, and the procedures followed to promote attendance to ceremonies (Yüksel, 2004). Through hidden curriculum, the students in this school perceived the importance of ceremonies and celebrations for the military profession. Students came to realize that having an active role in the performance of ceremonies, receiving an award in the ceremonies, thus being acknowledged and appreciated by the school staff and other students would have positive reflections in the future. The school administration holds and attends the ceremonies without any exception, so the students have learned ceremonies is not anything to compromise.

Symbolic elements such as school uniforms and emblems, symbols they bear, colors used, units within the school, different units symbols and marks belonging to each class convey unique messages through hidden curriculum (Wren, 1999; Yüksel, 2004; Veznedaroğlu, 2007). The school under focus in this study has a diversity of symbolic characteristics unique to the institution it is aligned with and to itself. There is an emblem belonging to the school and special symbols belonging to various groups; the students can wear officer or noncommissioned officer uniforms without ranks on them through their education. This is a significant element of hidden curriculum, fostering institutional and professional sense of belonging among students. Another symbolic element is the military ring design, which flourishes the spirit of class buddies/battle buddies. The company emblems other than the school emblems, group names of “the stars” for officer candidates and “the eagles” for noncommissioned officer candidates, anthems, slogans unique to student groups, sports suits specially designed for students, caps, barrettes, and souvenirs such as special glasses, key holders, and plates are among the other symbolic elements of school.

As part of hidden curriculum, establishing clubs in certain areas at school, and their actively organizing activities, producing social responsibility projects, organizing sports events, conducting cultural and scientific activities, and administrators’ and teachers’ supporting them create the effect that these activities are important (Yüksel, 2004; Sari, 2007). Such activities are given importance in the school studied in this research. The students have discovered the importance of participating in these activities, taking part in its practices, and fulfilling the duties in the best way possible.
Çubukçu (2011) conducted a study demonstrating that activities that support the hidden curriculum such as social, cultural, and sports events, free time activities, and social club activities are powerful value gaining instruments which help students internalize and apply the values. In accordance with these findings, it may be concluded that social, cultural, sportive, and scientific activities at the school, and the implicit messages delivered by them are instrumental in the training of personnel possessing basic values of Air Forces (having integrity in life and responsibility at duty, being agreeable, taking initiative).

The informal expectations of the school were considered in the scope of hidden curriculum, and it was found that the school had numerous informal expectations. These expectations are generally related to social and economic life. The informal expectations of the school are that the students are to work without caring about overtime, avoid borrowing excessively and being addicted to luck games, reject easy money making methods such as gambling, use credit cards in a controlled manner, stay away from trade during their professional lives, save money, and have habits. Yüksel (2005), who claims that how the school defines good and bad students and how they really expect them to be can be closely related, stated that the formal expectations of school and the expectations set through the hidden curriculum may disagree, or sometimes even conflict. For example, a school may formally claim that it aims to raise individuals who can defend their own rights, think critically and question, yet in reality it can expect the students to yield to teachers and administrators and obey their rules. It may classify students who behave according to expectations as good, and those who do not as bad (Veznedaroğlu, 2007).

At the school in the present research, the primary criterion for the perception of a student as a good or bad student is student behavior. A good student is someone who is responsible, punctual at fulfilling responsibilities, disciplined, respectful, communicative, honest, sincere, predictable, organized, effective at time-management, successful as regards his or her performance, active, enthusiastic for social activities, altruistic, helpful, and generous. The definition of a good student and the academic performance is weakly correlated. Characteristics associated with bad students are disobedient, unenthusiastic, irresponsible, disagreeable, always late, aggressive, violent, self-interested, and egocentric. No correlation was found between the definition of a bad student and the academic performance. The findings of the study demonstrated that the formal expectations of the school, the expectations in the form of hidden curriculum outcomes, and the related perception of what a good student is agree with one other. The students who are not agreeable in terms of formal and informal expectations are perceived as bad students.

Another perception related with school expectations are about successful and unsuccessful students. Tezcan (2003) asserted that there is a direct relation between hidden curriculum and academic performance. Here, how the school defines successful and unsuccessful students is directly linked with hidden curriculum (Veznedaroğlu, 2007). At the school studied in this research, a successful student is someone who takes on responsibility, displays high performance, gets good grades, submits homework on time, studies systematically, manages the time effectively,
takes initiative, and is sociable, communicative, and willing. A main constituent of the successful student definition is academic performance. The underachievers are those who disregard their responsibilities, do not do homework, receive low grades, perform poorly, fail to adapt, disobey the rules, pay little effort, have a pessimistic mindset, and who refuse to help themselves. Academic failure and the perception of weak student are closely related. While there is a weak relation between academic performance and being a good student, there is no relation between academic failures and being a bad student. “Academically competent” is one of the good student qualities, while “academically incompetent” is not included into bad student qualities. This is in accordance with Tezcan’s (2003) argument that academic competence and the perception of a good student is strongly linked.

In terms of the architectural design and decoration, first the spaces allocated for classes, administrators, and teachers were analyzed. Yüksel (2004) reminded that certain conclusions might be reached based on physical conditions; for example, if the classrooms are narrow and poorly-equipped but administrator and teacher rooms are spacious and well-equipped, it may lead to the conclusion that authority is given greater importance than teaching and learning activities. In the school of the present study, it was observed that the space allocated for classrooms are sufficient relative to the entire school space. Furthermore, it was seen that the equipment and other materials in the classrooms are of the same quality with those in teachers’ and administrators’ rooms.

Demirel (2004) claimed that the extracurricular activities carried out in a school are within the scope of hidden curriculum and that curriculum designers only consider the programs pertaining to the courses delivered at school, disregarding the extracurricular practices. Veznedaroğlu (2007) showed that little, if any, time is devoted to extracurricular activities, which may lead the students to think that these activities are not really important.

As the school under focus in this study is a boarding school, there is an abundance of extracurricular activities. Sociocultural and sports events, other activities geared towards academic courses and homework constitute the extracurricular activities. Some sociocultural activities organized by the school include trips on and outside the school campus, cinema and theatre, sports matches, concerts, tree planting and maintaining activities, guitar, and baglama, water marbling, calligraphy, painting, and model aircraft courses. Sports activities, on the other hand, are tournaments organized in different branches, playing chess, and physical competence enhancing activities. The time devoted by the school to extracurricular activities, and the diversity of these activities convey the message that these activities are important and especially socio-cultural and sportive development is attached great significance by means of hidden curriculum.

As a result, the school studied in this research basically aims to help students gain the foundational dynamics of the military profession. A classification of these dynamics according to learning domains shows that most of them are related with the affective domain. The findings of the study revealed that the school has an intensive hidden curriculum along with its formal curriculum. It was concluded that the hidden curriculum was more effective than the formal curriculum in in gaining
the students these affective domain objectives.

The following recommendations can be made based on research findings:

- Some informal rules can be made formal, and the emergence and the necessity of each rule can be justified. Thus, the new rules can be made a part of induction process more systematically. At the same time, this would contribute to the sustainability of the culture.

- Active participation in classes should be included in the school rules (especially formal rules). A strict adherence to this rule will help develop the ideal student and reach the goals set by the formal curriculum.

- New regulations can be introduced emphasizing that obeying the rules is more related with respecting others’ rights and freedoms rather than with benefits such as being perceived as “good students” by the school staff, increasing one’s academic performance, avoiding punishments/sanctions.

- Great care must be paid to the design of symbolic instruments (emblems, slogans, dress code, and souvenirs) for a particular group of students so that the other student groups will not be disturbed and will not have to be in a negative competitive atmosphere.

- The present study was conducted at a school which trains candidates recruited externally from civil universities to work at Turkish Air Force in a much shorter time than Military Academies and Noncommissioned officer Vocational schools. Similarly, a study focusing on hidden curriculum can be conducted at military academies and Noncommissioned officer vocational high schools.

- Further research focusing on hidden curriculum can be conducted in institutions training officers and noncommissioned officers for other military departments such as Land and Naval Forces of Turkish command, Gendarmerie General Command, and Coast Guard Command.

- Further research can be conducted after enhancing the conceptual framework used in this study.

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Chapter 48
The Factors Which Affect Learning Motivation of Higher Education Students

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INTRODUCTION

In order to actualize an action and to reach the aim of the relevant action, individuals should be willing to realize that action and to be motivated. It can be stated that motivation is the reason for actions and behaviors (Lefrançois, 1995). The word, motivation, which was derived from the word “movere” that means “moving” in Latin, also has the meaning of initiating, maintaining and constructively directing an action (Eren, 2000; Adair, 2003). In general terms, motivation expresses taking an action by an individual to meet a physiological or psychological need, and the willingness for this action (Chruden & Sherman, 1984; Luthans, 1992; DeCenzo & Robbins, 1996). From this point of view, it can be said that the willingness of individuals to realize an action or behavior depends on a need.

Identification of the needs of individuals has an importance in terms of ensuring motivation and enhancing the level. The fact that the needs are varied and can be changed from person to person should be taken into the consideration.

Motivation is driven by internal and external sources. Therefore, motivation is separated into two as internal and external motivation (Woolfolk, 1998). If the causes of a behaviour are occurring due to external, environmental factor, external motivation occurs. In the internal motivation, the behavior originated from the individual itself, from his/her needs (Wu, 2003). The most important internal resources can be given as; interest, talent and curiosity. There is a direct proportion between high levels of internal motivation and success (Lin, McKeachie & Kim, 2003). It can be asserted that individuals’ achievement of success is associated with their motivation levels that are originated from themselves.

Different approaches were developed on the subject of motivation. The behaviorist approaches will explain motivation with reward and stimulus. Reward expresses reinforces that are given as a result of the behavior and stimulus expresses the components that support and prevents the behavior (Woolfolk, 1998). According to behaviorists, motivation is a process that stems from external, and in this process the individual is under a constant impact of external stimulus. However, this approach does not mean that internal motivation resources are completely rejected. Behaviorists accept that self- evaluation, expectation, prediction and intention are important internal components that have an impact on motivation (Moore, 2001). According to the cognitive motivation theory, behaviors
are initiated and controlled by plans, objectives, schemes and attributions. Individuals do not display a behavior with external factors, yet due to their way of evaluating these impacts. This evaluation process is the source of motivation (Long, 2000). This source which is internal, is associated with concepts as curiosity, the will of learning and interest. Cognitive approach highlights the importance of thought and acknowledges that the thinking process is more important than instincts and needs (Bartlett, Burton & Peim, 2001). Despite the fact that motivation is tried to be explained by different approaches, it has an important and leading role in terms of initiating an action, a behavior and concluding the behavior.

As in many actions and behaviors, ensuring motivation and being motivated are important in terms of realizing learning. It can be claimed that motivation is one of the pre-conditions of learning. The most important provider of effective learning is motivation (Slavin, 2013). A former minister of education of the USA, Terrell H. Bell emphasized the importance of motivation in education with his words “There are three things to remember on education: The first one is motivation, the second is motivation and the third is motivation.” (Lumsden, 1999). A student who will have a high level of learning will also achieve success in school. Motivation is considered as the most important component that affects the school success of students (Orhan Özen, 2017; Robinson, 2017). Ensuring motivation will enhance the level of motivation, realize learning, increase learning level and success in school.

Students can be motivated for learning. A highly-motivated student also experiences high-levels of learning because these students display behaviors of effort willingness, continuity in attention, focusing, being interested, willingness to reach a conclusion, determination and persisting. A student is learning on a scale of motivation and accordingly be successful (Spaulding, 1992; Akbaba, 2006). The research studies also reveal that motivated students are also more successful in an academic sense (Ahmed & Bruinsma, 2006; Keller, 1999, 2010; Goodman et al. 2011; Kutlu & Sözbilir, 2011; Çolak & Cırık, 2015; Ali, 2016). From this point of view, it can be said that motivation supports the development of the student and contribute to using his/her potential in school effectively (Eggen & Kauchak, 2001). It can be said that motivation also facilitates teachers’ job as it increases the level of learning (Spaulding, 1992). Motivated students are also students who are ready and open to learning. Teachers will confront fewer difficulties in terms of reaching objectives in learning-teaching activities with students who are ready and willing to learn.

There are important principles in ensuring learning motivation. These principles can be listed as follows:

a. Employing different teaching methods in increasing student motivation
b. Maintaining and increasing motivation in addition to the motivation of a student
c. Establishing a positive atmosphere in class with different strategies (Dornyei, 2002).

Different factors might have an impact on learning motivation level. All of the components regarding the need of a student to achieve, interest in learning and
reading, having an aim, factualness and functionality of the aims, which variables that the success and failures are associated with and efficacy-perception towards learning have an impact on the level of motivation (Bozanoğlu, 2005). Furthermore, learning experiences, personal characteristics, environmental factors, the status of physical well-being and cultural variables also affect motivation (Cüceloğlu, 1992; Barrett, Patock-Peckham, Hutchinson & Nagoshi, 2005). It can be asserted that these factors that affect the motivation of students also determine the needs of students. The factors that affect the learning motivation of students also have an impact on students’ learning levels, academic success, participation in a lesson and willingness to continue to their education (Spaulding, 1992; Akbaba, 2006). Therefore, identification of these factors plays an important role.

It can be said that learning level is the most important indicator of the quality of education. Students who graduated from their school by reaching the learning-teaching objectives and learning the course contents turn into well-equipped individuals. The existence of individuals with these qualifications gives rise to the thought that a quality education is provided and existed. When it is considered that motivation is the most effective factor in learning levels and student success, it can also be stated that it is a factor that affects the quality in education to a large extent. From this point of view, it can be advocated that the factors that affect the learning motivation of students should be known. It is more important to know the factors that affect the motivation of higher-education students as the manpower requirements of the state will be filled with higher education graduates. Higher education students who will graduate as well-equipped and good-educated students by means of the high-level of learning they obtain will enable to produce and provide high-quality outcomes in all sectors of the state.

While the studies in the literature are examined; it is seen that studies regarding the learning motivations of students are generally quantitative studies examining the motivation level, the relationship between motivation and other variables. On the other hand, it was understood that the number of qualitative studies on the factors that affect the learning motivation of students is limited.

The objective of this qualitative study is to determine the opinions of higher education students regarding the factors that affect their learning motivation.

In line with the given aim, answers were sought to the following questions:

1. What are the factors that affect the motivation of students to continue to school?
2. What are the factors that affect the motivation of students to learn?

Method

In this section, research pattern and study group were described; and data collection and their analysis were emphasized.

a. Research Pattern: The present research is a phenomenological qualitative study. Phenomenological study means the common sense of several people's experience of a phenomenon or concept (Creswell, 2016). It has been tried to determine influences on the “learning motivation” phenomenon discussed in this study by the opinions of the students of higher education who have experience in
learning motivation. These sort of studies are used for systematic, descriptive and exploratory analyze of meanings that arise as a result of experiences of participants included in a study (Ekiz, 2003). Sensitivity to natural environment, participative role of researcher, determining perceptions, flexibility in research pattern, and inductive analysis can be considered as characteristics of qualitative researches (Yıldırım & Şimşek, 2011). Primary end of qualitative researches is to assess and explain the answers given for questions such as “Why?” and “How?”, which cannot be represented by quantitative values; and thus, to make participant behaviors, social phenomena and incidents more comprehensible and explicable (Demirbaş, 2014).

Research data was collected through “interview” method, one of the qualitative data collection methods. Interview is kind of communication process among minimum two parties concerning a certain subject (Aktaş, 2014). Interviews conducted in this study can be characterized as “semi-structured interviews”. “Semi-structured interview” is neither stiff as much as fully-structured interview nor flexible as unstructured interview. This is a technique remaining between these two ends and provides necessary flexibility and convenience to researchers (Karasar, 1999).

b. The Study Group: The study group consisted of higher education students who were determined via convenience sampling method of purposeful sample, which is used in qualitative researches, and studied at least two years in the university. 42 students carrying aforesaid qualifications have been reached but some students declared that they were reluctant to participate in the study. Whereas some of the students interviewed were not disposed to answer the research questions. Some of the students answered questions with irrelevant expressions and gave non-contextual answers. Of the volunteered students to answer questions, there were 35 students who answered all questions with relevant answers. Research findings were obtained through answers of these students.

Sample selection process in qualitative researches is quite flexible. Sampling selection develops and evolves in parallel to the progress gained during course of study. Sampling is replenished on continuous base in order to strengthen and support the major subject according to gained progress on the subject or theory (Kuzel, 1992). All interview sessions were conducted by the researcher.

Demographical information of participants was given in Table 1.

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<td>10</td>
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<tr>
<td></td>
<td>4 years</td>
<td>18</td>
</tr>
</tbody>
</table>

c. Data Collection Tool: In preparation of necessary questions that will be employed during data collection, 10-15 minute face-to-face interviews were
conducted with randomly selected 8 higher education students in order to determine the factors that affect learning motivation. Reviewing the relevant literature, ultimate form of questions that would be included in the interview sessions were tried to be determined. Following the interview process with students, based on the literature review, semi-structured interview form consisted of 2 open-ended questions was developed. The draft interview form was consulted to the specialists from assessment-evaluation, educational sciences and Turkish teaching to ensure internal validity. Then preliminary application was implemented with 9 students. In the preliminary application, it was determined whether the interview questions were comprehensible to answer, and whether they did not violated its designated scope, or not. Hence, data collection tool was assessed through a trial. Yet, the assessment of the data collection tool is directly correlated with validity and reliability of the research (Yıldırım & Şimşek, 2011).

Data utilized in the study was obtained from the answers of students given in regard to the questions asked during the interviews. Interviews were conducted individually for each participant on a determined date and place by the respondents. The interviews were recorded by means of a voice recorder. In addition to the questions in the interview form, participants were asked following questions to determine their opinions accurately: “What is the rationale behind your thought?”, “Why do you think in this way?”, “Could you explain your opinion?”, “What would you mean by your words?”

During the interviews, the following questions were addressed to the participants:

1. Are you willingly go to school?
2. During a course, what are the reasons and factors that raise or lower your learning desire for that course? What raises or reduces your eagerness to learn? In other words, what makes you to become more motivated or not motivated?

Firstly, recorded interviews into the voice recorder were analyzed and transferred to the paper form. During this transfer process, it was paid attention to transfer answers of participants to the relevant question to the paper form without allowing any alteration. Then, transferred data on the paper form was checked once more with the voice records so that all collected data was captured in the paper form.

**d. The Analyzing of Data:** Collected data was analyzed through descriptive analysis. During the descriptive analysis process, row data obtained from interview sessions were transformed into codes; then, categories were formed through codes. Categories were presented under themes revealed earlier by the research questions (McMillan & Schumacher, 2010).

In the findings section, opinions of some students were directly quoted so as to ensure “validity” (Patton, 1987). In direct quotation, due to scientific ethics, participant students’ names were disguised; each of them was assigned a reference starting from S1 to S35; and the student, whose respective opinion was directly expressed, was indicated with this reference.
Findings

The interviews started by addressing the question, “What do the concept of ‘motivation’ mean to you?” to the participants in order to determine their perceptions regarding the concept of “motivation” and prepare them to the interviews. Answers given to this question revealed that the participants knew the meaning and significance of the concept of “motivation”.

a. Factors Affecting Motivation to Continue to School

According to the study objective, the first question addressed to the students was as follows: “Are you willingly go to school?” In their answers to this question; the students specified factors that affect motivation to continue to school (go to school).

The factors that decrease or increase the motivation to continue to the school (go to school) were determined from the answers given by the students to the first question. The factors that decrease the motivation of the students to continue to the school (go to school) are given in Table 2.

Table 2: The factors that decrease the motivation of the students to continue to the school (go to school).

<table>
<thead>
<tr>
<th>Factors Related to Instructors</th>
<th>Factors Related to Teaching</th>
<th>Factors Related to Peers</th>
<th>Physical / Environmental Factors</th>
<th>Individual / Psychological Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Humiliation / insult</td>
<td>- Instructor centered teaching</td>
<td>- Not taking care of peer rights and freedoms</td>
<td>- Classrooms without good physical conditions</td>
<td>- Indifference to the contents of the courses</td>
</tr>
<tr>
<td>- Not taking care of student rights and freedoms</td>
<td>- Negative class atmosphere</td>
<td>- Political propaganda and suggestion</td>
<td>- Neglected common areas</td>
<td>- Negative attitude towards department</td>
</tr>
<tr>
<td>- Pressure and imposition</td>
<td>- Idle classes</td>
<td>- Factionalism</td>
<td>- Lack of social and cultural activities venues in the campus</td>
<td>- Exam anxiety</td>
</tr>
<tr>
<td>- Political propaganda and suggestion</td>
<td>- Intensive and poorly planned curriculum</td>
<td>- Benefit based relationships</td>
<td>- Distance of school</td>
<td>- Fatigue</td>
</tr>
<tr>
<td>- Communication flaws</td>
<td>- Teaching that does not related to learning (curriculum) objectives</td>
<td>- Benefit based relationships</td>
<td>- Bad weather conditions</td>
<td>- Low self confidence</td>
</tr>
<tr>
<td>- Unfairness, discrimination</td>
<td>- Block Class</td>
<td></td>
<td></td>
<td>Disease</td>
</tr>
<tr>
<td>- Inadequacy in education</td>
<td>- Too many homework</td>
<td></td>
<td></td>
<td>Negative attitudes and behaviors of the family</td>
</tr>
<tr>
<td></td>
<td>- Daily long learning period</td>
<td></td>
<td></td>
<td>- The perception that needs and expectations are not met</td>
</tr>
<tr>
<td></td>
<td>- Exams</td>
<td></td>
<td></td>
<td>- Perception of failure</td>
</tr>
</tbody>
</table>

When the Table 2 was examined, the factors that decrease the motivation of the
students to continue to the school (go to school) are

- related to instructors
- related to teaching
- related to peers
- physical / environmental
- individual / psychological.

There are some explanations of views of some of the students who referred to “factors that reduce the motivation to continue to the school (go to school)” below.

1. Factors Related to Instructors

Humiliation / insult

“We are afraid of explaining our views during class. Because if we give a wrong answer, instructors reproach and tell our friends that we are ignorant. There are also instructors who are insulting us like 'idiots etc.' “ (S8)

“An instructor always tells us that we cannot be teachers, we do not have the capacity to be teachers.” (S27)

Political propaganda and suggestion

“He always speaks politics. This is not the aim of the course. Thus, I do not think that this course will be useful to me.” (S3)

Inadequacy in education

“We are going to school to learn and to improve ourselves. Is not that the duty of instructors too? But there are instructors who have not developed themselves, who are not beneficial for students and have not full knowledge of their field.” (S3).

2. Factors Related to Teaching

Instructor centered education

“He talks until the end of the lesson, we take notes. We certainly can not participate in classes.” (S10)

Negative class atmosphere

“Lessons are a constant tension. I feel like everybody is enemy of each other.” (S33)

Education that does not related to learning (curriculum) objectives

“When teachers attend the class even if the course is not related to their field, they teach a lesson by giving information about their own field.” (S21)

“There are some teachers who tell us about their memories. He tells a few sentences about the course at the end of the course and we are asked to learn from it.” (S19).

3. Factors Related to Peers

Not taking care of peer rights and freedoms

“I cannot explain my thoughts to my class. Because I realize that some of our friends are mocking.” (S2)
Factionalism
"We have friends who have never spoken to each other for two years. I, too ... We stay away in class and out of class. Because they act like a separate group.” (S24)

Competition
“It makes me very sad to know that my friends are secretly studying and hiding course notes during the exams. Unfortunately, this is a race that takes us away from each other.” (S1)

4. Physical / Environmental Factors

Lack of social and cultural activities venues in the campus
“I'm not sure I study in the university. I never imagined it like that. We do not even have a decent cafe in our faculty. We do not even have a decent library to read books.” (S25)

Distance of school
“Our dormitory is far away. We are very far from the center. Collective taxi is not frequent. Going to school is like torture.” (S6)

5. Individual / Psychological Factors

Indifference to the contents of the courses
“Lessons are not interesting at all. For this reason, I do not want to learn anything. I'm just trying to pass the exams.” (S7)

Fatigue
“I feel like I need a good rest for a long time. Because I'm so tired. I cannot wake up in the morning. Who wants to go to school with this tiredness?” (S2)

Perception of failure
“I get low points from the exams. If I fail one more course, my graduation will be delayed. I cannot show myself in class. That's why I hate school.” (S23)

The factors that increase the motivation of the students to continue to the school (go to school) are given in Table 3.

The factors that increase the motivation of the students to continue to the school (go to school) are
- related to instructors
- related to teaching
- related to peers
- physical / environmental
- individual psychological.

There are some explanations of views of some of the students who referred to “factors that increase the motivation to continue to the school (go to school)” below.
Table 3: The factors that increase the motivation of the students to continue to the school (go to school)

<table>
<thead>
<tr>
<th>Factors Related to Instructors</th>
<th>Factors Related to Teaching</th>
<th>Factors Related to Peers</th>
<th>Physical / Environmental Factors</th>
<th>Individual / Psychological Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendly Approach</td>
<td>- Student centered teaching</td>
<td>- Good friendships</td>
<td>- Good weather conditions</td>
<td>- Commitment to the course</td>
</tr>
<tr>
<td>- Taking care of student rights and freedoms</td>
<td>- Positive class atmosphere</td>
<td></td>
<td>- Commitment to the instructor</td>
<td>- Nice weather</td>
</tr>
<tr>
<td>- Guidance, development of students</td>
<td>- Fun teaching</td>
<td></td>
<td>- Desire to develop</td>
<td>- Desire to learn</td>
</tr>
<tr>
<td>- Effective communication</td>
<td>- Good friendships</td>
<td></td>
<td>- Commitment to department</td>
<td>- Commitment to the profession</td>
</tr>
<tr>
<td>- Proficiency in teaching</td>
<td>- Teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Factors Related to Instructors

Friendly approach

“Of course, instructors who treat us well and who care about us are loved. We can talk to them outside of class. The school is even more beautiful with them.” (S13)

Taking care of student rights and freedoms

“I express myself better in the lesson of an instructor who gives us the right to speak. I'm really waiting for those lessons, and I'm eager to go to school.” (S22)

“Some instructors prejudice any of our characteristics, while others respect all differences.” (S33)

Effective communication

“We have an instructor with great speaking skill. He makes us talk, he cares about our thoughts. I'm trying not to miss his lessons.” (S10)

2. Factors Related to Teaching

Student centered teaching

“Consideration of our requests in lessons are very important.” (S10)

“The lessons that we participate and speak make us eager to come to the school.” (S17)

Positive class atmosphere

“During the lectures of this instructor, everyone participates in class, everyone is trying hard. Nobody is afraid, everyone feels safe and the lesson is not boring.” (S10)

“I am going to a lesson without any difficulty, even if it is difficult for me to
attend morning classes because our instructor has created a different atmosphere.
We are all happy in that class.” (S21)

**Fun teaching**

“We have a very jokey, laughing instructor. We have a lot of fun in his lessons. He entertains us with anecdotes, jokes and memories.” (S21)

3. **Factors Related to Peers**

**Good friendships**

“I'm happy to go to the school to meet my friends.” (S3)

“The physical possibilities of the school are not very good, but thanks to my friends, the school is fun, a place we want to go to.” (S4)

4. **Physical / Environmental Factors**

**Good weather conditions**

“When the weather is good I look at everything positively. I go to the school happily. Because my energy increases.” (S2)

5. **Individual / Psychological Factors**

**Commitment to the course**

“In the days when I have classes I like, I go to the school with great eagerness.” (S20)

**Desire to develop**

“I continue to learn to improve myself; so I should not be absent.” (S32)

**Sense of responsibility**

“My family made a lot of effort for me. Since I do not want to upset them, I try not to be absent.” (S32)

**Commitment to the profession**

“I want to be a teacher since I was a child. I love teaching. I go to the school to learn how to be a good teacher.” (S18)

b. **Factors Affecting Learning Motivation**

According to the main study objective, the second question addressed to the students was as follows: “During a course, what are the reasons and factors that raise or lower your learning desire for that course? What raises or reduces your eagerness to learn? In other words, what makes you to become more motivated or not motivated?” In their answers to this question; the students specified factors that affect learning motivation.

The factors that decrease or increase the learning motivation were determined from the answers given by the students to the second question. The factors that decrease learning motivation of students are given in Table 4.
Table 4: Factors that decrease learning motivation of students

<table>
<thead>
<tr>
<th>Factors Related to Instructors</th>
<th>Factors Related to Teaching</th>
<th>Factors Related to Peers</th>
<th>Physical / Environmental Factors</th>
<th>Individual / Psychological Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Humiliation / insulting</td>
<td>- Instructor centered teaching</td>
<td>- Not taking care of rights and freedoms</td>
<td>- Classrooms at bad physical conditions</td>
<td>- Being unfamiliar with the course</td>
</tr>
<tr>
<td>- Not taking care of student rights and freedoms</td>
<td>- Negative class atmosphere</td>
<td>- Communication flaws</td>
<td>- Noise</td>
<td>- Fatigue</td>
</tr>
<tr>
<td>- Pressure and imposition</td>
<td>- Not seeking teaching (curriculum) objectives</td>
<td>- Political propaganda and suggestion</td>
<td>- Bad weather conditions</td>
<td>- Low self-confidence</td>
</tr>
<tr>
<td>- Political propaganda and suggestion</td>
<td>- Theory-oriented teaching</td>
<td>- Communication flaws</td>
<td>- Being unfamiliar with lesson / course content</td>
<td>- Illness</td>
</tr>
<tr>
<td>- Unfairness, discrimination</td>
<td>- Inadequate practices</td>
<td>- Unfairness, discrimination</td>
<td>- Unnecessary repetitions</td>
<td></td>
</tr>
<tr>
<td>- Inadequacy in teaching</td>
<td>- Being unfamiliar with lesson / course content</td>
<td>- Inadequacy in teaching</td>
<td>- Direct instruction method</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Teaching sticking to a single source / book</td>
<td>- Teaching sticking to a single source / book</td>
<td>- Teaching sticking to a single source / book</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Not knowing teaching objectives / goals</td>
<td>- Block class</td>
<td>- Long learning periods per day</td>
<td></td>
</tr>
</tbody>
</table>

When the Table 4 was examined, the factors that decrease learning motivation of the students are

- related to instructors
- related to teaching
- related to peers
- physical / environmental
- individual psychological.

There are some explanations of views of some of the students who referred to “factors that decrease the learning motivation” below.
1. Factors Related to Instructors

Not taking care of student rights and freedoms

“There are instructors who only speak and do not give us any word until the end of the lesson. We can not even raise hand. They ignore our hands or say ‘Get your hands down.’” (S14)

“One day I was talking to my friend. We did not speak loudly. The instructor threw both of us out of class.” (S30)

Unfairness, discrimination

“One of our instructors is protecting our female friends more. I think he gave higher grade to them. Actually, I do not trust this instructor.” (S3)

“I do not think they can act fairly. Each one is influenced by something.” (S11)

Communication flaws

“Some of the instructors use too many foreign words while they speak. I do not understand what they say.” (S30)

“He speaks very fast. What he says is not understood. We wish to learn but we do not even understand.” (S28)

2. Factors Related to Teaching

Theory-orientes teaching

“We are exposed to hard abstract information. We keep repeating information from textbooks, but we do not know how to use it, how to apply in real life.” (S25)

Being unfamiliar with the course / course content

“Some lessons do not mean anything to me. Because I do not know anything about the content, I feel so far away.” (S26)

Block class

“I think the block classes are very inefficient. Instructor does a block class to finish early. But we lose attention after the first 30-40 minutes. Sometimes we sleep because only instructor speaks.” (S14)

3. Factors Related to Peers

Not taking care of peer rights and freedoms

“From time to time, some of our friends making things that distract our attention. Sometimes instructors make unnecessary conversations and discussions with them. We lose our attention and the time for learning is wasted. (S13)

4. Physical / Environmental Factors

Classrooms at bad physical conditions

“The classes are very repellent, desks are very uncomfortable. Sometimes we spend the first lesson in the morning to get warm. We do not feel comfortable here and we are unhappy.” (S20)

Noise

“Just under our window sometimes students from other departments or classes play ball. It is impossible not to hear them. Sometimes it even suppresses the voice
of the instructor, we miss some words of him.” (S5)

**Negative weather conditions**

"I do not want anything when it is overcast weather. I also don’t want to listen to the lesson.” (S2)

5. Individual / Psychological Factors

**Low self confidence**

“I am afraid to answer the questions asked. I'm afraid to fail. Because of this, I cannot get much participation. Thus, I think that I cannot learn well.” (S30)

The factors that increase learning motivation of students are given in Table 5.

<table>
<thead>
<tr>
<th>Factors Related to Instructors</th>
<th>Factors Related to Teaching</th>
<th>Factors Related to Peers</th>
<th>Physical / Environmental Factors</th>
<th>Individual / Psychological Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendly Approach</td>
<td>Student centered teaching</td>
<td>- Cooperation and solidarity</td>
<td>- Sufficiency of the temperature in the classrooms</td>
<td>- Devotion to / interest in course</td>
</tr>
<tr>
<td>- Taking care of student rights and freedoms</td>
<td>- Positive class atmosphere</td>
<td></td>
<td></td>
<td>- Devotion to / interest in instructor</td>
</tr>
<tr>
<td>- Guiding / improving students</td>
<td>- Fun teaching</td>
<td></td>
<td></td>
<td>- Eagerness to improve</td>
</tr>
<tr>
<td>- Effective communication</td>
<td>- Students knowing teaching objectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Praise, appreciation</td>
<td>- Teaching using teaching technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Proficiency in teaching</td>
<td>- Use of different teaching materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Proficiency in field knowledge</td>
<td>- Teaching from easy to difficult</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Teaching appropriate to the principle of proximity to life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Teaching appropriate to the principle of effective participation of the learners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Student perception of the fact that the</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When the Table 5 was examined, the factors that increase learning motivation of the students are

- related to instructors
- related to teaching
- related to peers
- physical / environmental
- individual psychological.

There are some explanations of views of some of the students who referred to “factors that increase the learning motivation” below.

1. Factors Related to Instructors

   Friendly approach
   “We have very friendly and respectful instructors. I am more eager to learn in their lessons.” (S22)

   Taking care of student rights and freedoms
   “In those lessons, I am asked what i have learned. I can also express myself enough.” (S18)

   Praise, appreciation
   “If my success is expressed on a topic that I have been successful in, my energy increases a lot. I listen to that instructor's lesson more carefully, I respect the lesson.” (S34)

2. Factors Related to Teaching

   Student centered teaching
   “I think lectures where students participate and talk more than teacher is more efficient.” (S10)

   Teaching using teaching technology
“Use of computers, projectors allows our sense organs to be addressed. I find such lessons useful.” (S12)

**Teaching appropriate to the principle of proximity to life**

“Knowing where and how to use what we learn makes learning easier.” (S16)

3. **Factors Related to Peers**

**Cooperation and solidarity**

“Sometimes I can not catch up with the teacher, I can not understand his words. My friend tells me about it and sometimes it is even more effective than the teacher.” (S16)

“I can learn better in some classroom activities with the help I get from my friends. Their support increases my motivation.”(S5)

4. **Physical / Environmental Factors**

**Sufficiency of the temperature in the classrooms**

“If the class is warm, I can apply myself to lectures.” (S20)

5. **Individual / Psychological Factors**

**Devotion to / interest in instructor**

“I learn better in the lessons of instructors that I love.” (S23)

**Eagerness to improve**

“I have to listen to the lessons carefully so I can improve myself.” (S32)

**Discussion, Conclusion and Recommendations**

Level of learning can be considered as the most important indicator of the quality of education. Motivation, on the other hand, can be claimed to be the most important factor affecting the level of learning and student success. Education of high quality is only possible when students have high levels of learning and high levels of learning can only be achieved when student are motivated to learn.

The state meets the manpower needs in all sectors with university graduates. It is right to say that university graduates who have completed their education with high and permanent learning scores will affect the development and growth rates of countries. Therefore, higher education students should have high learning motivation and factors affecting their learning motivation should be identified. According to Komarraju, Karau and Ramayah (2007), it is especially important to understand the factors affecting academic motivation of higher education students, since academic motivation is a prominent factor affecting students' learning levels and academic success.

The aim of this qualitative research is to identify the factors that affect learning motivation of higher education students. In accessible national and international literature, it has been found out that although there is some quantitative research on students' motivation (Pintrich & DeGroot, 1990; Gültan Uzgören, 1999; DeBacker & Nelson, 2000; Hancock, 2001; Lam et al., 2004; Dede & Argün, 2004; Çakır, 2006; Komarraju & Ramayah, 2007; Wang & Reeves, 2007; Tan, 2009; Ersoy & Başer, 2010; İşigüzel, 2013; Yılmaz & Arslan Buzlukluoğlu, 2014; Al Şensoy &
Sağsöz, 2015), there is not a sufficient number of qualitative studies on factors affecting the learning motivation of students and higher education students. This fact constituted the main reason why this research was conducted in the first place.

The main aim of the research is to identify the factors affecting learning motivation of higher education students. Besides that, factors affecting motivation of students to continue to the school have been identified. Accordingly, it has been concluded that there are some factors affecting motivation of higher education students to continue to the school either positively or negatively. Factors affecting motivation of students to continue to the school have been identified to be a. related to instructors, b. related to teaching, c. related to peers, d. physical / environmental, e. individual / psychological.

It has been also deduced that there are two types of factors affecting learning motivation of higher education students. These factors can be categorized as those which either increase or decrease motivation. Factors affecting learning motivation of students have been identified to be a. related to instructors, b. related to teaching, c. related to peers, d. physical / environmental, e. individual / psychological.

The fact that some factors that decrease students' continueing to school and learning motivation have been identified in the research is a negative result. Factors decreasing or affecting motivation adversely may cause amotivation in students. Amotivation can be defined as the absence of any intrinsic and extrinsic motivation to take any kind of action (Ryan & Deci, 2000). Amotivation occurs when an individual does not value action, feel an external pressure to perform it or have an expectation regarding the outcome of the action in question. Once unmotivated, individuals feel insufficient and perceive that they have little or no control over their actions. After a while, they stop taking actions for which they feel unmotivated. For instance, a student who has no intrinsic or extrinsic reasons for going to the school drops out after a while (Vallerand & Ratelle, 2004). Amotivation may also hinder the process of learning. For a student who does not attend school and therefore cannot learn, academic failure is an inevitable result.

Examining the studies on the factors affecting the learning motivation of students, some studies were found to achieve similar results with this study. The study conducted by Jafari (2013) has revealed that factors affecting students' eagerness to learn are “memorization, teacher’s explaining the subjects in a boring manner, teacher’s ignorance of students’ psychological condition, difficult and dull subjects, and reluctance to learn.” In the study conducted by Ullah, Sagheer, Sattar and Khan (2013), it has been deduced that there are factors that increase and decrease students' motivation. These factors are stated to be “class size, attitude of the teachers towards their students and internal motivation of the student.” It has been also concluded in the same study that “non-verbal encouragement of the instructors to their students, establishment of cooperative learning environment and adequate incentives given to the students” have prominent impact on students' learning motivation.

The study has revealed that characteristics, behaviours and attitudes of instructors is one of the factors affecting learning motivation of children. It has been
also identified that instructor-related factors either increase or decrease students' motivation. Instructor-related factors that increase students' motivation have been determined to be “friendly approach, taking care of student rights and freedoms, guiding students / improving students, effective communication, praise / appreciation, proficiency in teaching and proficiency in field knowledge.” On the other hand, instructor-related factors that decrease students' motivation have been determined to be “humiliation / insulting, not taking care of student rights and freedoms, pressure and imposition, political propaganda and suggestion, communication flaws, unfairness / discrimination, inadequacy in teaching.”

According to Sürürçü and Ünal (2018), there are certain teacher behaviors which increase or decrease students' motivation. In the study conducted by Sürürçü and Ünal (2018), it has been concluded that “personal interest, preparation / planning, high expectation of success, enthusiasm, equality-justice, consistency, open classroom climate, field knowledge and attention” are the teacher-related factors that increase students' motivation, whereas “apathy, having a favorite student, inconsistency, closed classroom climate, psychological violence and passive aggressiveness, inaccessibility, inadequacy-classroom control, sense of humor, human relations, speech problems, field knowledge” decrease students' motivation. Gorham and Christophel (1992) have found that teacher behaviors that decrease students' motivation are more effective than those which increase motivation. Oxford (1998) has found that instructor behaviors related to “personal relationship with students”, “teacher's attitude towards lessons and materials”, “conflicts with students” and “the quality of the instructor's in-class activities” decrease students' motivation (as cited by: Dornyei and Ushioda, 2011). Moreover, Eryılmaz (2007) has concluded that there are three main factors affecting students' motivation, which are “teacher's teaching method, teacher's response to students' personal expectations and teacher's characteristics.”

In the study, teaching-related factors have been found to affect learning motivation of the students. It has been also identified that teaching-related factors either increase or decrease students' motivation. Amongst teaching-related factors, “student-centered teaching, positive classroom atmosphere, fun teaching, knowing teaching objectives / goals, teaching using teaching technology, use of different teaching materials, teaching from easy to difficult, teaching appropriate to the principle of proximity to life, teaching appropriate to the principle of effective participation of the learners, student perception of the fact that the learning has taken place, teaching appropriate to the principle of up-to-dateness, students’ preparatory activities for lessons, teaching appropriate to the principle of transfer, teaching appropriate to the principle of openness” increase students' motivation, whereas “instructor-centered teaching, negative classroom atmosphere, not seeking teaching (curriculum) objectives, theory-oriented teaching, inadequate practices, being unfamiliar with lesson / course content, not knowing teaching objectives, unnecessary repetitions, direct instruction method, teaching sticking to a single source / book, not knowing teaching objectives / goals, block classes, long learning periods per day” decrease motivation. It can be said that majority of these factors are related to teaching strategy / strategies. Afzal et al. (2004) and Murphy (2004)
have also emphasized that instructors' teaching strategies will increase learning motivation of the students.

The study had revealed that “knowing teaching objectives” and “positive classroom atmosphere” are the teaching-related factors affecting learning motivation of students. According to Gottfried, et al. (2001), teachers should to improve students' learning motivation by explaining learning objectives and goals to students. That being said, the study conducted by Ullah, Sagheer, Sattar and Khan (2013) has concluded that positive classroom atmosphere is a factor that increases motivation.

In the study, peer-related factors have been found to affect learning motivation of the students. It has been also identified that peer-related factors either increase or decrease students' motivation. Amongst peer-related factors, “cooperation and solidarity” increases students' motivation, whereas “not taking care of rights and freedoms” decreases motivation. Therefore, it can be said that competitive classroom atmosphere should be avoided and classrooms should have an atmosphere of solidarity instead.

Tan (2009) has also come to a conclusion similar to that which stresses that “cooperation and solidarity” increases motivation, whereas “not taking care of rights and freedoms” decreases motivation and has stated that “students believing that their instructors and peers value him or her” is one of the most prominent factors affecting students' motivation.

In the study, physical / environmental factors have been found to affect learning motivation of the students. It has been also identified that physical / environmental factors either increase or decrease students' motivation. Amongst physical / environmental factors, “sufficiency of the temperature in the classrooms” increases students' motivation, whereas “classrooms at bad physical conditions, noise, bad weather conditions” decrease motivation. Furthermore, there are also some other studies that have revealed that air quality in classrooms and main physical factors such as temperature and noise affect learning process (Lackney, 1999; McGregor, 2004; Edwards 2006, Hunter, 2006).

In this study, it has been found out that “sufficiency of the temperature in the classrooms” has a positive effect on students' motivation. The study conducted by Şensoy and Sağsöz (2015) also concluded that “temperature” is one of the physical factors affecting students' motivation positively.

In the study, individual / psychological factors have been found to affect learning motivation of the students. It has been also identified that individual / psychological factors either increase or decrease students' motivation. Amongst individual / psychological factors, “devotion to / interest in course, devotion to / interest in instructor, eagerness to improve” increase students' motivation, whereas “being unfamiliar with the course / course content, fatigue, low self-confidence, illness” decrease motivation. Conclusions of this research bear a resemblance to that of the study conducted by Tan (2009) who concluded that the most important motivation factors are student-centered and that “students' belief in the importance of the course and its professional benefits and course content attracting students' attention” are listed among these factors.
Based on the results of the research, possible suggestions are as follows:

In the research, it has been deduced that instructors' behaviors, attitudes and characteristics affect students' continuing to school and learning motivation. In order to have a positive effect on students' motivation, instructors should exhibit positive attitudes and behaviors and improve themselves in their professional field and in terms of professional knowledge and skills.

In the research, it has been deduced that teaching-related factors affect students' continuing to school and learning motivation. Student-centered teaching and teaching strategies, methods and techniques that take into consideration the requests and needs of students and enable them to be active are thought to improve students' motivation.

Moreover, it has been determined that the use of technology and equipment that appeals to different senses in the teaching affect the learning motivation of students. For this reason, different equipment should be preferred in teaching and teaching should be planned and implemented in accordance with this plan through intriguing equipment that appeal to different senses.

Based on the results of the research, it is thought that it would be beneficial to determine the duration of school days, the start and end times of school days and the weekly course schedule taking into consideration the requests and needs of the students in order not to affect students' continuing to school and learning motivation adversely.

In the research, it has been deduced that peers affect students' continuing to school and learning motivation. From this point of view, activities should be carried out by the university / faculty management and especially by the instructors (since they know students and their needs much better) to ensure that students strengthen their relationship with each other.

It has been also concluded that physical conditions of classrooms affects students' motivation. That is why physical conditions of the classrooms should be improved. Furthermore, the physical conditions of the school / campus should be improved, the number of places, where social and cultural activities are carried out, should be increased and existing places should be improved in order to increase students' continuing to school motivation.

In the research, it has been deduced that individual / psychological factors affect students' continuing to school and learning motivation. From this point of view, in universities, there should be guidance and counseling units which provide efficient and effective services. These units should provide support to students in terms of psychological health, personal development and career planning. Instructors should also guide students in career planning.

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Chapter 49

Preschool Period and Parent Attitudes

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INTRODUCTION

The preschool period is a period that forms the basis of human life. The family is one of the smallest units and foundation stones of the society, which supports the growth and development of the individual from birth to death. A newborn child has a certain potential with hereditary characteristics obtained from his/her parents. The stimuli that s/he has inherited from the very first days may help to positively develop these potential features, but on the contrary, it can lead to negative development as well.

In this respect, the first living environment and the influences of this environment are very effective in determining what kind of a person the child will be in the future (Oktay, 2004). The family environment is the primary habitat for pre-school children. It is their families that the children are most often in contact with. At different stages of development, the roles that the family plays are also different.

According to Gordon (1993), the influence of parents on their children is very extensive. In a sense, parents are the ones who are closest to their children in both fulfilling all the needs in the 0-6 age range and therefore meet their needs, and their first teachers who are effective in their upbringing. Given the fact that the developmental foundations of human personality have been laid in the 0-6 age range, the importance of parental role is better understood in the identification of children’s educational identity. The status of the child obtained in the family, the valued s/he has earned and the identity s/he has developed gradually becomes the determinant of the identity, statues and values s/he will gain in the society.

Scientists have tried to determine the effects of the environment in development by primarily examining the family. Especially in the initial years, the family has an important place in the development of the child (Çağdaş, 2002). Basic education is the education received in the family. The family is the most effective institution in the care, development and education of the child. Although each family is unique, similarities can be seen in terms of social values, political beliefs and social events (Dönmez, 1999). It is the environment that allows the child to reach the highest level of his/her full potential of birth. It is fairly difficult to intervene externally with his/her hereditary features. In addition, it is possible to reach the highest point with suitable environmental conditions where the hereditary
capacity can develop. The first years of childhood are the period when a child gains a large share of his/her behaviors and the habits that s/he needs to learn and whose effects will last for a lifetime. The importance of parent-child relationships is understood better when the child develops a healthy personality and adapts to the surrounding environment ( Çağdaş & Seçer, 2006). The family is an institution where face-to-face relationships are experienced. Therefore, it is possible to say that the perception of discipline and paternal attitudes on the family play an important role in children’s social and emotional development. Therefore, parents’ attitudes and behaviors influence the conscience and moral development of children and how they build a coherent or incompatible, active or passive, dependent or autonomous, introverted or outward personality development ( Dönmezer, 1999).

The first thing that comes to mind when environment is mentioned is the family. It is because, after the family inheritance, a person is faced with the attitude of the family and parents ( Bacanlı, 2007). While the child tries to adapt to the physical and social environment that surrounds it from birth, the biggest support is taken from his/her parents. The identification patterns, which are the main roles in the formation of the child’s personality, are especially the parents. The child learns their way of life by imitation. The child also learns how to express himself/herself or how to be a self-directed individual from the family. At the root of many behaviors of the child are the essences of his/her parents. In the first years of life, the child begins to see the outside world with the eyes of his/her parents. For this reason, the worldview, value judgments and beliefs of the parents are directly reflected onto the children ( Aydoğanış et al., 2010). Every child is an independent individual with his/her own unique intelligence and personality traits. In addition to the individual characteristics of the child, the parents’ attitude and immediate environmental conditions influence their behavior and development ( Yavuzer, 2003). The way the mother and father approach the child shapes the discipline they apply, the child’s personality and other individual characteristics. At the same time, these attitudes also affect the achievement of the students in their schools ( Bacanlı, 2007).

Early childhood specialists indicate that children’s needs will be addressed through their families and that this is the good way of doing it. The primary responsibility of the family is to meet children’s needs when necessary. The experience and direction that parents can or cannot pass on to their children will shape them in life. The basic values of children are literacy skills, approaches to learning, being empowered within the family ( Morrison, 2003). This is why the attitudes of the families, who have such a significant role to children towards their children, are important.

As Maccoby (2002) noted, even though the parents are not the only “source” in the socialization process of their children, parents are seen as the most basic factor in this process, they are seen as the most fundamental factor in this process. It is because the first interaction in this first period of life of a child, where his/her personality traits, social harmony and social skills, as well as his/her values start, is in the family. In recent years, the relationship between parents and children has
been assessed within a process where both the child and the parents mutually affect one another, rather than being unilaterally influenced by the parents to the child. Despite this interaction, parents have more influence, especially during early development, because they are responsible for the care and education of their children. Developmental theories and approaches emphasize the role of parenting, taking into account these early stages of determining children’s early physical and social environment. Therefore, it is important to evaluate the attitudes of parents in the pre-school period (Cited in Demir & Şendil, 2008).

1. Parental Attitudes

Developmental psychologists have generally been more interested in parental attitudes since the 1900s. Being a parent is a complex activity involving many individual and holistic behaviors that affect children’s behavior. Negative parental attitudes, such as slapping or shouting, can be a misleading guide for the child, even if they seem to affect child development. Many authors say that focusing on specific parental behaviors in anticipating child development is less important than comprehending the overall attitude. Most researchers attempting to define this comprehensive subject refer to Baumrind’s definition of parental attitude.

Baumrind (1991) stated that the structure of parental attitudes was shaped by the parents’ selecting the normal efforts to control and socialize their children (Cited in Darling, 1999). The attitudes of parents depend both on the parents, and their children, the parents of the parents and their culture. Most parents learn their parenting behavior from their parents (Santrock, 2007). Parental attitudes affect the whole personality development of the child (Senemoğlu, 2002). The parenting styles of the parents greatly affect their psychosocial, mental, language, sexual and physical development of children (Senemoğlu, 2002).

The attitudes of parents who take responsibility for the care of the child towards the children who grow up as a member of the society are very important in terms of developing their desired characteristics (Özyürek & Şahin, 2005). Parental attitude influences personality, since it creates a model for the child, and is revealed by exhibiting the similar attitudes gained the identification models (Yavuzer, 2007). Attitudes are formed or changed as a result of many factors, especially the demographic characteristics of the families (Özyürek & Şahin, 2005).

The childhood period is a period in which the relationships with parents have significant influences on the child's personality development and school achievement, and in which the friendship relationships also affect the child's school life and future adaptation (Hortaçsu, 1997).

Family attitudes on which the most extensive studies are carried out are authoritarian, authoritative and permissive attitudes. It was revealed that these attitudes were influential at different levels, especially on the socialization of the child in the pre-school period, cognitive development and personality (Baumrind, 1966, 1991; Dornbusch et al., 1987).

In general, previous studies indicate that authoritative parents have children who are socially active, responsible and have cognitive skills; while the parents with other attitudes have children who have developed these characteristics less
The authoritarian attitude based on pressure and discipline is seen in families which are parent-centered and where the expectations from children are greater than children’s capacity. Meeting the child's needs and communication is insufficient (Yapıcı, 2010). The oppressive parents are concerned with their children, but they give orders at an extreme level (Şen et al., 2011). Authoritative parents are over demanding and motivating but not contributors. They are the parents who dictate their children clearly and openly what to do. The parents are obedience and situation-focused and demand their obedience to be obeyed without any questioning (Baumrind, 1991). The child growing with this attitude may be introverted, lack of self-esteem, weak social relationships, coward and addictive, as well as aggressive and incompatible (Dönmez, 1999).

The parents who have authoritative or competent attitudes indicating equality are successful in their expectations from children, enabling control and discipline, and in communicating with them. The boundaries of families with such attitudes in controlling and showing-love to their children are clear and the children’s needs are met. While these families put restrictions on their children, they, at the same time, encourage success by giving support and approval (Yapıcı, 2010). Authoritative parents set up rules and guide their children without oppressing them (Santrock, 2007). In the child-centered family with permissive attitudes based on freedom, the children’s needs are met, but giving them responsibility, enabling discipline and communication with them are inadequate (Yapıcı, 2010). They do not want mature behaviors from the children, allow them to self-inspect themselves significantly, and avoid confrontation. They allow their children to do whatever they want (Baumrind, 1991). The parents with indifferent attitudes, on the other hand, have nothing to do with their children’s life. They neglect their children and show little love for them. Their social lives are more important than their children. They have little control over the behavior of children. This attitude makes the child aggressive and can cause damage to the surrounding belongings. Parents with this attitude bring up children with weak social background, and who cannot easily accept independence (Şen et al., 2011; Yavuzer, 2011).

Baumrind believed that parents should be neither punitive nor unconcerned (Santrock, 2007). They should set rules for their children and be compassionate towards them. These parents’ attitudes were determined not to explain the abnormal parenting of slang and swearing, but to explain the normal attitudes of the parents. It is because most parents do not just belong to one category, they are located somewhere in the middle, showing the characteristics of multiple attitudes. Additionally, parental stress can often cause behavioral changes such as inconsistency, increased negative communication, decreased supervision, inconceivable rules or limitations set to the behavior, more reactive and less supportive or hysterical disciplinary behavior (Wikipedia, 2016).

Below is a list of authoritarian, permissive and authoritative parental attitudes based primarily on Baumrind.

In addition, the attitudes stated by Yavuzer (2007) were tried to be given. In
general, these attitudes are authoritarian attitude, permissive attitude, authoritative attitude, negligent-indifferent attitude, loose attitude-child-centered family, unstable and irresolute attitude and protective attitude.

1.1. Authoritarian Attitude

Authoritarian parents are demanding and controlling, but not giving parents (Berk, 1991). Authoritarian parenting is also called inflexible parenting. There is very little dialogue between the parents with attitude. Parents have high expectations from the children (Başal, 2012). Besides, parents attach such importance to harmony and obedience that they are unresponsive to their children’s opposing ideas and beliefs. As a result, the communication between these children and parents remains at a limited level. More often, these children accept what their parents say, without questioning them. It is because if the children do not comply with what their parents say, the authoritarian parents resort to the use of force and punitive behavior to stop children from acting disorderly. The authoritarian style is clearly framed on the needs of the parents, recognizing only a small area for the child to express himself/herself freely (Berk, 1991).

Such parents control their children, but they never listen to them; they are restrictive and punishers (Bacanlı, 2007). This attitude may be in the form of threats or physical violence, as well as withholding from love, interrupting the communication or making humiliating comparisons (Yavuzer, 2006). It is the case of strictly applying the rules and orders determined by the parents without controversy, negotiation, cooperating with the children, regardless of their wishes (Çağdaş & Seçer, 2006). If the children do not comply with these strict rules established by their parents, they will be punished. Authoritarian families do not explain to the child the reasons behind these strict rules. When children ask for clarification, parents say, "Because I want it that way." According to Baumrind, parents who hold this attitude expect their orders to be followed without any questioning (Cherry, 2018). Authoritative parents do not take into consideration the personality, interests and needs of their children. Their expectations from their children are quite high (Çağdaş & Seçer, 2006). Authoritarian attitude is an attitude that removes the child’s self-confidence and disregards his/her personality. Regrettably, this is a common attitude in traditional family patterns.

The child who is under the control of one or both of the parents may have an excessively delicate personality structure that is susceptible to being silent, gentle, gentle, honest, and attentive, disgruntled, shy, withdrawn, and easily affected by others (Yavuzer, 2007; Yavuzer et al., 2010). The children of parents who accuse, punish, and interfere with their children are seen weepy (Yavuzer et al., 2010; Aydoğmuş et al., 2010).

A study by Baumrind (1967) demonstrated that pre-school children with authoritarian parents were unhappy and introvert. These children felt uneasy and insecure when interacting with their friends, and showed hostile attitudes when they felt blocked. Baumrind (1971) found that girls who grew up in authoritarian style, especially those who developed a dependent personality, lacked entrepreneurship and motivation of success, while males exhibited anger and disrespectful behavior.
Authoritarianism is a negative relationship internalized by discipline based on the use of force, ethical prohibitions and confidence (Berk, 1991).

Children of authoritarian parents are often unhappy, unhappy and bad-tempered. It was observed that they were unreliable to others and had lower class achievements (Bacanlı, 2007). In addition, it was found that these children grew up as prescriptive, authoritarian, hostile to other children, despotic, resistant to adults, and far from creativity. Boys were more aggressive and girls were more dependent (Senemoğlu, 2002).

1.2. Permissive Attitude

In the permissive parent attitude; parents are giving but not demanding. Parents may also be referred to as tolerant, free, non-directive and good-tempered.

They have minimal behavioral expectations from their children. “In the attitude of a tolerant parent”, parents are as thick as thieves with the children, but there is little demand or control in this relationship. Tolerant parents do not expect their children to regulate, develop themselves, or act appropriately. This leads to proliferation of spoiled children or “sweet mardies”. Tolerant parents demonstrate a non-punitive, accepting and positive attitude towards the children’s reactions, desires and actions. Parents have little expectations towards the home-related responsibilities and regular behavior. Parents present themselves as a resource that the child can use as s/he wants. Parents are not an idol or a person who is responsible for shaping the future behavior of their children. They allow the children to organize as much of their activities as possible, stay out of controlling them, and not direct him or her to comply with the established standards. They do not use any force to reach their goals; he only use their logic (Baumrind, 1966). We can call this type of parenting “thoughtful”.

It is possible that children who are both in terms of development and age very young, are excessively auto-centric, but as they grow older, they need to become members of a group and learn to be self-existent like everyone else (Cited Miller, 2010).

These types of parents do not expect much from their children; they do not set rules; and they avoid punishing them. They are often inconsistent and distrustful. The children of these parents also tend not to trust themselves and tend to be unhappy. It seems that especially boys are less successful in the class (Woolfol, 1987; Cited in Bacanlı, 2007). This attitude damages children emotionally, harming them as much as the authoritarian attitude (Senemoğlu, 2002). Parents allow their children to make their own decisions about routine activities such as watching television, sleeping time and deciding when to eat. The permitting families put restrictions on children only in a few issues. Such families make several demands for their children’s mature behavior. Self-control and self-esteem are low in these children (Bukatko & Daehler, 1992).

The children of tolerant parents are more likely to act without thinking and tend demonstrate in bad behavior or be involved in drug abuse during the adolescent period. These children never learn to control their own behavior and they always want to behave the way they want. Nevertheless, some children in these
families may also be emotionally secure, independent, willing to learn and accept failure. They mature rapidly and can live their lives without the help of others (Santrock, 2007).

Tolerant parents are compassionate, talkative, and adoptive. They refrain from any form of control and having an authoritarian attitude. These highly tolerant parents allow their children to do almost anything they wish. Children of these families eat, sleep, and watch as much television as they want, do not have to learn moral behavior, take no responsibility for domestic affairs, and do not face their parents’ objections even when they are disrespectful to others. While some tolerant parents consciously believe that providing a free lifestyle to their children is good for the upbringing of their children, many of them are inadequate in finding the trust in themselves to change their behavior and maintain a regular home life (Berk, 1991).

In his research on parent attitudes in general, Baumrind (1967) stated that it was difficult to identify the tolerant parents amongst the study participants. The children of parents who are highly tolerant of their children are highly “immature” children. These children have difficulty in controlling their energy, act extensively independently and make many demands from the adults. On the other hand, these children participate in class activities less than the children who are under the control of their families. Furthermore, when they are demanded to act against their will, these children usually exhibit disrespectful and naughty attitudes. According to some findings, it appears that there is a relationship between a tolerant parent and passive, dependent, unsuccessful behavior and that there is a relationship only in boys (Bamrind, 1971; Cited in Berk, 1991).

1.3. Authoritative Attitude

It has been observed that parents with this attitude are demanding and giving. Parents who usually have this attitude are planned and organized. They are well suited to the definition of planned parenting. Authoritative parenting is also called positive or balanced parenting, and this attitude is defined by a child-centered approach with high expectations for maturity. Authoritative parents can understand how their children feel and teach their children how to regulate their emotions. They often help their children to find suitable ways to solve problems. Authoritative parents encourage their children to be independent, but they still set rules and limits on their behavior (Santrock, 2007).

Parents do their best to be loving and warm to their children and communicate with them verbally. Authoritative parents are often not as controllable as the authoritarian parents. They allow children to freely make discoveries, so that their children can make their own decisions according to their own logic. Authoritative parents usually raise more independent and self-confident children. Authoritative parental attitudes usually occur when there is high parental giving and high parental demanding. Authoritative parents establish clear standards for their children, reflect the boundaries they have created, and also allow children to develop their own autonomy. They also expect mature, independent and age-appropriate behaviors in their children. Penalties for misbehavior are moderate and consistent; they are not
inconsistent or do not involve violence (Santrock, 2007).

Authoritative parents’ boundaries and demands are clear; they make explanation when they apply punishment. Children adhere more to the punishment given by the authoritative parents. It is simply because the punishment is logical and fair. Besides, the child knows why s/he is punished. The parents use control when they are in conflict with the child, but do not exert pressure on him/her. Parents want to adopt their own opinions as adults, but do not ignore their children’s individual interests and their own methods. The authoritative parents support the child's existing characteristics, but also set standards for the future. They use logic, power, systematic shaping and reinforcement to achieve their goals and do not base its decisions on the ideas of the group or the will of their children (Baumrind, 1966. Cited in Miller, 2010).

Just as in the authoritarian parental attitude, parents with authoritative attitude expect their children to follow the rules. However, this parental attitude is authoritative. They are responsible for their children and are eager to lend an ear to their children. Authoritative parents are very forgiving and supportive of their children rather than punishing them if their children do not respond to their expectations (Bacanlı, 2003; Bekatko & Daehler, 1992; Cherry, 2018). In this attitude, parents set rules, but they explain the logic of the rules and listen to the children’s criticism. They sometimes resort to punishment, but tend to reward more the positive behaviors of the child (Bacanlı, 2007). Parents’ tolerance of their children and their support for them mean that they allow their children to fulfill their wishes in the way they wish, except for some restrictions. Parents are consistent, dedicated and trustworthy. The child should be supported to develop a sense of responsibility and an independent personality structure.

The realization of the parent’s tolerance at a normal level helps children to become a self-confident, creative, social individual. The limits of acceptable and unacceptable behavior at home are definite. Children are free within these boundaries. They have a say. The child’s views and thoughts are valued. In such an environment, children are supported to develop a sense of responsibility and an independent personality structure (Burden & Bryd, 1994. Cited in Uysal, 2006). Children of such parents are harmonious with their friends, outgoing, active, entrepreneurial, leadership-minded, able to establish effective interpersonal relationships, cooperative with adults, independent, energetic, self-satisfied, self-confident, agile, high self-respect and success-centered children (Bacanlı, 2007; Bekatko & Daehler, 1992; Bilal, 1986). This attitude helps the child to become a self-confident, creative, social individual (Aydoğan et al., 2010). In addition, the child can control himself/herself (Bukatko & Daehler, 1992).

1.4. Negligent-Indifferent Attitude

These parents are neither giving nor demanding. Negligent-indifferent parenting is also called non-interfering, impartial and non-considering parenting. It means parents’ leaving their children alone or ignoring and isolating them. In such an environment that causes emotional abuse, there is a lack of communication between parents and children. The negligent-indifferent parental attitude
strengthens the aggression tendency of children (Yavuzer, 2007; Berk, 1991; Özgüven, 2001).

Parents who display negligent-indifferent attitudes are weak when it comes to sincerity and control towards their children; they often do not interfere with the lives of their children. They are indifferent, non-demanding and inadequate in terms of being a giver and do not set limits. Neglected-indifferent parenting also means ignoring the children’s feelings and thoughts. Such parents do not support their children emotionally, but they meet their basic needs. The basic needs are food, shelter, toilet or money. Indifferent parenting can occur for many reasons. Some of these reasons may be parental prioritization, lack of parental encouragement, financial stress, inadequate support, and drug addiction (Wikipedia, 2016).

Habitually, negligent-indifferent parents do not care about their children’s emotional needs. In fact, in the indifferent parental attitude, the child can be harmed and therefore, efforts should be exerted to develop the parenting skills of the families (Miller, 2010).

Children, whose parents are negligent-indifferent, develop the feeling that other things in their parents’ lives are more important than themselves (Santrock, 2007). Parents and children often exhibit contradictory, opposite behaviors. Children are often emotionally introverted in social situations. This disturbing dependence also affects their relationships later in life. They may display school truancy and criminal behavior during adolescence.

In a study by Maccoby & Martin (1983), adolescents between the ages of 14-18 were examined in four areas. These areas were; psychological development, school success, internal distress and problem behaviors. In a study by Maccoby & Martin (1983), adolescents between the ages of 14-18 were examined in four areas. The study found that children with negligent and indifferent parents had the lowest scores on these tests, while children with authoritative parents had the highest scores (Steinberg et al., 1994).

Usually negligent-indifferent parents do not do their parts to their children in their socializing. They see their children only as a member of the family and they exert the minimum effort for them. These families are often confronted with intense daily stress and pressure, and have little time and energy to spare for their children. Consequently, these families try to fulfill what parents have to offer to their children by keeping their children away and preventing any problems. They respond to children’s eating habits and other easy access life-sustaining needs. However, it was observed that they were inadequate in terms of long-term goals such as giving children the habit of doing their homework on time and setting standards for social behaviors (Maccoby & Martin, 1983; Cited in Berk, 1991).

1.5. Relaxed Attitude-Children-Centered Family

Relaxed attitude is often found in middle-aged families with children or when the child is the only child in a large group of adults. In such an environment, the child is the only one with priority and other family members adapt his/her wishes unconditionally (Yavuzer, 2007). The lack of healthy communication between the parents and children causes the children to grow in an exaggerated way of
displaying love in an unbalanced environment, leading them to becoming “greedy” individuals. Mothers and fathers who submit to their children are those who accept their sovereignty at home. The child rules the parents and shows little respect for them (Yavuzer, 2007; Yavuzer et al., 2010). These kinds of children who come from children-centered families and who make the habit of having their requests accepted are disappointed with the rules in the school institution and display very poor social adaptation (Yavuzer, 2007; Yavuzer et al., 2010, Aydoğmuş et al., 2010).

1.6. Unstable and Irresolute Attitude

The “unstable and irresolute” attitude of the parents negatively affects the discipline and development of the child. The imbalance and inconsistency can be seen in the different opinions between the parents and also in the inconstant behavior of the parents. Criticizing one another in relation to the child, the negative approach of one parent to the positive approach of the other parent or the favor of the mother or father of the child are the examples unstable and irresolute attitudes. In an unstable and irresolute attitude, whether or not a behavior is appropriate depends on the mood of the mother or father, rather than the nature of the behavior. This may lead to some internal conflicts, uneasiness, and then to the formation of an unstable and irresolute nature in the child.

Children who encounter unstable and irresolute attitudes do not know how to behave. They cannot decide which of their behaviors are appropriate or inappropriate. This situation can adversely affect the development of children. It can cause an unstable and irresolute personality in children, internal conflicts and uneasiness can arise and children have difficulty making the right decisions (Yavuzer, 2007; Dönmezer, 1999).

1.7. Protective Attitude

The overprotective attitude of the parents means that children have more control and care than necessary (Yavuzer, 2007; Çağdaş & Seçer, 2004). As a result of this, children struggle to enter the group because they develop a stubborn and selfish personality structure that is over-dependent, insecure, timid, emotional weakness that does not consider others’ rights (Çağdaş & Seçer, 2006). Behind this extreme protection, which is more often associated with the mother-child relationships, lies the mother’s emotional loneliness. The protective approach prevents children from becoming an autonomous that is, self-managing individual. It disrupts children’s social development and causes them to develop a dependent personality. Children, from time to time, may resort to social and rebellious behavior in order to get themselves accepted the group (Yavuzer, 2007). The most important cause of dependence is the overprotective parental attitude. In other words, the child is overwhelmed with excessive love and care. Our traditional child-rearing methods have a tendency to increase dependence and restrict the assertiveness (Çağdaş & Seçer, 2006). The findings of studies show that the protection of mothers is higher than that of fathers. It is stated that this situation may arise from the expectation that the parenting role expected from mothers in the
Turkish culture should be overprotective towards their children (Çağdaş & Seçer, 2006). The overprotection of the parents affects children’s school orientation and also affects their school success (Aydoğmuş et al., 2010)

**CONCLUSION**

If we make a general assessment of the attitudes mentioned above, it is possible to say that in families with caring and authoritative attitudes, children are self-confident, able to put forward creative ideas, more outgoing, active, free, successful in relation to their friends and success-motivated. Authoritarian and permissive parents negatively affect their children’s personality development. However, authoritative parents can guide their children according to their abilities. They can establish authoritative relationship with their children by explicitly specifying the expectations and the standards expected them. When the parents respond to children’s activities with interest and pleasure, they are encouraged to learn on their own and acquire new skills when a suitable environment is created. Such a free environment encourages the children. It is because children try to perceive and explore the external world only to the extent of the opportunities and possibilities offered to them. Freedom is not irresponsibility and lack of inspection, it is related to self-control and internalized responsibility. The children who are left alone and allowed to do anything they wish may display inappropriate behavior.

It is important to recognize and support children’s abilities and characteristics that are different from others. Parents should recognize that their children have unique personality traits. They should act in an informed manner. Therefore, the attitude and support of the parents are very important.

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INTRODUCTION

Every child is different and unique in terms of his or her traits. It is important to place all children in educational environments that ideally meet their interest and needs and enable their maximum development (Avcı, 2012). An educational program that addresses all of the children with different cognitive, physical, social and emotional development characteristics and interests is of great benefit for all children.

An education that is appropriate to the needs of all children in the classroom is provided in inclusion (Allen & Cowdery, 2014). Inclusion refers to not only an educational environment or program but also a concept underlining that children with special needs are a member of general education classrooms (Allen & Cowdery, 2014; Hunt & McDonnell, 2007; McDonnell & Brown, 2013; Metin, 2012; Odom, Buysse, & Soukakou, 2011). Inclusion is basically related to sense of belonging, valuing, accepting individual differences, valuing them, providing the necessary support for them, and accepting all children, their families and environment, which points out that the educational program should require the respect and value for different cultural values, opinions, and lifestyles (Allen & Cowdery, 2014; McDonnell & Brown, 2013; Odom et al., 2011).

In the globalizing world wherein individuals with cultural difference live together, multicultural education plays a paramount role in coping with stereotypes, prejudices, and ethical perspectives (Rizvi, Engel, Rutkowski, & Sparks, 2007; Verma, 2007). In this regard, social justice is both a process and target in this multicultural education. Social justice provides the equal and complete participation of all groups in the society in a way that meets their needs. A process should be democratic, participative and integrative to accomplish social justice (Butler-Kisber, 2014 as cited in Adams, Bell, & Griffin). UNESCO (2005) explained inclusion as an opportunity to enrich learning and an approach yielding positive outcomes for children, rather than a problematic concept. Therefore, beyond being a technical or organizational change, inclusion is clearly an idea movement. Based on the Universal Declaration of Human Rights published in 1948, human rights underlie the inclusive education (Guidelines for Inclusion, UNESCO, 2005).

Following this declaration of the United Nations, many countries, despite their limited facilities, have taken various steps to ensure the equality in their education.
These steps have provided economic and social benefit to the whole society (Rizvi et al., 2007). In this respect, the inclusive process responds to all children’s educational, cultural and sociological diversity and minimizes the exclusion through education. Furthermore, inclusive education concerns with how to organize educational systems and environments to meet student diversity, rather than providing an answer to the question on how to include some children in inclusive education. Inclusive education aims to have teachers and children consider differences as an asset rather than the source of a problem, feel comfortable against these differences, overcome the difficulties they encounter and enrich learning environments (UNESCO, 2005).

Inclusive education also highlights the need to provide sufficient flexibility and adaptation in order to make educational institutions suitable for all children (Tassoni, 2003). Efforts to achieve this are based on the universal design, which argues that all individuals should have an unconditional access to facilities (Brand & Dalton, 2012; Clough & Nutbrown, 2005; Çağlar, 2012). Universal design first appeared in the field of architecture, which concerns with designing facilities for all people (e.g. elderly, pregnant, sick, and individuals with/without special need) (Conn-Powers, Cross, Traub, & Hutter-Pishgahi, 2006).

Originated from the universal design, the concept of universal design for learning (UDL) has emerged, which refers to making arrangements in the educational program in order to foster educational achievement of all children (Fovet, 2014; McDonnell & Brown, 2013). The program revised from this perspective provides equal educational opportunities for all children (McDonnell & Brown, 2013). In this way, children, as an equal and valuable member of the classroom, can benefit from all learning opportunities and represent their learning in various ways (Conn-Powers et al., 2006). In the joint report of the Division for Early Childhood (DEC) and National Association for the Education of Young Children (NAEYC), the concept of accessibility was defined based on universal design. In this report, accessibility was defined as eliminating physical barriers (universal design) and using a wide array of methods to foster development and learning (UDL) (Odom et al., 2011). This report also clarified the terms of participation and support, claiming further definitions of participation as increasing children’s sense of belonging and their participation in play and support as learning activities in educational approaches and intervention approaches for the former and of efforts of stakeholders of inclusion (the educator-family collaboration, the coordination of inclusive services, professional development, and public policy) (Odom et al., 2011). Based on the fundamental principle that educational arrangements should be for all children, support services provided for children are becoming more and more appropriate to the ideal point (Darragh, 2007).

Accessibility in early childhood education programs refers that all children are able to interact with materials, activities, teachers, and peers at the highest possible level of equal frequency and fun. The content of UDL includes teaching strategies, educational program, classroom routines, daily plan, and classroom environment (Watson & McCathren, 2009). An appropriately designed classroom environment
facilitates inclusive practices. The vision of today’s educational administrators has become presenting a school with high standards that can meet all children’s expectations (McDonnell & Brown, 2013).

Technical support provided to teachers by the school is also of critical importance for all children to meet their social, behavioral, and educational needs (McDonnell & Brown, 2013). In addition, making adaptations that optimizing children’ skills to participate in all classroom routines and activities based on the UDL principle is another element supporting children in inclusive classrooms (Conn-Powers et al., 2006; Darragh, 2007; Fovet, 2014; McDonnell & Brown, 2013). Children’ optimal development needs are easily met when these components are considered while planning and implementing the program (Avcı, 2012; Mogharreban & Bruns, 2009).

**Importance of Inclusive Education**

Efforts towards inclusive education increase the quality of education for all children (McDonnell & Brown, 2013; Odom et al., 2011). In this regard, inclusive practices are useful for both children with and without special needs (Dukes & Smith, 2006; Hunt & McDonnell, 2007; Odom et al., 2011). At this point, knowledge, and skills, which can diversify the educational system based on the existing teaching and assessment stereotypes, are needed in order to successfully support children with a wide array of needs (Hoover & Patton, 2004).

The basic reason for the inclusive education is to provide social and developmental benefits for children with special needs (Avcı, 2012; Hunt & McDonnell, 2007; Odom & Wolery, 2003; Tsao et al., 2008). The sense of belonging, participating and establishing positive social relationships; that is, social acceptance, appropriate social interactions, and friendship are among these benefits (Avcı, 2012; Odom & Wolery, 2003; Odom et al., 2011). Basic social competencies provide children to successfully participate in many activities together with their peers, help them establishing positive peer relationships and optimizes their potential benefit (Avcı, 2012; Hunt & McDonnell, 2007; Kennedy & Pigott, 2012; McDonnell & Brown, 2013; Odom et al., 2011; Tsao et al., 2008). In addition, inclusive education fosters inclusive children’s gain of problem solving skills at an early period (Kennedy & Pigott, 2012).

Sufficient and appropriate support provided in inclusive practices foster children’s acquisition of skills and their development (Avcı, 2012; Odom & Wolery, 2003). Odom et al. (2011) in their study investigate the effect of inclusive education provided for children on their achievement and reveal a positive relationship between children’s cognitive, social and motor skills differ and the quality of the inclusive practice. Compared to their counterparts with special needs who live in environments for only individuals with special needs, children with special needs who live with their families within the social life are more similar to their peers without special needs. In addition to increasing participation in social activities, inclusion also increases the access to the general education program when appropriate arrangement and support are provided (Hunt & McDonnell, 2007; McDonnell & Brown, 2013). High school graduate children with special needs can
have a better future than their peers who did not have these opportunities (Bambara, Wilson, & McKenzie, 2007; McDonnell & Brown, 2013). Inclusive practices in secondary education facilitate the employment of children with special needs in a field that is appropriate to them when they are graduated (Mank, 2007; McDonnell & Brown, 2013).

Inclusion also contributes to the development of children without special needs (Avcı, 2012). Thurman and Widerstorm (cited in Allen & Cowdery, 2005) indicate that children without special needs in inclusive environments gain more attainments compared to their peers in environments where inclusive education is not carried out. Inclusive environments also enable the development of prosocial behaviors (Becker & Eagly, 2004). Moreover, inclusive children’s awareness and attitudes towards special needs are positively influenced (Allen & Cowdery, 2005; Avcı, 2012; Odom et al., 2011). Inclusion provides children to understand the differences, therefore improve their sensitiveness, and help them recognize their strengths/weaknesses (Allen & Cowdery, 2005; Avcı, 2012; Çakıroğlu-Wilbrandt, Aydoğan, & Kılınç, 2008).

All children, whether they have special needs or not, carry out peer coaching, which is beneficial to them. Through peer coaching, children have a chance to more internalize their learning. Educators should become lifelong learners to keep their professional knowledge updated; therefore, they can improve their knowledge of inclusion and perform inclusive practices more effectively (Allen & Cowdery, 2005; Avcı, 2012). Continuous professional development is an important element of the success of inclusive classrooms.

Inclusive education is also important and beneficial to families. Families’ attitudes and experience regarding inclusion affect their perspectives towards inclusive education. Families of children with special needs generally possess positive perspectives towards inclusion. In addition, families of children without special needs become more positive as their experience regarding inclusion increases (Allen & Cowdery, 2005; Çakıroğlu-Wilbrandt et al., 2008). Beyond its positive effects on teachers and families, inclusive education provides long-term benefits to the society. As children, who share the same environment with children with special needs and interact with them, grow, they will become more open-minded, empathetic, and respectful adults (Allen & Cowdery, 2005).

Factors Affecting Inclusion

Several factors affect the success of an inclusive practice. Some of these factors are children with special needs, families and their attitudes, teachers and their attitudes, peers and their attitudes, collaboration, support services, and administrative issues (Batu & İftar, 2005; Çakıroğlu-Wilbrandt et al., 2008; Odom et al., 2011; Sucuoğlu & Kargın, 2008). In the coming part, further explanations are provided on each factor.

1- Children with special needs: It is crucial for all children to establish positive relationships with their peers, which contributes to the formation of social competences. Social competencies can be problematic for children with special needs (Dukes & Smith, 2006; Odom & Wolery, 2003; Odom, Horner, Snell, &
Compared to their peers without special needs, children with special needs can have more difficulties in social adaptation, initiating and maintaining a communication, and self-expression (Odom & Wolery, 2003).

2- Families and Their Attitudes: Families have diversified opinions and attitudes towards the inclusive education, which sometimes makes the inclusion a dynamics process and sometimes a challenging one (Bakkaloğlu, 2013; Dimitrios, Georgia, Eleni, & Asterios, 2008; Gupta & Buwade, 2013). While some families prefer the inclusive environment, others prefer segregated environments (Elkins, van-Kraayenoord, & Jobling, 2003 as cited in Grove & Fisher). Studies, comparing special education schools and inclusive school in terms of their contribution to children’s development, reported that special education schools are less effective (Hunt & McDonnell, 2007; Tsao et al., 2008). Families sometimes insist on having their children attend special education schools. On the other hand, pro-inclusion families are of the opinion that general education classrooms are better educational environments for their children and therefore better equip them with learning skills (Bakkaloğlu, 2013; Narumanchi & Bhargava, 2011). Families of children who have positive experiences in inclusive environments indicate that in such environments, personal development of their children are promoted and their prosocial skills are improved (Allen & Cowdery, 2005; Çakıroğlu-Wilbrandt et al., 2008; Narumanchi & Bhargava, 2011). Families with negative attitudes towards inclusion think that general education classrooms are not sufficient for children with special needs and that only academic education program is focused and basic life skills and other skills are ignored in these classrooms (Elkins, van-Kraayenoord, & Jobling, 2003). Besides, some families do not support inclusion with the argument that children may take children with special needs as an example; thus, their children are developmentally and educationally influenced in a negative way (Narumanchi & Bhargava, 2011).

3- Teachers and their attitudes: Teachers’ attitudes towards inclusion and inclusive children play a significant role in the success of an inclusive education (Metin, 2000; Walker et al., 2012). Teachers’ lack of knowledge of needs of children with special needs and their feelings of inadequacy and anger stemming from this lack of knowledge negatively influence the inclusion process (Yavuz & Avcı, 2007). Teachers are unable to create an effective educational climate for children when they possess negative attitudes towards inclusion and are reluctant to bring children with special needs to the classroom (Cassady, 2011; Metin, 2000). Teachers’ attitudes towards inclusion also redound on their communication with children in the classroom and their families. Increasing teacher competencies can positively affect their attitudes towards inclusion. Teacher education programs and professional development facilities are of critical importance to have teachers adopt inclusion approaches, to foster their positive perspectives towards inclusion, to equip them with necessary knowledge and skills and improve their competencies (Allen & Cowdery, 2005; Avcı, 1999; Batu & Kircalı-İftar, 2005).

4- Peers and their attitudes: Peer coaching is an element that facilitates inclusive practices. Through peer coaching, children are able to learn easily and
permanently and their social relationships and friendship become more qualified and permanent. Peer-based social competency is beneficial for all children (Guralnick, 2010; Kennedy & Pigott, 2012; McDonnell & Brown, 2013; Odom, 2005; Tsao et al., 2008). Collaborative learning is effective particularly for middle school children with special needs to improve their academic and social achievement (McDonnell & Brown, 2013). Weak social relationships, negative social behaviors, dysphasia and weak leadership skills, which are encountered in children with special needs (Kennedy & Pigott, 2012; Odom et al., 2007) lead to rejection by peers (Kennedy & Pigott, 2012; Odom & Wolery, 2003). For this reason, children with special needs frequently face peer rejection (Kennedy & Pigott, 2012; Loftin et al., 2008). As well as children with special needs, this is the case for disadvantaged groups (e.g. children coming from locations open to abuse or children from institutional care) (Kennedy & Pigott, 2012).

Peer attitudes are an important element for the success of inclusive practices (Georgiadi, Kalyva, Kourkoutas, & Tsakiris, 2012). Peer interaction can influence children in a positive or negative way (Choi & Nieminen, 2005). Peer acceptance or rejection has a crucial role in realizing social-emotional objectives (Georgiadi et al., 2012). A qualified inclusive educational program and positive attitudes towards inclusion are useful for all children in terms of peer coaching (Allen & Cowdery, 2005). In addition to its benefit to children with special needs, it enables children without special needs to develop positive attitudes and to gain universal values. However, it is necessary to take steps to boost in-class interaction in order for children to access to the aforementioned benefit because the acceptance of children with special needs by their peers depends on the quality and level of the interaction taking place among children (Choi & Nieminen, 2005; Vignes et al. 2009). Children’s interactions with their peers with special needs is affected by several variables such as age, gender, and parents’ perspectives towards inclusion and their interaction with children with special needs (Georgiadi et al., 2012). Considering the importance of peer support in inclusive practices, in-class peer relationships should be fostered to eliminate negative attitudes. Odom and Wolery (2003) similarly report that barriers to an inclusive process can be overcome through the share of ideas, present of sufficient support, and development of positive relationships.

5- Collaboration: Collaboration is regarded as a basic building block (Hunt & McDonnell, 2007; Odom et al., 2011). Teachers should collaborate with their colleagues in preparing development plans, arranging the classroom environment, making adaptations in activities and realizing peer coaching in order to carry out more effective and successful inclusive practices. Furthermore, they should make the arrangement in the program considering the targets and content of individualized education plans (IEP) and use necessary systematic instructions to improve children’ achievement (McDonnell & Brown, 2013).

The communication and collaboration between the child’s special education teacher and early childhood education (ECE) teacher is of critical importance for the inclusive practice regarding this child to be successful (Hunt & McDonnell,
The collaboration between these teachers sometimes cannot be established due to weak communication, lack of time, and distinct perspectives (Odom & Wolery, 2003). These teachers should make an in-depth plan of inclusive practices in order to prevent this.

6- Support Services: Successful inclusive practices require school-wide efforts to foster the educational quality for all children (McDonnell & Brown, 2013). Support services, early intervention programs, and individualized education programs are the basic components of a successful inclusive practice (Bakkaloğlu, 2008; Odom et al., 2011). Support services involve continuous guidance, communication, planning, collaboration, and professional development (Dukes & Smith, 2006; Odom et al., 2011).

A well-designed infrastructure for early childhood education is quite important for inclusive practices to be successful at this level. A planned and systematic supported provided at early ages depends on the characteristics of the child’s educational environment. Support services are effective in revealing, improving, and using children’s all capabilities (Diamond, Hestenes, & O’Connor, 1994; Ersoy & Avci, 2000; Kuz, 2001; Odom et al., 2011). Support services equip the program and the personnel who implement the program accordingly for children with a wide array of needs and characteristics (Odom et al., 2011). Besides, qualified school personnel are another important element that facilitates inclusive practices.

7- Administrative Issues: Administrative issues are another important component that determines the success of an inclusive practice. Despite their knowledge of what to do, teachers are unable to bring about a change on their own in cases of insufficient time and support. Administrators with insufficient knowledge of inclusive education also lack the knowledge of teachers’ responsibilities for a successful inclusive practice (Smith & Smith, 2000). Teachers can develop more positive attitudes when they are provided with sufficient support (Avramidis & Norwich, 2002). Therefore, all support, including administrative ones, provided positively influence teachers’ perspectives and attitudes. Considering all these, supporting teachers should be considered as a priority of educational policies in terms of its contribution to their attitude, expectations, and competencies (Avci, 2012).

In conclusion, inclusive education should be designed according to all children’s interest and needs. Families, teachers, peers, attitudes, collaboration efforts, the quality of support services, and administrative issues determine the success of an inclusive practice. Ensuring all these components, inclusive education enables all children to reach all educational facilities.

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