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Development of Curriculum Changes Perception Scale and Teachers’ Perceptions of Curriculum Changes

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Ministry of National Education

Çetin TORAMAN
Çanakkale Onsekiz Mart University

Abstract
This study aims to develop a scale to measure teachers' perceptions of curriculum changes. The experimental form created for this purpose was presented to the experts for their opinions. The content validity rates of the items were determined in line with the feedback from experts. Items with a content validity rate of less than .80 were excluded from the study. The 11-item trial form was applied to 162 Turkish teachers from different branches. Sampling was selected through convenient sampling method. With the Exploratory Factor Analyses (EFA), a two-dimensional structure consisting of 11 items, namely “Resistance to Program Changes” and “The Effect of Program Changes on Learning Environments”, was reached. The relationship between the subscales of the scale was examined in the analyzes and it was found that the factors were in a significant relationship with each other. It has been verified as a result of the analysis that the sub-dimensions are components of a structure that includes positive and negative perceptions called teacher perceptions against curriculum changes and that they together form a superstructure. It was determined that the model's goodness of fit indexes were quite high. Confirmatory factor analysis also confirmed the EFA results. The internal consistency coefficient obtained for the whole scale was determined as .95.

Keywords: Program Changes, Teacher Perceptions, Scale Development

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Introduction

Curricula change quite frequently in Turkey. With the proclamation of the Turkish Republic, curricula were gathered in one hand within the framework of Tevhid-i Tedrisat Law and became parallel with the practices in the west (Varış, 1970). In the 1950s, the definition of curriculum was changed from “Müfredat Programı” to “Eğitim Programı” which means the Turkish Ministry of Education accepted a broader definition by current studies as the second definition involves a broader meaning. Particularly, in the last 20 years, almost every minister has tried to implement a new program.

Even if teachers follow curricula while teaching a subject, they tend to use their ideas and make small or even bigger changes in their lessons. In other words, teachers refer to their past experiences upon which they formulate decisions to change the current situation into one which better suits to their own beliefs, values, and vision of what the teaching situation should be (Duffee & Eikenhead, 1992; OECD, 2009).

Curriculums change in time which is parallel with the educational philosophy of the dominant academicians and administrators. Teachers’ role in implementing curriculums have changed for the past decades. Traditionally the role of teachers was perceived as “executors” of the innovative ideas of the policymakers. Nowadays, there is a consensus in related literature approving the fact that teachers have a leading role in implementing curricula (Ball & Cohen 1999). In this respect, it can be said that curriculum changes gradually let teachers act more freely (Driel et al., 2008). Also, Change is a part of our life so the curriculums should be designed to meet this end and teachers should adapt these changes (Şahin, 2020).

Teachers are educated according to one educational philosophy and they tend to use this philosophy during their professional life. Their curriculum orientation is both related to the goals of education, to the relative importance of the subject matter, and to how teachers and students should interact (Tanrıverdi & Apak, 2016). This fact should be considered when changing curricula. Studies showed that Turkish teachers did not internalize these curriculum changes (Yaşar, 2012). The more teachers get older, the more conservative they become. Younger teachers are more open to curriculum changes. When curriculum changes are planned, this fact should be considered and varying curriculum orientations among pre-service and in-service schoolteachers should be considered (Ashour et al., 2012). Also, another important factor for teachers’ adopting changing curriculums is their job satisfaction (Lüleci & Çoruk, 2018).

Curriculum reform can only be successful when teachers’ ideas are considered and confronted. Otherwise, teachers will maintain their hidden agendas in the privacy of their classrooms and the process will result in a deceiving public exercise of reform and a waste of energy and
resources. Teachers are those who ultimately decide the fate of any educational enterprise (Handal & Herrington, 2003). Reforms that seek to by-pass teachers or to be overly prescriptive will not succeed. (Kirk & Mc Donald, 2001).

**Purpose of the Study**

The purpose of this study was to find out teachers’ perceptions of curriculum changes. The research questions are the following:

1. What are the explanatory and confirmatory factor analysis results of the Curriculum Changes Perception Scale (CCPC)?

2. What is the reliability test result of the Curriculum Changes Perception Scale (CCPC)?

3. What are teachers’ perceptions of curriculum changes?

4. Do gender, age, education level, school type, or teaching branch explain teachers’ perceptions of curriculum changes?

**Method**

**Research Design**

The study was designed according to the descriptive research methodology. To answer the research questions, a scale for assessing teachers’ perceptions on curriculum changes was developed, tried and its technicality (validity & reliability) was examined. Additionally, by using this reliable and valid scale teachers’ perceptions of curriculum changes were compared as per various factors.

**Participants**

During the research project, three different participant groups were used:

**Trial group for scale development**

This group consists of 122 teachers working in a central Anatolian city. 75 of those were female, while 47 of them male, 99 teachers have a bachelor’s degree in teaching while 23 of them have a graduate degree. 10 preschool teachers, 15 primary school teachers, 1 school counselor, 39 Turkish literature and language teachers and 57 of them were Turkish language teachers. Researchers worked with this group in April 2015. Construct validity (explanatory factor analysis) and reliability (Cronbach Alpha) of the scale were inspected with this group.

**Confirmatory Factor Analysis Group**

This group consisted of 162 teachers working in Eskişehir, Turkey. The confirmatory Factor Analysis study was conducted in May 2015.
Table 1. Distribution of demographic data of the participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>63</td>
</tr>
<tr>
<td>Female</td>
<td>99</td>
</tr>
<tr>
<td>Graduation</td>
<td></td>
</tr>
<tr>
<td>Bachelor’s</td>
<td>132</td>
</tr>
<tr>
<td>Master’s</td>
<td>30</td>
</tr>
<tr>
<td>Teaching Subject</td>
<td></td>
</tr>
<tr>
<td>Kindergarten</td>
<td>10</td>
</tr>
<tr>
<td>Primary</td>
<td>19</td>
</tr>
<tr>
<td>Maths</td>
<td>52</td>
</tr>
<tr>
<td>Turkish</td>
<td>81</td>
</tr>
</tbody>
</table>

Study Group

This group was subjected to the scale confirmed with validity, reliability, and confirmatory factor analysis (CFA) tests. The study group consisted of 238 teachers working in Eskişehir, Turkey. The sampling was determined through a probability sampling method as purposeful sampling enabled researchers to gather more pointed data from voluntary participants. The practice was made in July 2015.

Table 2. Distribution of demographic data of the participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>101</td>
</tr>
<tr>
<td>Female</td>
<td>137</td>
</tr>
<tr>
<td>Graduation</td>
<td></td>
</tr>
<tr>
<td>Bachelor’s</td>
<td>191</td>
</tr>
<tr>
<td>Master’s</td>
<td>47</td>
</tr>
<tr>
<td>Teaching Subject</td>
<td></td>
</tr>
<tr>
<td>Kindergarten</td>
<td>10</td>
</tr>
<tr>
<td>Primary</td>
<td>16</td>
</tr>
<tr>
<td>Psychological Counselling</td>
<td>30</td>
</tr>
<tr>
<td>Turkish Literature</td>
<td>80</td>
</tr>
<tr>
<td>Turkish</td>
<td>82</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>18</td>
</tr>
<tr>
<td>Geography</td>
<td>1</td>
</tr>
<tr>
<td>Visual Arts</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Below 25</td>
<td>4</td>
</tr>
<tr>
<td>25-34</td>
<td>58</td>
</tr>
<tr>
<td>35-44</td>
<td>113</td>
</tr>
<tr>
<td>45-54</td>
<td>53</td>
</tr>
<tr>
<td>Above 55</td>
<td>10</td>
</tr>
<tr>
<td>Faculty of Graduation</td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>1</td>
</tr>
<tr>
<td>School of Economics and Administrative Sciences</td>
<td>1</td>
</tr>
<tr>
<td>Faculty of Arts and Sciences</td>
<td>61</td>
</tr>
<tr>
<td>Faculty of Education</td>
<td>141</td>
</tr>
<tr>
<td>Institute of Education</td>
<td>8</td>
</tr>
<tr>
<td>Faculty of Distance Education</td>
<td>4</td>
</tr>
</tbody>
</table>

Scale Development Process

It is generally stated in the literature that the scale development process should follow some necessary guidelines. During our scale development process, we followed these scale development

Setting the objective of the scale, determining the target group and the reason for applying that objective,

a. Deciding the scope and the content of the scale,

b. Writing items in line with determined scope and content,

c. Controlling the items and drafting the scale,

d. Deciding on the grading and data analysis method of the items,

e. Applying the draft scale to the scale development study group,

f. Grading and analyzing the items,

g. Forming the final form of the scale

**Data Collection Tool**

“Curriculum Changes Perception Scale (CCPS)” is a Likert type scale and consists of 23 questions with 5 rating points (totally disagree, disagree, partially agree, agree, totally agree), and its technical specialties (validity and reliability) were tested in this research process. Before the scale development process was started, researchers reviewed the related literature (curriculum development, curriculum evaluation, change, and reform in education). Then, the items were written, and the draft scale was given to the field experts for review. The results from the data analysis revealed that the items 1, 2 and 3 formed a dimension, however, this dimension is not a collectible one. It was concluded that these questions are not a sub-scale, so they were excluded. The items 4, 6, 7, 9, 12, 13, 17 and 19 have low total item correlation (below 0.30) and they also were excluded from the scale. As a result of the explanatory factor analysis, the final form of the scale consisted of 11 items in two dimensions. These dimensions were explained in detail below:

**Resistance to Application of Curriculum Changes**

This factor consists of items 1, 2, 3, 7, and 11. This dimension provides information about teachers’ resistance to applying changes in curricula. Items are negative so they are coded reversely. The possible maximum score of this subscale is 25.
The effect of Curriculum Changes on teaching/learning settings

This dimension consists of 4, 5, 6, 8, 9, and 10 numbered items. It informs the researchers about the contribution of the curriculum changes to the teaching and learning settings. All of these items are positive. The highest score that can be obtained from this subscale is 30.

Analysis of Data

The data was analyzed using IBM-SPSS 19 and AMOS software. To test the scale’s reliability and validity Kaiser-Meyer-Olkin (KMO), Bartlett Sphericity, Varimax Rotation, Anti-Image Correlation tests, Cronbach Alpha reliability coefficient were used (Büyüköztürk, 2013; Özdamar, 2013).

Results

Construct Validity (Explanatory Factor Analysis)

The construct validity of CCPS was found with Principal Component Analysis. In Principal Component Analysis Keiser-Meyer-Olkin (KMO) and Bartlett Sphericity tests are conducted to see whether the data set is suitable for factor analysis. Varimax rotation method was used to exhibit factor structures better. The details of these analyses are below:

To identify the factor structure of CCPS, the gathered data of the trial group were tested to see whether its factor structure is suitable for factor analysis (Büyüköztürk, 2013; Özdamar, 2013).

1. KMO value was found 0.826. This value is over 0.50, which shows the data set is appropriate for factor analysis.

2. Bartlett Test results were found \[X^2=802.162; \text{df}=55, p<0.01\] and the meaningfulness of this result showed factor analysis can be applied to this data.

1st, 2nd, 5th items were gathered as a factor in consequence of explanatory factor analysis of CCPS, but the factor is not summable. This is understood as these questions are not a subscale. Therefore, these items were excluded. Items 4, 6, 7, 9, 12, 13, 17 and 19 were also removed as they showed low total item correlation (below 0.30). Remained items showed factor values between 0.357 and 0.819. Total item correlations were between 0.448 and 0.756. The two factors formed after varimax rotation explained %63.431 variances in the perceptions of teachers against curriculum changes. Item factor load values and total item correlations were shown in Table 3.
Table 3. Factor Analysis Primary Factor Load Values, Total Item Correlations, Anti-Image Correlations and Factors After Varimax Rotation

<table>
<thead>
<tr>
<th>Item No</th>
<th>Primary Factor Load Values</th>
<th>Total Item Correlation</th>
<th>Anti-image Correlation</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>M14</td>
<td>0.780</td>
<td>0.747</td>
<td>0.815</td>
<td>0.857</td>
<td></td>
</tr>
<tr>
<td>M15</td>
<td>0.803</td>
<td>0.755</td>
<td>0.744</td>
<td>0.900</td>
<td></td>
</tr>
<tr>
<td>M16</td>
<td>0.819</td>
<td>0.703</td>
<td>0.814</td>
<td>0.900</td>
<td></td>
</tr>
<tr>
<td>M20</td>
<td>0.648</td>
<td>0.709</td>
<td>0.942</td>
<td>0.744</td>
<td></td>
</tr>
<tr>
<td>M21</td>
<td>0.697</td>
<td>0.756</td>
<td>0.828</td>
<td>0.758</td>
<td></td>
</tr>
<tr>
<td>M22</td>
<td>0.557</td>
<td>0.613</td>
<td>0.900</td>
<td>0.718</td>
<td></td>
</tr>
<tr>
<td>M8</td>
<td>0.357</td>
<td>0.448</td>
<td>0.898</td>
<td></td>
<td>0.540</td>
</tr>
<tr>
<td>M10</td>
<td>0.714</td>
<td>0.555</td>
<td>0.776</td>
<td>0.829</td>
<td></td>
</tr>
<tr>
<td>M11</td>
<td>0.709</td>
<td>0.464</td>
<td>0.758</td>
<td>0.840</td>
<td></td>
</tr>
<tr>
<td>M18</td>
<td>0.393</td>
<td>0.472</td>
<td>0.813</td>
<td>0.565</td>
<td></td>
</tr>
<tr>
<td>M23</td>
<td>0.500</td>
<td>0.499</td>
<td>0.893</td>
<td>0.670</td>
<td></td>
</tr>
</tbody>
</table>

Explained Variance = %63.431
Reliability Value of the Scale (Cronbach α) = 0.890

As seen in Table 3, the primary factor loads of the remaining items were above 0.357 and total item correlations were above 0.448. Explained variance is above %63. This percentage is above the acceptable value for scale development studies in social sciences (Büyüköztürk, 2013). The anti-image correlation values change between 0.744 and 0.942. None of the remained items were below 0.50. This value shows that factor values of items contribute highly to the factor load (Özdamar, 2013). Varimax Rotation Method was applied to see whether there were subscales and if there were which items were gathered under which factor (Büyüköztürk, 2013; Özdamar, 2013). The Varimax Rotation Method showed there are two factors in the scale. Figure 1 shows the scree plot of the scale and that confirms the two factors of the scale.

Figure 1. The Scree Plot Graphic of CCPS
The scree plot graphic shows that after two factors, the line becomes horizontal. That shows that the scale has two dimensions.

In brief;

- Items 8, 10, 11, 18 and 23 constitute first sub-dimension. These items are questions about teachers’ resistance to applying new curriculums. Items were renumbered as 1, 2, 3, 7 and 11, also the dimension was named as “Resistance to Applying Curriculum Changes”

- Items 14, 15, 16, 20, 21 and 22 constitutes the second sub-scale. These items are about the effects of curriculum changes on the teaching/learning environment. Items were renumbered as 4, 5, 6, 8, 9 and 10. This dimension was named “The Effects of Curriculum Changes to Teaching/Learning Environment”

**Confirmatory Factor Analysis**

To see whether the structure of CCPS can be affirmed, confirmatory factor analysis was applied to the scale. The model after the analysis is shown in Figure 2.

![Diagram](image)

**Figure 2.** The Explanatory Factor Analysis Model of CCPS; Abbreviations PDUD: Resistance to Applying Curriculum Changes, PDOOOE: The Effect of Curriculum Changes to Teaching/Learning Environment.
When Figure 2 is analyzed, Chi-Square and Degree of Freedom levels as a result of Confirmatory Factor Analysis were $X^2=104.948$, (sd=38, p<.01) and $X^2$/sd=2.762 ratio was found. This ratio has a value below 3 and refers to a perfect fit (Jöreskog & Sörbom, 1993; Kline, 2005; Sümer, 2000). One of the most common fit indices of Confirmatory Factor Analysis is RMSEA (root mean square error of approximation). RMSEA value should be 0.05 or below. However, many academics state this value is acceptable until 0.08 (Browne & Cudeck, 1993; Hu & Bentler, 1999; Şimşek, 2007; Vieira, 2011). The RMSEA value found in this analysis is 0.079 and it can be classified as acceptable.

The 0.95 and above values of the CFI (Comparative Fit Index) and IFI (Incremental Fit Index) mean “perfect fit” for a model (Bentler, 1990; Çokluk et al., 2008; Hu & Bentler, 1999; Sümer, 2000; Şimşek, 2007;). In our analysis, the values were CFI=0.923 and IFI=0.925. According to these results the data fit of the model is at an acceptable level and the two-factor-structure of the “Curriculum Changes Perception Scale” was affirmed after the fit indexes of confirmatory factor analysis.

**Reliability Test (Cronbach Alpha)**

When CCPS was accepted as a single dimension scale, internal consistency was found 0.89. Also, the explanatory factor analysis showed that the scale consists of two subscales, so Cronbach Alpha tests were applied for these two dimensions. The results are listed in Table 4.

**Table 4.** The Cronbach Alpha and Additivity Test Results of CCPS by Sub-Scales

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Cronbach Alpha</th>
<th>Source of the Variance</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistance to Applying Curriculum Changes</td>
<td>0.917</td>
<td>Nonadditivity</td>
<td>0.914</td>
<td>0.914</td>
<td>2.782</td>
<td>1</td>
<td>0.096</td>
</tr>
<tr>
<td>The effect of Curriculum Change to Teaching/Learning Environment</td>
<td>0.767</td>
<td>Nonadditivity</td>
<td>0.327</td>
<td>0.327</td>
<td>0.699</td>
<td>1</td>
<td>0.403</td>
</tr>
</tbody>
</table>

When Table 4 was analyzed, the reliability value of the first subscale is 0.917 and the second subscale’s value is 0.767. A level more than 0.70 is accepted as high reliability for the scales (Özdamar, 2013). These sub-scales have a high-reliability level and also they are Likert type scales in terms of additivity (Tukey’s Nonadditivity p>.05).

**Teachers’ Perceptions of Curriculum Changes**

The descriptive statistics of the 238 teachers’ responses to CCPS are indicated Table 5.

**Table 5.** The Descriptive statistics of the teachers’ responses to CCPS

<table>
<thead>
<tr>
<th>Subscale</th>
<th>X</th>
<th>S</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistance to Applying Curriculum Changes</td>
<td>17.61</td>
<td>3.01</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>The effect of Curriculum Change to Teaching/Learning Environment</td>
<td>19.11</td>
<td>5.29</td>
<td>6</td>
<td>57</td>
</tr>
</tbody>
</table>
The maximum score of the “Resistance to Curriculum Changes” subdimension is 25. The mean score of the 228 teachers for this subdimension is 17.61. According to this, it can be said that teachers have a negative attitude toward applying curriculum changes. The maximum score point for the second subdimension of CCPS is 30 and teachers’ mean score is 19.11. Teachers think that the curriculum changes directly affect the learning/teaching environment. This result seems like a dilemma because teachers have a negative attitude against curriculum changes; however, they find these changes beneficial for their teaching.

The Explanation Level of CCPS Of Teachers’ Attitudes Toward Curriculum Changes in Terms of Teachers’ Age, Gender, Educational Status, School Type and Teaching Field

Logistic regression analysis was performed to see whether teachers’ age, gender, educational status, school type, and teaching field explained their perceptions of curriculum changes. The dependent variable should be categorical to perform this analysis (Özdamar, 2013). The dependent variable of this research is “teachers’ perceptions of curriculum changes”. This is tested with two sub-dimensions defined above. Each participant was coded in the sub-dimension which he/she got a higher point. Because the number of the items in each sub-scale are not equal. The points of the participants were standardized with Z points. By coding the participants in a sub-dimension, the dependent value was transformed into a categorical one.

The participants were coded as regards for some characteristics according to their properties such as age, gender, school of graduation, school types and their branches.

The identified reference groups for logistical regression analysis were “female” for gender; “25 and below” for age; “bachelor’s degree” for educational status; “kindergarten” for school type and “pre-school teacher” for teaching field. The results of “Binary Logistical Regression with Entering Method” were given in Tables 6, 7, 8, 9 and 10.

Table 6. Blog “0” Explanatoriness – Preliminary classification status after LRA

<table>
<thead>
<tr>
<th>Observation</th>
<th>1. Resistance to Applying Curriculum Changes (PDUD)</th>
<th>2. The effect of Curriculum Change to Teaching/Learning Environment (PDÖÖOE)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDUD</td>
<td>120</td>
<td>118</td>
<td>% 100</td>
</tr>
<tr>
<td>PDÖÖOE</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Percentage</td>
<td></td>
<td></td>
<td>% 50.4</td>
</tr>
</tbody>
</table>

According to Table 5, the groups made for perceptions of curriculum changes are explained with a percentage of %50 before the explanatory (predictive) variables are taken into the model. In other words, all of the participants are classified in “the resistance to applying curriculum changes” group, and the correct classification percentage is %50.4.
Table 7. Blog “0” Explanatoriness

<table>
<thead>
<tr>
<th>Observation</th>
<th>Regression</th>
<th>PDUD</th>
<th>PDÖÖOE</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of Curriculum Changes (PDUD)</td>
<td>1. Resistance to Applying Curriculum Changes</td>
<td>75</td>
<td>45</td>
<td>% 62.5</td>
</tr>
<tr>
<td></td>
<td>2. The effect of Curriculum Change to Teaching/Learning Environment (PDÖÖOE)</td>
<td>34</td>
<td>84</td>
<td>% 71.2</td>
</tr>
<tr>
<td>Total Percentage</td>
<td></td>
<td></td>
<td></td>
<td>% 66.8</td>
</tr>
</tbody>
</table>

When Table 7 is analyzed, it can be seen that the groups can be explained with % 66.8 when explanatory variables are taken into the model. The classification of the logistical regression model shows that 75 teachers were classified correctly, and the true classification rate is %62.5. Also, the positive effect of curriculum changes to the classroom settings is %71.2. 84 of the 238 teachers were classified correctly.

Table 8. Omnibus Test Related of The Correlations in The Model and Model Summary

<table>
<thead>
<tr>
<th>Step</th>
<th>X²</th>
<th>Df</th>
<th>p</th>
<th>Cox &amp; Snell R²</th>
<th>Nagelkerke R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Step Block</td>
<td>38.753</td>
<td>29</td>
<td>0.106</td>
<td>0.150</td>
<td>0.200</td>
</tr>
<tr>
<td>Model</td>
<td>38.753</td>
<td>29</td>
<td>0.106</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Chi-square is not positive and high enough in Table 6 and this shows that there is not enough improvement from block 1 to block 2. (X²=38.753, p>.05). This Chi-square result suggests rejecting the H₀ hypothesis (There is no difference between the starting model (block 0) which only includes constant and the resulting model which also explanatory variables.) This result also does not support the relationship between explained and explanatory variables. Cox & Snell R² and Nagelkerke R² values show that there is %15-%20 relationship between the dependent and independent variables.

Table 9. Hosmer and Lemeshow Test Result

<table>
<thead>
<tr>
<th>Block 1</th>
<th>X²</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.662</td>
<td>8</td>
<td>0.793</td>
<td></td>
</tr>
</tbody>
</table>

According to Hosmer and Lemeshow test model fitness is not significant (p>.05). This means that the model has an acceptable fitness.

Table 10. The Relations in the model

<table>
<thead>
<tr>
<th>B</th>
<th>Standart Error</th>
<th>Wald</th>
<th>df</th>
<th>p</th>
<th>Exp (β)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.107</td>
<td>0.989</td>
<td>0.012</td>
<td>1</td>
<td>0.914</td>
</tr>
<tr>
<td>Gender (male)</td>
<td>-0.473</td>
<td>0.346</td>
<td>1.865</td>
<td>1</td>
<td>0.172</td>
</tr>
<tr>
<td>Age (reference group)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (between 25–34)</td>
<td>2.865</td>
<td>1.728</td>
<td>2.749</td>
<td>1</td>
<td>0.097</td>
</tr>
<tr>
<td>Age (between 35–44)</td>
<td>0.081</td>
<td>1.018</td>
<td>0.006</td>
<td>1</td>
<td>0.937</td>
</tr>
<tr>
<td>Age (between 45–54)</td>
<td>-0.694</td>
<td>0.842</td>
<td>0.680</td>
<td>1</td>
<td>0.410</td>
</tr>
<tr>
<td>Age (more than 55)</td>
<td>-0.071</td>
<td>0.764</td>
<td>0.009</td>
<td>1</td>
<td>0.926</td>
</tr>
<tr>
<td>Graduation (graduate)</td>
<td>0.300</td>
<td>0.383</td>
<td>0.613</td>
<td>1</td>
<td>0.434</td>
</tr>
<tr>
<td>School (reference group)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School (primary)</td>
<td>-0.992</td>
<td>1.006</td>
<td>0.972</td>
<td>1</td>
<td>0.324</td>
</tr>
<tr>
<td>School (secondary)</td>
<td>0.005</td>
<td>0.823</td>
<td>0.000</td>
<td>1</td>
<td>0.995</td>
</tr>
</tbody>
</table>
In the variable explained (predicted) in the regression model, the reference groups are “the resistant to implementing program changes (PDUD)”; for the gender, the variable is “female”, for the age that variable is “25 and under”, “the undergraduate graduates” in the graduation variable, “the preschool institution” for the type of school variable, the school in the branch variable. The interpretation of the table is shaped according to these reference groups.

The constant is not significant in the model (p>.05). In this case, it cannot be said that any variable other than the explanatory (predictive) variables included in the model explain participation or non-participation in the course.

According to the model, the branch of physics teaching is a significant predictor of resistance to applying changes in the curricula (p<.05). If the teacher is a physics teacher, their resistance to applying changes in the curriculum decreases 5.1 times (1/0.196).

**Discussion, Conclusion and Recommendations**

“Curriculum Changes Perception Scale” is a measurement tool that consists of two sub-dimensions, developed to measure teachers’ perceptions of curriculum changes.

“The dimension of resistance to implementing curriculum changes” aims to measure the resistance of teachers against these changes. There are 5 items in this sub-dimension. The items in this sub-dimension are:

- Changes in the curricula are difficult to implement.
Since the curriculum changes very often, I do not apply the changing curriculum.

Since the curriculum is shaped by daily politics, I do not apply the changing curriculum.

Since I prepare students for the exam, I do not consider curriculum changes.

I do not apply the curriculum changes as they are not scientific.

The highest score that can be obtained from this sub-dimension is 25, and the lowest score is 5. A high score indicates that the level of resistance to the curriculum is high.

The second dimension of the scale is called “The Effect of Curriculum Changes on Learning Environment” and includes the following 6 items.

- Curriculum changes positively affect classroom management.
- As the curriculum changes, the quality of the learning environment increases.
- Curriculum changes reveal students' interests and abilities.
- As the curriculum change, the content of the course becomes more updated.
- Since the information is constantly changing, the curriculum should also change.
- I do not apply the curriculum changes as they are not scientific.

The highest score that can be obtained from this sub-dimension is 30, and the lowest score is 6. Item 11 of the scale should be reverse coded. A high score means that teachers’ curriculum changes contribute positively to the learning environment.

The high Alpha coefficients of the sub-dimensions of the scale (resistance to implementing curriculum changes .91, the effect of curriculum change on learning environment .76) indicate that the items in the sub-dimensions are consistent with each other. EFA and CFA result also confirmed the validity of the scale.

Curriculum evaluation is an important part of the curriculum development process (Eryaman, 2010). By evaluating a curriculum which is used in schools, the ministry of education can see the effectiveness and the usefulness of the curriculum. Teachers’ views are important at this point as they are the practitioners. Thus, they are the main members of the study groups, when a new curriculum is evaluated or developed (Özdemir, 2009). When teachers somehow resist to the new practices, it becomes hard to speak about the success of that practice. Teachers’ resistance to changing curricula is mainly because of their lack of information about new curricula (Bal, 2008; Korkmaz, 2016). It is important to know teachers’ perceptions about curriculum changes in order to develop curriculums.
which is adopted by teachers. Also, knowing these causes will be a useful data for training in-service teachers as their readiness will directly affect the future success of the whole education system (Karadağ et. al., 2008).

In conclusion, based on validity and reliability studies, it can be said that this scale is applicable in studies to be conducted with teachers. The curriculum is constantly on the agenda of the changes in Turkey, the curriculum is important for teachers' attitudes towards curricula for practitioners. The completion of the curriculum development process and teacher attitudes in the curriculum evaluation process is extremely effective on the success of the curriculum. It is thought that the scale can be used by the policymakers and administrators of the Ministry of National Education, as well as by curriculum development experts.

References


OECD. (2009). *Teaching practices, teachers’ beliefs and attitudes. in creating effective teaching and learning environments: First results from talis*. OECD.


Appendix 1. Curriculum Changes Perception Scale

Dear Participant

This scale has been prepared to determine how the changes made in the curricula in Turkey are perceived by teachers. The scale consists of 11 questions that include expressions that will enable us to learn your opinions.

Please read the items and choose the best option that explains your idea. The options are: “Strongly Disagree”, “Disagree”, “Partially Agree”, “Agree”, “Strongly Agree”. The obtained data obtained will only be used in a scientific research. Your sincere answers are important for the reliability of the research. Please do not write your names on the scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Statements</th>
<th>Totally Disagree</th>
<th>Disagree</th>
<th>Partially Agree</th>
<th>Agree</th>
<th>Totally Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>It is difficult to implement changes in the curriculum.</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I do not apply the curriculum that changes because the programs change very often.</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Since the curriculum is shaped by daily politics, I do not apply the changing program.</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Curriculum changes increase student motivation.</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Curriculum changes positively affect classroom management.</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>As the curricula change, the quality of the learning environment increases.</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Since I prepare the students for the exam, I do not consider the curriculum change.</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Curriculum changes reveal students' interests and abilities</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>As the curriculum change, the content of the course becomes more updated.</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Since the information is constantly changing, the curricula must also change.</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I do not apply the curriculum changes as they are not scientific.</td>
<td>① ② ③ ④ ⑤</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 2. Turkish version of Curriculum Changes Perception Scale

<table>
<thead>
<tr>
<th>Sıra</th>
<th>İfadeler</th>
<th>Kesinlik Katılmıyorum</th>
<th>Katılmıyorum</th>
<th>Kısaca Katılıyorum</th>
<th>Katılıyorum</th>
<th>Kesinlik Katılıyorum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Programdaki değişiklikleri uygulamak zordur.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Programlar çok sık değiştiği için değişen programı uygulamam.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Program günlük siyasete göre şekillendiği için değişen programı uygulamam.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Program değişiklikleri öğrenci motivasyonunu artırır.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Program değişiklikleri sınıf yönetimini olumlu etkiler.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Programlar değişikçe öğrenme ortamının kalitesi artırır.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Öğrencileri sınava hazırladığım için program değişikliğini dikkate alamam.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Program değişiklikleri öğrencilerin ilgi ve yeteneklerini ortaya çıkarır.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Programlar değişikçe dersin içeriği daha güncel hale gelir.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Bilgi sürekli değiştiği için program da değişmelidir.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>Program değişiklikleri bilimsel olmadığı için uygulamam.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Entrepreneurship Skill in The Context of Teaching Programs: Case of Poland

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Abstract
It can be said that entrepreneurship education is effective in realizing career plans that will shape the lives of individuals. This situation causes people to give importance to entrepreneurship. The knowledge and skills gained in the entrepreneurship education process benefit people's lives. Entrepreneurship education has an undeniable effect on human life and the success of countries in social, economic, cultural and technological fields. For this reason, countries attach importance to entrepreneurship education and include this course in their education and training programs. In this study, the education system of Poland, which is one of the successful countries in research results such as PISA and TIMSS, is discussed in terms of entrepreneurship education. Entrepreneurship education in Poland is compulsory at some grade levels. Therefore, it is considered important to evaluate the entrepreneurship education practices in this country. Qualitative research method was used in the research. The data were obtained with the document review form, descriptive analysis and content analysis methods were used in the analysis of the data. The findings were interpreted under three headings: 1. The content of the teaching programs within the framework of entrepreneurship education. 2. Evaluation of learning outcomes in teaching programs within the framework of entrepreneurship education. 3. Evaluation criteria of students in the process of entrepreneurship education.

Keywords: Entrepreneurship Skill, Education, Teaching Programs, Entrepreneurship in Poland, Poland.

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Introduction

Entrepreneurship education helps communities and economic development. Because entrepreneurship education includes behaviors and skills that will encourage people to produce. It includes important skills such as self-knowledge, critical thinking, problem solving, and working together in a team. Entrepreneurship education has been seen as important for countries to achieve their long-term economic goals and therefore has attracted the attention of policy makers. Entrepreneurship education is thought to serve people's long-term career goals. Thanks to this education, the desire and belief of students to create their own careers and start their own businesses is increasing day by day. This situation causes individuals to give importance to entrepreneurship. Because these knowledge and skills will contribute to the profession of individuals. Entrepreneurship education provides the training of individuals who are more active, constructive, creative, able to work in teams, identify and evaluate opportunities, and produce practical solutions to the problems they encounter with the knowledge and skills they have acquired. In this respect, evaluation of the educational practices of Poland, which provides compulsory entrepreneurship education, has been deemed important. The main objectives of the educational process are outputs. These outputs, which we can explain as products, are the gains we want to achieve in students. Raising young generations is one of the most important duties of the family and the school. This is a must for the family and the state. With a value-oriented education, it is possible for students to make the right choices and improve their decision-making skills. During the education and training process, students engage in activities both for themselves and for the formation of national memory. In this respect, education has an important place in shaping minds, forming a sense of national belonging and developing skills. At this point, it is important to examine unique entrepreneurship education practices in the world in terms of developing entrepreneurship education.

Publishing on entrepreneurship can be expressed as academic entrepreneurship. This situation can be explained as the expansion of the information network for entrepreneurship. The concept of academic entrepreneurship was initially explained as an information network involving technology companies. However, it is possible to define academic entrepreneurship in a way that includes all activities especially for entrepreneurship in universities (Poznańska, 2014). Poland has shown a successful performance in studies such as PISA and TIMSS. Therefore, entrepreneurship practices in Poland have been a matter of curiosity. In Poland, the scientific interest in qualifications in entrepreneurship education began in the 1990s, and this was largely due to the transformation in the economy. The emerging market economy has created a significant demand for professionals who value skills actively involved in various transformation stages. These were priorities: industrial restructuring, the emergence of new types of corporate initiatives, the development of financial institutions, banks and stock exchanges, Poland's process of integration with the European Union, and changes resulting from increased globalization. Economic transformations have also changed
academic education (Piróg, 2015). Innovation has become the driving force behind the development of modern economies, including the Polish economy. The Polish economy has been restructured and developed. In this configuration, attention was paid to the outsourcing processes of low and medium technologies (mainly - as an imitation innovation) and low wage advantage, high qualifications of its employees and capital transfer. Poland has recently formulated its strategy with the word "innovation" to improve its economy and increase economic competition. One of the priorities of the strategy created within the scope of sustainable and inclusive growth effort is smart growth, that is, it can be expressed as the development of an economy based on knowledge and innovation (Stachowic, 2015).

It is stated that the education sector in Central and Eastern Europe, especially in Poland, has shown a rapid growth in higher education. It is an indisputable fact that training programs have an important effect here. In transition economies where entrepreneurial education programs are exemplified by Poland, it is important to give students an entrepreneurial spirit. Because in this way, individuals see establishing a business as an important action (Cieślak, 2011). The year 2013 is very important for the transformation of entrepreneurship education in Poland. Because in 2013, a new national strategic and policy document on lifelong learning was prepared and accepted. Entrepreneurship education was also included in the compulsory courses category this year, and an action plan including entrepreneurship education and skills was adopted. The textbook "Applied economics", which describes the basics of entrepreneurship for secondary school students (general secondary school and technical secondary school), has been included in the list of textbooks for general education 1105/2020 by the Polish Ministry of Education. The objectives of general education in secondary and technical high schools in Poland are as follows (Ministry of National Education, 2020):

To treat regular systematic knowledge as the basis for skill development,

To develop thinking and language skills such as reading comprehension and writing,

To formulate questions and problems, to use criteria, to justify,

Define, classify, justify, explain, use examples, etc.

Developing the student's personal interests and reinforcing their knowledge on the subject using different disciplines,

Provide the ability to formulate and justify independent and well-thought judgments.

Making comparisons with their own and other people's judgments in the dialogue process within the investigation community,

Combining critical and logical thinking skills with imagination skills and creativity,
To ensure the development of social, moral and aesthetic sensitivity,

To develop mental tools that enable students to interact with and understand culture.

The Applied Economics program, which is given under the fundamentals of entrepreneurship, is based on the following four main elements of economic education in the 21st century (Polish Ministry of Education, 2020):

To prepare students to operate in the labor market by introducing basic information, shaping economic knowledge and entrepreneurial attitudes,

Shaping the ability to use economic information in daily life,

To enable students to use the knowledge and skills they have acquired over time in their living conditions,

To create economic life representatives that support the implementation of the program in schools.

As a result, Poland was selected for this study in order to evaluate entrepreneurship education practices in the world and to increase diversity within the scope of academic entrepreneurship. The success in research results such as PISA and TIMSS and compulsory entrepreneurship education are one of the important reasons for this choice. Depending on how entrepreneurship education is conducted in Poland, the following questions were asked in the study:

1. Why is entrepreneurship education important?

2. How is entrepreneurship training provided?

3. What are the teaching contents provided within the scope of entrepreneurship education?

4. What are the learning outcomes of entrepreneurship education included in the curriculum?

5. What are the evaluation criteria applied in the course curriculum in the entrepreneurship education process?

**Method**

The current study is designed according to the qualitative research method. It is possible to find various definitions in the literature on qualitative research. Qualitative research can be explained as a method in which qualitative information gathering methods such as observation, interview and document analysis are used, and a qualitative process is followed to reveal perceptions and events in a
realistic and holistic manner in the natural environment (Yıldırım & Şimşek, 2013). In addition to this definition, the nature of objects is also considered important in qualitative research. Because quality is directly related to what something is, how it is, when, where it is, its causes and consequences, its essence and its environment. Therefore, qualitative research includes meaning, concept, definition, fiction, feature, metaphor and symbols (Berg, 2016). In this context, the study was designed based on the idea of how entrepreneurship skills are realized in the process of entrepreneurship education in Poland. The study can also be expressed as a descriptive research. Because in this study, it is stated how entrepreneurship education is carried out in Poland.

**Research Process**

The research process covers the implementation processes that include entrepreneurship education elements, based on the curricula that form the application part of entrepreneurship education in Poland. The Polish education system is discussed in the context of elements, theories and practices on how to apply entrepreneurship education at different levels. The implementation stages and learning outcomes of the entrepreneurship education process have been evaluated within the framework of the sample curriculum.

**Data Collection Tools**

Standardized quantitative measurement tools were not used in the study, as the learning process was mostly based on experience and aimed at the affective domain in acquiring entrepreneurial skills. Qualitative data collection tools, which were predicted to be suitable for the holistic structure of the study, were used. Document review (document review form) was used for data collection. The knowledge, skills and values of entrepreneurship were taken into account in the creation of the document review form. Findings were categorized according to these factors and elements for entrepreneurship training were determined. Based on these elements, the application process and tools have been developed. The document review form has been prepared in two different ways:

**Form 1:** In this form, it is aimed to obtain data on the determination and application of knowledge, skills and values in the process of entrepreneurship education (in the context of entrepreneurship education elements). At the same time, it is aimed to reach data regarding the implementation process.

**Form 2:** In the second form, it was aimed to obtain the data related to gaining the competencies of the educational contents especially in the curriculum for entrepreneurship action. In the creation of this form, the purpose, content, feature, applicability, etc. criteria have been taken into account.
Data Analysis

While analyzing the data during the research process, descriptive analysis was used to classify written materials containing information about the phenomenon or facts aimed to be investigated during the literature review. In descriptive analysis, researchers can often add direct quotes to dramatically reflect the views of the individuals they interviewed or observed. The main purpose of this analysis type is to present the findings to the reader in a summarized and interpreted form (Yıldırım & Şimşek, 2013). Content analysis was also used to identify some situations. Content analysis; It is possible to express it as a qualitative data analysis method that includes the stages of organizing, classifying, comparing and reaching theoretical results (Cavitt, 2006; Cohen, Manion, & Morrison, 2007). As a result, in the process of realization of entrepreneurship education in Poland, information on education and training activities has been interpreted and findings have been reached. The obtained findings were evaluated by comparing them with other information in the literature.

Results

Poland is the only country in the European Union to include the compulsory entrepreneurship course in its education process. In terms of entrepreneurship education, the inclusion of the "Fundamentals of Entrepreneurship Course" in the training program in 2002 is an important development. With this course, it is aimed to develop positive attitudes towards entrepreneurship in individuals, to bring the entrepreneurial spirit to life, to enable individuals to gain entrepreneurship skills by making them more active in the education system. Entrepreneurship education is seen as an integral part of the education system in Poland. As a matter of fact, entrepreneurship education is included in the entire education system from pre-school education to university. The purpose of the integration of entrepreneurship education into the system is to increase the positive synergy between individuals and to ensure maximum efficiency. At this point, it is thought that entrepreneurship education will be possible by shaping entrepreneurial attitudes and skills towards thinking. In Poland, in the process of entrepreneurship education, the objectives of secondary schools are to: promote the intellectual development of the student and improve their skills; to enable them to use verbal and non-verbal forms of communication; evaluating the effects of positive and negative decisions they make; preparing a simple business plan; understanding the functioning of economic and market institutions; To analyze the current changes and trends in the world and the Polish economy. In addition to the competencies aimed to be realized, it is aimed to develop attitudes and behaviors such as honesty, self-esteem, respect for others, creativity, entrepreneurship, personal culture, knowledge of intercultural differences (tolerance including other cultures). After completing the education process, students are expected to gain the following qualifications: (1) making sense of economic principles, (2) making rational decisions to manage their resources, (3) learning the strengths and weaknesses of their individual characteristics (4) career planning and effort, personal success. (5) working in the
Entrepreneurship education takes place in different ways at all educational levels in Poland. This education is given in a comprehensive and systematic manner in secondary schools. The Polish education system consists of six levels. Children start education at the age of seven, and primary school lasts six years. The age of starting secondary education can be expressed as thirteen. Education in Poland is compulsory up to the age of eighteen (Wach, 2008). Social Studies, Economics and Entrepreneurship courses are among the compulsory courses. Entrepreneurship is also included in the curriculum of compulsory subjects in all lower secondary schools in Poland. Entrepreneurship training has been created to give at least 76 hours and this period has been extended with the authority of the school principals. In this context, the "Fundamentals of Entrepreneurship Course" curriculum has been prepared. An interdisciplinary method was preferred in the preparation of the content of this program. The main topics of the program are related to economics. Theoretical information is frequently included in the program. The educational objectives of the Entrepreneurship Education Curriculum in Poland are as follows: To be active in the economic field, to ensure conscious participation, to increase the ability to produce and work together, to increase entrepreneurial behavior and the motivation of individuals to establish their own enterprises. In this context, educational contents should address learning areas such as basic concepts for entrepreneurship, personal development, economy, the relationship between the state and economy, business and the global economy. In addition, the program is designed to achieve significant learning outcomes for improving ethical behavior, legal procedures (Polish Ministry of Education, 2020).

Entrepreneurship Education in Poland: Teaching Content

The findings in this section were reached as a result of the evaluations made over the curriculum of the "Applied Economics" course within the scope of "Fundamentals of Entrepreneurship" in Poland. In this program, the information (theory and practice) is given thematically under four headings. Relevant learning areas are given under the headings (Polish Ministry of Education, Applied Economics Course Curriculum, 2020):

First Theme (Learning Area): Market Economy

This chapter was created to teach the basics of entrepreneurial processes by focusing on the entrepreneur's characteristics, entrepreneurial skills and possibilities to shape them. In the field of learning, targeted competencies have been tried to be gained with the following subjects: (1) How should an entrepreneur be? (2) Entrepreneur and the world. (3) Market economy. (4) Supply, demand,
price. (5) Economy and state. (6) Consumer rights. On the other hand, competencies to be gained in the field of learning are as follows:

- To explain the characteristics of the entrepreneur,
- Understanding the role of communication skills.
- Understanding the importance of entrepreneurship including innovation,
- Characterizing the market economy assets with examples from various fields,
- Defining economic behavior.

When the above information is evaluated, students are expected to know the characteristics of entrepreneurs, to express their roles and behaviors in social life, and to explain the importance of entrepreneurship for economic development. This chapter emerges as a theme in which the theoretical framework for entrepreneurship is conveyed based on existing knowledge.

**Second Theme (Learning Area): Financial Market**

This learning area is prepared for students to understand the working principles of the market economy and the transformation process taking place in Poland. Related topics in the field of learning are: (1) Modern World and Money, (2) Investment, (3) Bank Need, (4) Pension, (5) Tax payment. Examples of competencies to be gained with these subjects are as follows:

- Listing the main features, functions and types of markets,
- Analyzing the services offered by commercial banks,
- Choosing the investment fund type,
- To know how tax criteria are determined according to various types.

With the targeted competences, students should gain the following competences: (1) They should have knowledge of the markets. (2) Must know the market function. (3) Must have knowledge of the economic process and make inferences by having knowledge of the transformation of the Polish economy. (4) It should evaluate the economic process. Based on these four competencies, it is aimed to educate individuals on subjects such as teaching market concepts, determining the structural characteristics of the market, Polish economic history, and evaluating the economy especially economically.

**Third Theme (Learning Area): Labor Market**

In this learning area called labor market, students are expected to have knowledge on: 1- Resource management (financing and time). 2- Money investment and investment factors for old age.
3- Economic determinants of insurance and security decisions. 4- Consumer rights. Examples of competencies targeted in the field of learning are as follows:

- To analyze the basic measures and indicators of the labor market,
- To explain the supply and demand mechanism in the labor market,
- To distinguish and evaluate job search methods,
- Analyzing their own competencies,
- Preparation of application documents for a specific proposal.

It is aimed to realize the above competencies under six headings (resource management, consumer rights, banking, investment, pension and personal security) in the relevant learning field. In particular, the expression "analyzing one's own competencies", which is one of the above competencies, emerges as an important competence goal regarding responsibilities as a result of personal control and individual decisions. In addition, the students were asked to have the ability to determine the focal point of the subject by having knowledge about "supply" and "demand", which form the basis of economic concepts. General economics knowledge is categorized in this learning area.

**Fourth Theme (Learning Area): Commitment**

Topics such as career planning, business idea, business activities, being the boss of your own business, establishing a company, financing the company, being a leader, being a manager, being successful are included in this learning area. It is aimed to gain the following competencies in the field of learning.

- Classifying businesses according to their types and criteria,
- To distinguish between ethical and unethical behaviors in the business world,
- Finding ideas for the business based on the entrepreneurs and the information they have acquired,
- To characterize key organizations and legal forms,
- Preparing your own project in the form of a business plan,
- To show creativity and design promotional activities in order to find the opportunity to finance business activities,
- To estimate the financial effects of the proposed business,
- To see the development opportunities and successes of the company,
• Describe your role in applying the principles of teamwork.

• Evaluating the advantages and disadvantages of individual tax forms.

Based on the aforementioned competences, the following learning outcomes are aimed: (1) To enable them to realize their skills. (2) To make them aware of their individual characteristics. (3) To improve the ability to evaluate and observe. (4) To ensure that they know the legal rights. (5) To develop analytical skills. (6) To enable them to make calculations (income and expense control). (7) To gain the ability to act together. On the other hand, students were asked to gain values such as being hardworking, responsible, challenging, adaptable and tolerant. Especially in this theme, which includes practical knowledge and skills, the presence of competencies such as job application process, calculation methods and forms, preparation of job application documents, and discussions on combating unemployment draw attention.

In addition, learning areas and topics offered within the scope of high-level entrepreneurship education are given in Table 1 (Polish Ministry of Education, 2020).

**Table 1.** The content of the training provided after the economy program implemented within the Basics of Entrepreneurship

<table>
<thead>
<tr>
<th>Themes (Learning Areas)</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Theme (Learning Area):</td>
<td>An entrepreneur in the modern world.</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>Demand, supply, price. Why not buy a laptop for Christmas?</td>
</tr>
<tr>
<td>Third Theme (Learning Area):</td>
<td>Be on your own. How do you manage your resources?</td>
</tr>
<tr>
<td>Personal Economy</td>
<td>The consumer is king. How do you deal with your rights?</td>
</tr>
<tr>
<td></td>
<td>Having a personal account in a bank.</td>
</tr>
<tr>
<td></td>
<td>The art of investment. Exchange.</td>
</tr>
<tr>
<td></td>
<td>Pension. Think before it's too late.</td>
</tr>
<tr>
<td></td>
<td>How to deal with bad luck?</td>
</tr>
<tr>
<td>Fourth Stage (Learning Area):</td>
<td>Employee or employer. What's better for me?</td>
</tr>
<tr>
<td>Career</td>
<td>Looking for a job. Where is my seat?</td>
</tr>
<tr>
<td></td>
<td>I want to work here.</td>
</tr>
<tr>
<td></td>
<td>How much of my salary is mine and why is it so low?</td>
</tr>
<tr>
<td></td>
<td>What's next?</td>
</tr>
<tr>
<td>Fifth Theme (Learning Area):</td>
<td>Be your own boss. Why should I start a company? How can I establish a</td>
</tr>
<tr>
<td>Business / Institutional</td>
<td>company?</td>
</tr>
<tr>
<td></td>
<td>What affects the functioning of the business (company in the market)</td>
</tr>
<tr>
<td></td>
<td>My company's success. How does my company work?</td>
</tr>
<tr>
<td>Sixth Theme (Learning Area):</td>
<td>Good team. The art of project management.</td>
</tr>
<tr>
<td>State and Economy</td>
<td>To act or not to do it.</td>
</tr>
<tr>
<td>Seventh Theme (Learning Area):</td>
<td>How does the money - financial market work in the world?</td>
</tr>
<tr>
<td>Global Economy</td>
<td>What is the value of money and why is it less?</td>
</tr>
<tr>
<td></td>
<td>Common cash register (i.e. state budget).</td>
</tr>
</tbody>
</table>

Based on the Table 1, it is aimed to realize the elements of entrepreneurship education (knowledge, skills and values) within the framework of these issues. Topics are dealt with in the form
of the individual, the environment and the world. In other words, a systematic path from private to
general has been followed in the education process.

The findings regarding the content of entrepreneurship training were evaluated within the
scope of exemplary training programs. In the curriculum aimed at the development of children at the
secondary school level, it is observed that entrepreneurship education is tried to be carried out under
four themes. In the following periods, this learning area was increased to seven. Davidsson (2008)
examines entrepreneurship according to history and economic system and defines competitive
behaviors as new business ventures that direct the market according to the functions of people.
Kirzner (1973) likewise expresses this as the implementation of new business ventures that lead to
changes in the market. Landström (2010) divides entrepreneurship into three functions as an academic
discipline. These functions are explained as "Entrepreneurship as a market function", "Entrepreneurship as an entrepreneur function", "Entrepreneurship as a process". In addition to these
findings, Tarhan (2019) expressed the elements (process, subject, knowledge and skill) of
entrepreneurship education in Table 2.

Table 2. Elements of entrepreneurship education (process, knowledge, skills and values)

<table>
<thead>
<tr>
<th>Process</th>
<th>Sub Themes (Topics / Information)</th>
<th>Skills</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business idea</td>
<td>From the people around us business idea creation. Community needs form the business idea by determining touring (needs analysis). Wanting to use the advantages of the place, creation. Questions about what people are interested in creating business idea by managing (question analysis). Our individual skills in line with the business idea creation.</td>
<td>The ability to see opportunities. Business plan skill. Workplace design skills. The ability to guess. The ability to understand difference / the ability to see change. Creative thinking skills. Innovative thinking skill. Problem solving skills. Collaboration skill.</td>
<td>Be patient. To have self-confidence. Being patriotic. To be hardworking. To be responsible. To act together.</td>
</tr>
<tr>
<td>Product Design and Production</td>
<td>Product demand (market) research. Product design. Realization of production / creation of product prototype.</td>
<td>Good conversation and the ability to communicate effectively with customers. Ability to create a</td>
<td></td>
</tr>
<tr>
<td>Promotion and Marketing</td>
<td>Market and marketing strategy. Presentation of product quality and distinctive features. Advertising and promotion.</td>
<td></td>
<td>To be hardworking. To be reliable. To have self-confidence.</td>
</tr>
</tbody>
</table>
According to Table 2, entrepreneurship education is handled in five processes: (1) Business idea. (2) Financing. (3) Product design and production. (4) Promotion and marketing. (5) Investment / Sustainability. In addition, these processes include sub-categories (subject, knowledge, skills and values). These elements can be updated in the context of the characteristics and needs of societies. It is important to systematically innovate and go beyond traditional thinking patterns in the acquisition of entrepreneurial competencies. Especially looking for change and seeing current changes as opportunities are important gains for entrepreneurship. In addition, entrepreneurs have the ability to innovate differently, take calculated risks, design and complete a particular project. Abilities such as creative thinking and acting, feeling the future (harbingers of change), discovering new opportunities, creative thinking, problem solving, and rapid response to market challenges are among other characteristics of entrepreneurs (Nowacka, 2011). In this context, it is seen that the relevant classification in the applied economics curriculum is not systematically prepared within the scope of knowledge, skills and values. Therefore, it will be beneficial to develop the related program in terms of entrepreneurship competencies. As a matter of fact, the steps in Table 2 can be followed during this development process.

Yelikalan et al. (2010) interpreted entrepreneurship as the whole process of realizing the activities of entrepreneurs. In this context, both the process of establishing a company and making innovation are within the scope of entrepreneurship. In the program, “How can I be successful; I am the boss of my own business; Subjects such as "investment" help the realization of entrepreneurship education in this sense. On the other hand, it is understood that the applied economics course curriculum needs more content in terms of skills and values to improve entrepreneurship characteristics. Factors such as the need to be successful in developing entrepreneurial skills, controlling, taking risks, managing uncertainty, self-confidence, being innovative and creative are very important (Ferrante, 2005; Koh, 1996; Akyürek & Şahin, 2013). For this reason, it is thought that including these skills more in the relevant program will produce more efficient results in terms of entrepreneurship education.
Teaching Program Learning Outcomes and Entrepreneurship Training

Under this heading, the "Basics of Entrepreneurship" course and the education program in the secondary education curriculum are taken as examples. An evaluation has been made regarding the learning outcomes targeted within the scope of this learning area and related subjects. Learning outcomes are included in the teaching program as primary and secondary outcomes. However, for ease of evaluation, these results were evaluated in a holistic way (Polish Ministry of Education, Applied Economics Curriculum, 2020):

First Learning Area (Market Economy): Learning outcomes in this learning area are expressed as follows: (1) Listing the characteristics of an entrepreneur, making self-evaluation. (2) To explain the concepts of entrepreneurship and creativity. (3) To explain the role of entrepreneurial activities. (4) To characterize the elements of the communication process. (5) To be able to describe non-verbal signals.

Second Learning Area (Financial Market): Examples of learning outcomes in this learning area are: (1) To be able to describe the properties of money. (2) To be able to list the currencies. (3) To be able to define monetary policy tools. (4) To be able to develop ethical practice examples and behaviors. (5) To be able to calculate loan costs. (6) To be able to compare bank loan offers. (7) To be able to explain the functioning of the Stock Exchange. (8) To be able to explain the Polish tax payment scheme.

Third Learning Domain (Labor Market): Sample learning outcomes in this learning area: (1) To be able to explain the reasons for people's professional activities. (2) To be able to define the types of unemployment. (3) To be able to make his own analysis according to his job. (4) To be able to prepare application documents for the job. (5) To be able to analyze their own competencies and opportunities to win. (6) To be able to list various types of wages for the job. (7) To give examples of ethical behavior.

Fourth Learning Area (Commitment): Sample learning outcomes of this learning area: (1) To explain the role of businesses in the economy. (2) To classify businesses according to the criteria. (3) Presenting business models. (4) To explain the usefulness of SWOT analysis. (5) To list the institutions that support small and medium-sized enterprises. (6) To be able to identify strengths, weaknesses and opportunities. (7) To list the various elements of the management process. (8) To list effective people management principles. (9) To explain the roles of a leader and manager. (10) Discussing the principles of teamwork.

When the learning outcomes are evaluated in general, it is seen that the program includes a limited number of skills such as determining personal characteristics, self-assessment, being creative,
communicating, comparing, explaining and defining, seeing and analyzing opportunities. Knowing the characteristics of entrepreneurs in the process of entrepreneurship training will be useful in shaping the programs. Bozkurt and Alparslan (2013) mentioned the following skills in addition to these characteristics of entrepreneurs.

- Being innovative,
- Taking risks,
- Being change oriented,
- Having emotional intelligence,
- Ability to focus on opportunities,
- Being creative,
- Having advanced communication skills,
- Being proactive,
- Having a high success motivation,
- To insist on their decisions,
- Self-confidence,
- High need for success,
- Good communication,
- To be able to solve problems easily,
- Ability to work for a long time,
- Determination in behavior and decisions,
- Have a passion for growth.

Morris (1998) expresses entrepreneurship as a process in any form and basically mentions six stages. These stages can also be explained as entrepreneurial qualifications. These six stages are described below:

1. Seeing and defining the opportunity: The entrepreneur needs to see, define and evaluate the opportunities before starting an activity. These opportunities may include changing demographic factors, the emergence of new market segments, new process needs, social changes.
(2) Idea development: Entrepreneurial individuals should be able to turn these opportunities they see and define into ideas. This idea can take the form of new products, new markets, new methods, new organizational structures, new technology, new sales and distribution channels.

(3) Identifying the necessary resources: It is important to determine what resources are needed to turn an idea into practice and how they will be obtained. It is possible to express these sources as an example as follows; Need for qualified workers, raw material needs, expert managers, marketing and sales experts, technical experts, financing needs, distribution channels, supply sources, production facility, license, patent.

(4) Providing the necessary resources: In the fourth stage, the entrepreneur must obtain the resources he has determined. For this, it can benefit from external sources, borrow from relatives or acquaintances, use other debt sources, and use equity.

(5) Realization and management of the idea: In the fifth stage, the entrepreneur starts to implement the idea, monitors the process and the success achieved, pays back the suppliers, and also ensures the growth of the business by doing new business. It increases its investments and strives to achieve its goals.

(6) Taking risks: It is one of the sine qua non of entrepreneurship. In fact, the entrepreneur takes risks from the very first moment. However, the risk is present not only at the beginning, but at every stage of the process.

At this point, when the program is examined, it will be useful to develop competencies in the main themes of business idea and financial affairs, which are among the characteristics of entrepreneurial individuals in the six stages mentioned above. On the other hand, Hisrich and Peters (1973) emphasized the importance of entrepreneurship education in the formation of entrepreneurial personality by stating that there is an important relationship between entrepreneurship and personal characteristics and expressed the characteristics of successful entrepreneurs as follows:

- Creative thinking skills,
- Desire to work at a high level,
- Courage, passion and determination,
- The ability to relate to people at a high level,
- The ability to express oneself verbally and in writing,
- Do not like your job and work motivation,
- A rich subconscious and imagination,
Team and teamwork predisposition,
To have a personal vision and mission,
To be willing to change, transform,
The ability to be flexible and tolerant,
Sincere, reliable, sympathetic and humorous personality,
To have the ability to persuade people,
Management skills and leadership ability,
The determination and enthusiasm to finish the job,
Foresight and the habit of seizing opportunities (as cited in: Yılmaz et al., 2019)

According to the explanations above, the program outcomes meet limited skills such as "Being Innovative, Focusing on Opportunities, Being Creative, Being Proactive, Being Determined". On the other hand, it has been seen that practical results should be included in the curriculum.

When looking at the studies in the field of entrepreneurship education from a different perspective, it is seen that the characteristics of entrepreneurial individuals in general are grouped as follows:

Personal Traits: High achievement, desire for autonomy and influence, adaptability, tolerance to uncertainty, high risk taking, adaptability and flexibility, self-esteem, confidence, opportunism.

Entrepreneurial Management Features: Creative vision and management, business finance, planned growth, planned competition in the market, providing the necessary resources, establishing a communication network.

Traits Gained Over Time: Communication skills, personal relationships and the ability to find solutions.

Entrepreneurial Behavior Characteristics: Commitment, forward working and planning, observing.

Entrepreneurial Orientation Characteristics: International orientation and global thinking.

Characteristics of Entrepreneurship Results: Regional growth and development, wealth creation, employment and socio-economic dynamism (Ethemad, 2004).

Based on the above information, it will be useful to organize the learning outcomes and contents within the scope of entrepreneurship education in a systematic framework that will address
the characteristics of entrepreneurial individuals. Information including this systematic structure is given in the example in Table 2.

**Evaluation criteria applied in the teaching program in the process of entrepreneurship education**

The findings were reached by taking into account the applied economics course curriculum, which is one of the application areas of the fundamentals of entrepreneurship course in the framework of entrepreneurship education in Poland. In this context, the evaluation possibilities regarding the education process are discussed under this title. The training contents and evaluation criteria were examined within the framework of the relevant training program. The methods and techniques used to measure student achievement in the education process are mentioned. The recommended criteria to be used to control student success can be explained as follows (Ministry of Education, Applied Economics Curriculum, 2020): 1-The success of the student should be evaluated in line with the aims of the program. Educational content on this subject should be taken into account. 2- Interpretation of the obtained information and researching how to use this information in the future learning process has been deemed important. 3- Six important functions of school evaluation (supportive, descriptive, positive, formative, knowledge-centered and motivation) should be taken into account. The teacher's task is to fulfill these functions in school practice. 4- School administrators and teachers should focus on assessment, identification / communication. These two processes are equally important. According to this: A diagnostic (input) evaluation is recommended at the beginning of the information cycle. Formative assessment is a way to support students’ work throughout the process. Teaching the basics of entrepreneurship and informing students about their current achievements is part of the education process. The summative (outgoing) assessment at the end of the teaching-learning process is a summary of student and teacher work. The rules for evaluating student achievement in the process of entrepreneurship education in the relevant program are given below: (1) Informing the student about the educational achievement and behavior level and making progress in this regard. (2) To determine how the student will learn and to know what he / she does. (3) To provide students with opportunities to complete their own development and make their own plans. (4) Motivating the student to make further progress in learning and behavior. As a result, it would be correct to say that entrepreneurship education aims at an assessment process based on student-centered knowledge, skills and motivation.

**Discussion, Conclusion and Recommendations**

Within the scope of entrepreneurship education, educational programs in Poland have been handled within the scope of content, learning outcomes and evaluation criteria and the following results have been reached.

The applied economics curriculum, which is one of the courses in which entrepreneurship education is given, includes the following topics: (1) How should an entrepreneur be?
Entrepreneurial, modern world? Market economy. (2) supply, demand, price; Why is the state in the economy? (3) Consumer rights. (4) The modern world and money. (5) Investment. (6) Why do I need a bank? (7) Retirement. (8) Tax. (9) Loyalty to what. (10) Be your boss on how to start your own company. (11) How do you finance your business? (12) Become a leader or manager. (13) How to be successful. Based on these issues, it has been tried to develop competencies for the elements (knowledge, skills and values) of entrepreneurship education.

According to the sample curriculum, the following competencies can be mentioned as examples of targeted learning outcomes in learning areas: Entrepreneurial characteristics, self-assessment, explaining entrepreneurship concepts, analysis of communication elements, defining the properties of money, expressing and explaining money forms, monetary policy, ethical practice and behavior examples, business defining the types of application documents, analyzing competencies, exemplifying ethical behavior, explaining the role of businesses in the economy, classifying businesses according to criteria, presenting and explaining business models. In addition, competences such as using SWOT analysis to identify the positive and negative aspects of individual skills are included in the program.

There are criteria established to evaluate students in the entrepreneurship education process. In this context, various methods have been determined to control the success of teachers and students according to the content of the education. It was suggested that the scope of the teaching content and the aims of the program should be taken into account in the evaluation of student achievements. In addition, it was deemed important to interpret the information obtained during the evaluation process and to investigate how this information will be used in the next learning process. Six important functions identified in the assessment of students in schools are expressed as follows: (1) supportive, (2) descriptive, (3) positive, (4) formative, (5) knowledge-centered, and (6) motivational. The teacher's task is to fulfill these functions in school practice. It was emphasized that assessment processes in schools should focus on identity formation and the development of communication skills.

Entrepreneurship training, which is carried out to increase entrepreneurial activities, is transferred to individuals within the framework of the unique cultural context of each country. In the USA, entrepreneurship education is given at primary grades and students get acquainted with entrepreneurship and entrepreneurship education before they reach high school level. In Japan, entrepreneurship education has been given in high schools since 2001 (in Tokyo). In Korea, entrepreneurship education, which started in colleges, became widespread later and was supported by various entrepreneurship training courses. Han & Lee (1998) attribute the economic development of the USA to advances in entrepreneurship. The main reason for the differences in economic and social life between South Korea and North Korea can be explained as the entrepreneurial economic philosophy. Because North Korea's lack of support for entrepreneurship has prevented an
entrepreneurial culture in this country. On the contrary, South Korea has attached great importance to the formation of an entrepreneurial culture in order to get rid of the financial crisis, and has made a significant breakthrough by supporting important entrepreneurial activities since 1997. As a result, the following factors have been effective in this success of South Korea: 1- Increase in the number of colleges providing entrepreneurship education. 2- Development of postgraduate programs. 3- To include students in business life with entrepreneurship education. 4- Realization of a significant growth with the increase in entrepreneurial activities. From this point of view, there is a relationship between the development, success and growth of countries and entrepreneurship education. As a matter of fact, Poland's success in PISA and TIMSS research results is directly proportional to the importance it attaches to entrepreneurship education.

Studies on entrepreneurship education and innovation are very popular in the world. Fayolle et al. (2005) stated that the scientific interaction between Europeans will leave its place to Asian countries in the future. In particular, China's integration of entrepreneurship training and development activities into all its programs and developing strategies in this direction in order to create a country based on innovation by 2020 was cited as an example of this situation. The fact that some European countries such as France, Finland and Estonia are below the European average in the Total Entrepreneurial Activities (TEA) index has been evaluated as a striking difference and a contradictory situation in entrepreneurship activities for Europe. In European countries, proactive attitudes and activities of Europe's competitors have been deemed important in order to better understand the complex dynamics between entrepreneurship, environmental factors and education. It is possible that the entrepreneurship activities in the world will shift to eastern bloc countries in the coming years. Despite this, Poland's success in entrepreneurship education is striking.

As a result, it is seen that there is an effort to teach entrepreneurship education in Poland more efficiently than in many countries of the world. Using active teaching methods (visual moderation, blended e-learning, educational entertainment tools) will be effective in gaining entrepreneurship skills. In this sense, methodological support can be provided to teachers (Wach, 2013). However, course contents and teaching programs for entrepreneurship education should be considered in a wide scope both theoretically and practically in terms of knowledge, skills and values. It would be beneficial to systematize the entrepreneurship-related elements (process, subject, skills and values) included in the training programs. An example of this systematic structure is given in Table 2.

References


Prediction of Fear of COVID-19: Meaning in Life and Psychological Resilience

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Abstract

The aim of this study is to examine the meaning in life and psychological resilience levels of university students as predictors of their fear of COVID-19. The research was carried out using the relational screening method, which is one of the quantitative research methods. The study consists of 475 university students, of which 353 women (74.3%), 122 men (25.7%), who are studying at different higher education institutions in Turkey and agree to participate voluntarily in the study. In the research; COVID-19 Fear Scale, Life Meaning Scale, and Brief Psychological Resilience Scale were used. In the study, while a negative non-significant relationship was found between university students' fear of COVID-19 and their meaning in life, in a negative way significant relationship was found with their psychological resilience levels. In addition, it has been showed that the life meaning and psychological resilience levels of university students explain 6% of their fear of COVID-19. The research results were discussed in the light of the literature and suggestions were made.

Keywords: Fear of COVID-19, Meaning in life, Psychological Resilience

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Introduction

The COVID-19 pandemic, which first emerged in China at the end of 2019 and quickly spread to the World, was also seen in Turkey in March 2020, has created a great impact on individuals (Health Ministry of the Republic of Turkey, 2021). It is considered that the COVID-19 pandemic seen in Turkey at a later time than in other countries, has affected all age groups -- from children to the elderly -- physically, psychologically and socially. Individuals' fear of contracting the disease, their belief that a difficult process awaits them when they contract the disease, and their concern for losing people around them due to this disease have caused psycho-social damage to the mental state of individuals (Stănculescu, 2021). In addition to these, a decrease in individuals' social interactions to protect themselves from COVID-19 and the increase in the time spent at home can further increase this stress that individuals experience (Droit-Volet et al., 2020; Polizzi et al., 2020). Although the condition of experiencing fear and stress caused by COVID-19 is normal for individuals' lives, the intense and frequent experience of these emotional reactions can be treated as a problem (Fofana et al., 2020; Satıcı et al., 2020). In this process, while some psycho-social characteristics of individuals have an accelerating effect on the fear of COVID-19 becoming abnormal, some features may have a preventive effect. For example, the fact that individuals experience conditions such as depression, anxiety, stress, anger, psychological vulnerability, trauma and addiction in their general lives can have an accelerating effect on the abnormal state of fear they experience during the covid-19 pandemic (Savi Çakar, 2018). However, individuals' having characteristics such as high self-esteem, emotional intelligence, conscious awareness, psychological well-being, hope, problem solving skills, psychological resilience and meaning in life can have a protective effect against the psychological problems they may experience in the COVID-19 pandemic (Savi Çakar, 2018). In this context, in this study, the fear of COVID-19 that individuals may experience during the pandemic period, meaning in life and psychological resilience were discussed in the context of two different protective factors. Fear can be defined as a natural condition that involves the emotional response of individuals to an uncertain situation they face in their lives (Gençöz, 1998). The rapid spread of the COVID-19 pandemic and its lethal effect create a threat perception in terms of making major changes in the lives of individuals, creating significant effects on vital experiences and may cause individuals to experience fear. (Ahorsu et al., 2020; Doğan & Düzəl, 2020). In addition, technological tools that have taken an important position in the lives of individuals in recent years often have situations related to COVID-19 and the constant exposure of individuals to this situation may increase their fears. (Al Zubayer et al., 2020; Planchuelo-Gómez et al., 2020; Wang et al., 2020). In a study conducted by Doğan and Düzəl (2020), 60% of the participants stated that the COVID-19 pandemic had negative effects on their psychological conditions. In addition, a large majority of participants, such as 94%, were very afraid that they and their relatives would be exposed to the disease. A study conducted by Bakioglu and his friends (2020) found a positively significant relationship between
individuals' COVID-19 fear levels and anxiety, fear and depression levels. The high fear experienced by individuals during COVID-19 can further deepen the psycho-social effects of the pandemic and have huge effects on the psychological states of individuals (Ladikli et al., 2020). Experts stress that it is not enough to take only physical measures for the COVID-19 pandemic, but that studies should be carried out to ensure that individuals can be psycho-socially well in order to remain immune (Griffiths & Mamun, 2020). In this context, countries carry out various studies to support the psycho-social well-being of their citizens in this process through relevant institutions. In this context, the situation of the predictive status of life meaning and psychological resilience factors on individuals' fear of COVID-19 was discussed.

The meaning in life, which is a subjective concept that involves individuals giving meaningful answers to why they live; it is an important factor for individuals to look forward to the future, to set goals and to have motivation to achieve these goals (Sarıçam, 2018). The meaning in life can be defined as the feeling and feeling felt about the nature of the existence of individuals (Çelik et al., 2015). In another definition, the meaning in life; it can be treated as a situation of having a goal, goal or comprehensive mission that allows the individual to make sense of his life (Sarıçam, 2018). Especially in difficult and stressful situations such as the COVID-19 pandemic, it can be said that the meaning in life has an important place in the those who can stay strong. The high levels of meaning in life of individuals may indicate that they attach a meaning to their existence, that they have certain life goals and that they have the motivation to achieve these goals. This situation can protect individuals against the psychological destruction of the COVID-19 pandemic. Along with the meaning in life, the psychological resilience factor can also be considered as an important protective factor for individuals to stay strong against difficult situations (Sarıçam, 2018). Psychological resilience can be defined as a concept that expresses the tendency of individuals to recover quickly in the face of negative life experiences and situations they face (Mizrak & Tutkun, 2020; Sarıçam, 2018; Soylu, 2020). By another definition, psychological resilience is expressed as the fact that individuals do not break down in the face of negative life experiences they face and can adapt to these changes that occur in their lives by staying strong (Karaırmak, 2006). Psychological resilience, such as the meaning in life, can be said to allow individuals to be least affected by negative psychological situations during the covid-19 pandemic (Yazici Çelebi, 2020).

In this article, the levels of fear experienced by individuals during COVID-19 were examined in terms of various variables. In these studies, individuals' COVID-19 fear levels were often studied for risk factors such as negative psychological conditions like stress, depression, and anxiety (Al Zubayer et al., 2020; Bakioğlu et al., 2020; Doğan & Düzel, 2020; Parlapani et al., 2020; Planchuelo-Gómez et al., 2020; Satıcı et al., 2020; Stănculescu, 2021). Accordingly, in some studies, individuals' fears of COVID-19 were examined in terms of protective factors such as positivity, life satisfaction, social support and psychological flexibility (Bakioğlu et al., 2020; Lebel et al., 2020; Prentice et al.,
In this research, two of the protective factors that have not been much researched on the COVID-19 fear levels of individuals in the area will be discussed with the meaning in life and psychological resilience. It can be said that the findings of the study may be important for preventive studies to ensure that individuals remain strong in the face of the negative psycho-social situation brought about by the pandemic during the COVID-19 pandemic.

**Purpose of the Research**

The aim of this study is to examine the meaning in life and psychological resilience levels of university students as predictors of their fear of COVID-19. In the research, in line with this general purpose, the following sub-goals were sought:

1. What are university students' scores for fear of COVID-19, meaning in life and psychological resilience?
2. What level of relationship is there between university students' fear of COVID-19 and their level of meaning in life and psychological resilience?
3. At what level do the life meaning and psychological resilience levels of university students predict their fear of COVID-19?

**Method**

In this section, information about the model of the research, the working group, the data collection tool, the collection and analysis of the data, the validity and reliability of the research, and the limitations of my research are included.

**Research Model**

Correlational survey model are research models aiming to determine the presence and/or degree of coexistence between two or more variables. According to the correlational survey model, the relationships among variables are examined in an existing situation without the intervention of the researcher (Fraenkel ve Wallen, 2006, s. 328).

**Working Group**

The study's working group consists of 475 university students, 353 of whom are women (74.3%) and 122 of whom are men (25.7%), who study in different higher education institutions in Turkey and agree to participate voluntarily in the study. Table 1 includes demographic information about the study group.
Table 1. Demographics of university students participating in the study

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Woman</td>
<td>353</td>
</tr>
<tr>
<td></td>
<td>Man</td>
<td>122</td>
</tr>
<tr>
<td>Cities with Restrictions</td>
<td>Yes</td>
<td>275</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>475</td>
</tr>
</tbody>
</table>

When Table 1 is examined; 353 of the university students participating in the research are women and 122 are men. While 275 of these students live in cities in where implementation of the various restrictions in Turkey, 200 live in cities where there are no restrictions.

Data Collection Tool

In the research; "COVID-19 Fear Scale" adapted to Turkish by Satıcı and his friends (2020), "Life Meaning Scale" adapted to Turkish by Akın and Taş (2015) and "Brief Psychological Resilience Scale" adapted to Turkish by Doğan (2015) were used. Permission has been obtained from authors who adapted the scales for the use of these measurement tools within the scope of the research. In addition, the demographic information of the university students who participated in the research was determined through the "Personal Information Form" developed by the researcher.

**COVID-19 Fear Scale:** The "COVID-19 Fear Scale" developed by Ahorsu and his friends (2020) and adapted to Turkish by Satıcı and his friends (2020) was used to determine the levels of COVID-19 fear of university students. The scale consists of one dimension and 7 substances. The scale was prepared in 5-point Likert type. The lowest score that can be obtained from the scale is 7, and the highest score is 35. Increased scores from the scale show that individuals’ levels of FEAR of COVID-19 are increasing. In the analyzes to determine the reliability of the scale; Cronbach's alpha coefficient was found to be. 847, McDonald's omega coefficient as .849, Guttmann's lambda coefficient as .844 and composite reliability coefficient as .842. In the study of the validity of the scale, analyses were carried out using similar scales. In the analysis, positive significant relationships between fear of COVID-19 and depression (r = .38, p <.001), anxiety (r = .55, p <.001) and stress (r = .47, p <.001) has been found. In addition, a significant negative correlation was found between fear of COVID-19 and life satisfaction (r = -. 20, p <.001). In addition to these, a model study was conducted in which direct and indirect effects were determined for the validity study of the scale. These results obtained in the study show that the scale is a suitable measurement tool that can be used in Turkish culture. In the re-conducted reliability study on the working group of this research, the cronbach alpha coefficient was calculated as .874.

**The Meaning in Life Scale:** The "The Meaning in Life" developed by Steger and his friends (2006) and adapted to Turkish by Akın and Taş (2015) was used to determine the life meaning levels of university students. The scale consists of 2 sub-dimensions: the Presence of Meaning in Life and the Search for Meaning in Life. The scale consists of 10 items prepared in 7-point Likert type. The
ninth item of the scale is reverse-coded. The lowest score that can be obtained from the scale is 10, and the highest score is 70. The increase in the scores obtained from the scale show that the individuals' levels of meaning in life have increased. In the reliability study of the scale; internal consistency coefficient was found as .77 for Presence of Meaning in Life sub-dimension and .83 for Search for Meaning in Life sub-dimension. In addition, the test-retest reliability coefficients obtained with 4-week intervals were found as .89 for the Presence of Meaning in Life and .92 for the Search for Meaning in Life. In the study of similar scale validity, the relationship between Meaning in Life and originality scales was examined and a positive relationship was found. In the explanatory factor analysis for the validity study of the scale, it was observed that 10 items explained 57% of the total variance and the items were collected in two sub-dimensions in the form of the Presence of Meaning in Life and the Search for Meaning in Life. The factor loads of the scale range from .54 to .77, and item total correlation scores between .42 and .68. In the confirmatory factor analysis, it was seen that the two-dimensional model fits well. (x²= 77.77, sd= 31, RMSEA=.065, NFI=.95, CFI=.97, GFI=.96, AGFI=.93, RFI=.93, SRMR=.065). These results obtained in the study show that the scale is a suitable measurement tool that can be used in Turkish culture. In the re-conducted reliability study conducted on the working group of this research, the cronbach alpha coefficient was calculated as .850 in the Presence of Meaning in Life and .860 in the Search for Meaning in Life sub-dimension.

**Brief Psychological Resilience Scale:** The "Short Psychological Resilience Scale" developed by Smith and his friends (2008) and adapted to Turkish by Doğan (2015) was used to determine the psychological resilience levels of university students. The scale consists of 6 items of 5-point Likert type. The second, fourth and sixth items of the scale are reverse-coded. The lowest score that can be obtained from the scale is 6, and the highest score is 30. The increase in the scores obtained from the scale indicates that the psychological resilience levels of the individuals increase. In the reliability study of the scale; It was observed that the corrected item total correlation values ranged from .49 to .66. In addition, the internal consistency coefficient value was found as .83 in the analysis. In the construct validity of the scale, it was observed that a single factor explained 54% of the total variance. It was observed that the factor loads of the scale items took values ranging between .63 and .79. In the criterion-related validity study for the validity study of the scale, psychological resilience and happiness (r = .40, p <.001), ego resilience (r = .61, p <.001) and a different psychological resilience scale (r = .66, p <.001) relationship was found. These results obtained in the study show that the scale is a suitable measurement tool that can be used in Turkish culture. In the re-conducted reliability study conducted on the working group of this research, the cronbach alpha coefficient was calculated as .855.
Process

The university students who participated in the study were informed about the purpose of the research and the scales. Participation in the research was reported to be voluntary and people who did not want to participate were not included in the research. The data was collected in a single session. The data collection process took about 15 minutes. After the data was collected, it was stated to those who wanted to learn the results of the scale filled in by themselves, and that the results could be shared with them if they wanted. In this context, these people who want to learn have been contacted at the end of the research. After the research data were collected, it was entered into the SPSS package program. Then, appropriate data analysis was made depending on the sub-problems of the research. First, frequency, percentage, mean and standard deviation were calculated to determine the fear of COVID-19, meaning in life and psychological resilience of university students. Then, Pearson Product Moment Correlation Analysis was conducted to examine the relationship between university students' fear of COVID-19, meaning in life, and psychological resilience. Finally, Multiple Linear Regression Analysis was conducted to determine to what extent university students' meaning in life and psychological resilience predicted their fear of COVID-19.

Limitations of the Study

In this study, the predictive relationship between university students' fear of COVID-19, meaning in life, and psychological resilience was examined. The research is limited to 475 university students studying in different higher education institutions in Turkey. In addition, the results of the study are limited to the qualities measured by the "COVID-19 Fear Scale", which is used to determine the levels of COVID-19 fear of university students, the "The Meaning in Life " used to determine life meaning levels, and the "Brief Psychological Resilience Scale" used to determine psychological resilience levels, and the analysis carried out by the researcher.

Results

In this part of the research, the results of the analyzes conducted in accordance with the general and sub-goals of the research are included.

COVID-19 fear, life meaning and psychological Strength levels of University students

The fear of COVID-19, the meaning in life and psychological resilience levels of university students are included in Table 2.

Table 2. University students' fear of COVID-19, meaning in life and psychological resilience levels

<table>
<thead>
<tr>
<th>Variable</th>
<th>f</th>
<th>x̄</th>
<th>ss</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fear of COVID-19</td>
<td>475</td>
<td>15.22</td>
<td>5.93</td>
</tr>
<tr>
<td>Meaning in life</td>
<td>475</td>
<td>49.95</td>
<td>9.71</td>
</tr>
<tr>
<td>Psychological resilience</td>
<td>475</td>
<td>19.50</td>
<td>5.50</td>
</tr>
</tbody>
</table>
When Table 2 is examined; The average scores of the university students for fear of COVID-19 were 15.22, the mean of life scores were 49.95, and the mean scores for psychological resilience were found to be 19.50.

### The Relationship Between University Students' Fear of COVID-19, Meaning in life, and Psychological Resilience Levels

Pearson correlation analysis was applied to examine the relationship between university students' fear of COVID-19, meaning in life, and psychological resilience. The findings obtained from the analysis are included in Table 3.

**Table 3. Relationship between university students' fear of COVID-19, meaning in life, and psychological resilience**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fear of COVID-19</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Meaning in life</td>
<td></td>
<td>.056</td>
<td>1</td>
</tr>
<tr>
<td>3. Psychological Resilience</td>
<td></td>
<td>-.247**</td>
<td>.215**</td>
</tr>
</tbody>
</table>

*Note. ** p <.001; significance level*

When Table 3 is examined; While a negatively significant relationship was found between the fear of COVID-19 and psychological resilience levels of the university students participating in the study, a non-negatively significant relationship was found with the meaning in life levels.

Based on this finding; It can be said that as the psychological resilience and meaning in life levels of university students increase, their fear of COVID-19 will decrease.

### The Status of University Students' Life Meaning and Psychological Resilience Levels to Predict their Fear of COVID-19

Multiple linear regression was conducted to determine the extent to which the meaning in life and psychological resilience levels of university students predicted their fear of COVID-19. Table 4 contains the findings obtained as a result of the analysis.

**Table 4. Multiple linear regression analysis result for predicting COVID-19 fear levels of college students**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SH₀</th>
<th>β</th>
<th>T</th>
<th>p</th>
<th>Binary r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>20.511</td>
<td>1.537</td>
<td></td>
<td>13.346</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psy. Resilience</td>
<td>-.266</td>
<td>.049</td>
<td>-.247</td>
<td>-5.399</td>
<td>.001</td>
<td>-.247</td>
<td>-.241</td>
</tr>
<tr>
<td>Meaning in Life</td>
<td>-.002</td>
<td>.028</td>
<td>-.003</td>
<td>-.072</td>
<td>.943</td>
<td>-.056</td>
<td>-.003</td>
</tr>
</tbody>
</table>

R=.247
R²=.061
F(2,472)=15.4
p=.001

*Note. ** p <.001; significance level*

As a result of multiple linear regression analysis conducted to predict how the variables of meaning in life and psychological resilience in which way predict fear of COVID-19, which are thought to have an effect on the levels of fear of COVID-19 of university students; meaning in life and psychological resilience variables together explained 6% of the total variance in fear of COVID-19.
19 (R=.247, R²=.061). In addition, while psychological resilience variable (p = .000; p < .05) was found to be a significant predictor of COVID-19 fear, meaning in life variable (p=.943; p>.05) was not found to be a significant predictor. According to the standardized regression coefficients, the relative order of importance of predictive variables on fear of COVID-19 is psychological resilience (= -.247) and meaning in life (= -.003).

**Conclusion, Discussion and Suggestions**

In the study, while a negative non-significant relationship was found between university students' fear of COVID-19 and their level of meaning in life, a negative significant relationship was found with their psychological resilience levels. In addition, it has been observed that the life meaning and psychological resilience levels of university students explain 6% of their fear of COVID-19.

As a result of the research, psychological resilience was found to be the most important predictor of COVID-19 fear. When considered as a preventive factor, psychological resilience can be defined as a power that enables individuals to effectively cope with these difficulties when they face difficult situations (Gizir, 2007; Karaırmak, 2006). When considered from this point of view, it is thought that the high psychological resilience of individuals against a difficult life experience such as the COVID-19 pandemic may prevent the development of the unusual fear they may experience in this process. In the literature, it is seen that there are studies showing that psychological resilience has a protective power against many difficult life experiences that individuals may encounter. In a study conducted by Arslan and Balkis (2016) with adolescents, it was seen that psychological resilience was a protective factor in the relationship between perceived emotional abuse from parents and problem behaviors in adolescents. A study conducted by wise and wise (2020) in Turkey during the COVID-19 pandemic showed that psychological resilience has a protective role in terms of the situation in which individuals experience psychological symptoms during the pandemic. In the path analysis carried out another study conducted during the COVID-19 pandemic in Turkey, it was observed that psychological resilience created a negative significant effect with intolerance to anxiety and uncertainty experienced during the pandemic period. (Kasapoğlu, 2020). This result shows that psychological resilience has a protective power against anxiety and intolerance to uncertainty during the pandemic period. In the study by Yazıcı Çelebi (2020) in which psychological responses of individuals during the COVID-19 pandemic were examined in terms of psychological resilience, it was seen that individuals with low psychological resilience were more affected by the negative situations brought about by the pandemic process. In a study conducted by Karataş and Tagay (2021), a negative significant relationship was found between the fear of COVID-19 and their life satisfaction levels of adults affected by COVID-19. These studies in the literature show that psychological resilience has a protective factor in terms of psycho-social problems that individuals may experience in difficult living conditions such as COVID-19.
As a result of the research, it was seen that the meaning in life is a non-significant predictor of COVID-19 fear. The concept of life meaning, which includes the individual having a comprehensive purpose, goal and mission related to his life, can enable individuals to remain strong in the face of difficult situations (Sarıçam, 2018). However, some psycho-social characteristics of individuals may cause individuals' meanings of life to be negatively affected by difficult and stressful situations. For example, a bereavement or trauma experienced by a person can have negative effects on the meaning in life and prevent motivation for the realization of the meaning in life. In this context, it can be said that individuals' life meanings may be negatively affected in the face of a stressful situation such as COVID-19. In this study, the non-meaningful relationship between life meaning and COVID-19 can be interpreted as a non-meaningful prediction situation occurred in terms of some of the people involved in the study create negative effects on life meaning in this stressful process.

This study was conducted to determine to what extent university students' mean of life and psychological resilience levels predicted their fear of COVID-19 levels. As a result of the research, it was seen that psychological resilience was a significant predictor of COVID-19 fear. In this extent, activities such as psycho-education to increase psychological resilience to be carried out by the Psychological Counseling and Guidance practice centers of universities within the scope of preventive mental health services may be important for university students to remain strong against stressful situations. In addition, this study examined the variables of meaning in life and psychological resilience that predicted the fear of COVID-19 of university students. In future studies, the predictive status of different protective factors on COVID-19 fear can be examined. Finally, this research was conducted with university students using quantitative research method. Studies can be carried out with different study groups and research methods in future studies.

References


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An International Student Learning Turkish Through Cultural Interaction: A Narrative Research

Enes YAŞAR1
Çanakkale Onsekiz Mart University

Abstract

This study aims to determine the relationship between cultural interaction and language in teaching Turkish as a foreign language and reveal its contribution to the learning process. Therefore, in this study, the cultural exchange of a Lebanese international student studying at Çanakkale Onsekiz Mart University was evaluated in the context of language learning performance. The narrative research design, one of the qualitative research methods, was used in the study. The primary purpose of narrative research is to examine individuals' lifestyles through the stories they produce. In this study, the student's social environment, school, and friendship relations were taken into account. His daily life's contributions to language skills, academic life, and social relations were tried to be measured. The target language has been observed in the cultural life experienced by the international student. Thus, through narrative research, the student's cultural world was entered as a language learning experience. In the study, the student's vocabulary learning, communication skills, and the ability to use language in academic life were emphasized. The semi-structured interview method was used as a data collection tool in the study. After deciphering each interview, attention was paid to ensure that the data obtained were sufficiently clear. The descriptive analysis method was applied to the collected data. As a result, it has been observed that international students who learn Turkish as a foreign language hugely benefit from cultural interaction in their foreign language proficiency, communication skills, and non-verbal behavior. It has been determined that international students behave pragmatically while communicating and classify words semantically in this process. It has been remarked that vocabulary learning, and pronunciation skills develop faster in cultural life, and their anxiety states decrease as they move away from the classroom setting. It was also understood in the study that different language families affect language acquisition. Besides, it has been determined that students who have difficulties comprehending language logic experience some degree of delay in their speaking skills.

Keywords: Culture, Communication, Narrative Research, Language Interaction, Teaching Turkish as a Foreign Language

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Introduction

It is necessary to be familiar with its cultural aspects as well as to know the system and grammar structures of that language to learn a foreign language. As Göçer (2012) also stated, language gives society a way of life. It embodies society’s thinking structures and value system and establishes a tight bond with the culture. It even becomes one of the most important transmitters of culture (Demir & Açık, 2011). Therefore, it is almost impossible to consider language and culture separately in foreign language learning.

In order to be able to communicate effectively, it is necessary to know the language usage created by the culture. Language usage styles vary within the conditions of each country. A situation that is desired to be expressed is reflected in the language of speech in a way specific to the society. From this point of view, a foreign language learner must have a command of the particular situation of the environment in which language learning takes place to overcome the situations they will encounter in their daily lives, understand the speakers of that language entirely, and explain their problems (Tapan, 1990). And this means knowing the country's cultural elements well (Polat, 1990, p.69-70).

The most crucial aim of knowing cultural factors is to ensure healthy interaction between individuals from different cultures. As a matter of fact, individuals with different cultures, who are in contact with each other, can adapt to societies' life patterns, attitudes, and behaviors as long as they perceive the target language's communicative needs and can communicate smoothly. However, if the cultural elements cannot be conveyed sufficiently, the individuals speaking a foreign language will mean nothing but expressing the concepts they see in their own cultural environment with different symbols (Brooks, 1986, p.128). This can cause some misunderstandings and problems while speaking a language. Therefore, learning a foreign language also means mastering the perspectives, ways of thinking, and value judgments of different societies. For this reason, it is necessary to be able to use the correct words and behavior patterns in the target language to comprehend the language altogether. Language learners should know the culture of the person they interact with at least as much as their own culture (Samovar, Porter & McDaniel, 1991, p.342).

Individuals primarily try to comprehend the lives in the countries they visit through their experiences. Then they try to establish the relationship between the similar and different aspects of both cultures. This makes positive contributions to intercultural interaction. Therefore, learning a language only within specific rules and patterns may not be sufficient for communication. For this reason, individuals should be able to use the language they have learned as a communication tool. To achieve this, they need to acquire the culture of the target language and grammar rules (Ülker, 2007, p.32). As individuals comprehend the culture and mentality of the language they learn, they will understand the structure of the language better. For example, individuals will be able to make a better
sense of what is happening around them while expressing the Turkish language concepts when they approach the concepts with the Turkish culture's mindset, not with the mentality of their own culture.

However, as Lado stated, if individuals do not have consistent information about the target culture, it is impossible to compare the two cultures (İşcan et al., 2012). And this may cause some problems for foreign language learners. Thus when individuals from different cultures come together, they may have some disagreements due to their perspectives. For example, people in other cultures may be described as loud or quiet, depending on their perspective. They can even describe each other as rude and disrespectful and begin to act with unbreakable prejudices. This shows that in foreign language learning, cultural interactions are an essential element that enables one to view events from a broader perspective and think in a multidimensional way.

As we can see, foreign language learning should be done consciously. For this reason, to learn a foreign language fully requires knowing the logic and cultural thinking of the target language. Only theoretical knowledge, such as grammar and sentence structures, is often insufficient for foreign language learning. Therefore, individuals who learn foreign languages must have the necessary skills to communicate in the target language and the skills required to use them (Aktaş, 2004, p.46).

Ultimately, individuals trying to recognize the target language's culture, understand its differences, and approach cultural differences with respect enable them to adopt the target culture's differences. In this way, societies can approach each other with respect and tolerance in their relations with different cultures. This increases the individuals' attitudes and motivations towards language in foreign language learning. So, the language learning process can be carried out more successfully (Okur & Keskin, 2013, p.1624).

Method

Narrative research design which is one of the qualitative research methods was used in this research.

The Model of the Research

Narrative research examines people's experiences of a subject with stories they have lived (Büyüköztürk etc., 2012, p.275). The researcher compiles the stories told. Through narrative research, stories are extended to experiences, and these experiences are evaluated with different perspectives following the purpose of the study in the research analysis process (Creswell, 2007; Webster & Mertova, 2007). In this process, the researcher is involved in exploring the participant's experiences. These experiences can be divided into two different types as social and individual (Saban & Ersoy, 2016). Social experiences emerge from the participant's interaction with other people, while individual experiences emerge from their experiences alone.
In the research, the social experiences of the participant on the subject were tried to be explored. In these experiences, Riessman's analysis process was followed. Riessman's (2005) analysis process takes place as follows:

1. The story told by the participant participating in the research. (narrative)
2. Interpretation of this story by the researcher (narrative of narrative)
3. The reader perceiving the story or reconstructing it in their own world (narrative of the narrative of narrative)

This narrative research below includes all these stages. The narrative is analyzed in the context of space, time, and interaction.

**Working Group**

In the study, a Lebanese male student studying at Çanakkale Onsekiz Mart University in the fall semester of the 2019-2020 academic year was interviewed. Narrative research is a research model that examines the life experiences of a single person or a very small number of people in great detail (Creswell, 2007). Therefore, detailed life experiences were tried to be revealed by interviewing a single person in the interview. The interview was conducted voluntarily. The participating student who came to Turkey in 2019 is acquainted with Turkish culture. At this stage of cultural interaction, the Turkish culture that the international student learns by experience has been observed in language learning. In this way, it has been tried to determine to what extent cultural life affects the language learning process.

**Data Collection Tools**

The semi-structured interview method was used as a data collection tool. The semi-structured interview method was used among the types of interview methods. While this method facilitates the analysis of the researcher, it provides the interviewee the opportunity to express himself better (Büyüköztürk etc., 2012, p.154). In addition to the questions planned to be asked in this technique, some other questions that develop depending on the interview flow can also be added (Yıldırım & Şimşek, 2011). In this study, two interviews were conducted on different days by recording the interview with the Lebanese international student. The international student was asked the description of cultural experiences he lived in Turkey. The questions directed to the interviewed student to obtain the data to be analyzed as follows:

1. What were the first words you started learning when you came to Turkey?
2. How did you begin to communicate with your environment when you first came to Turkey? How did you manage to meet your daily needs in Turkish?
3. What kind of problems did you encounter during the university registration process because you do not know Turkish? Have you ever had anxiety?
4. To what extent have you improved your listening, reading, and speaking skills while in social life? What types of social activities contributed to these skills?

5. What effects has your cultural life had on your academic life? Could you briefly explain?

6. How has your cultural life contributed to your spoken language? To what extent did these reflect on your body language? Could you briefly explain?

Analysis of Data

In the narrative study, data analysis aims to reveal the meanings in experiences. For this reason, there is an effort to conceptualize the data and turn it into a fact (Liamputtong, 2009). For this reason, the content analysis method was used. The main goal of this method is to present the findings to the reader in a summarized and interpreted form (Yıldırım & Şimşek, 2011). As a result of the analysis, two themes emerged: the international student's perspective on Turkish culture and cultural interaction contributions to language learning. Conclusions on these themes include direct quotations from the participant student's views, and these views have been interpreted based on the participant student's statements.

Findings and Comments

This section presents the findings obtained from the interviews with the international student on the relationship between cultural interaction and learning Turkish as a foreign language.

1. What were the first words you started learning when you came to Turkey?

When I first came here, the first thing I learned was to say “good morning” as a necessity. But it took me 2-3 days to learn to say good morning. Because with my mouth structure, it was heavy and challenging to say. Because it is spoken only in the morning, I say it in the morning, and I would not use it again. For this, I forgot until the next day. The first word I learned in Turkish was “my eyes.” To come to Turkey with a scholarship, they asked me if I know any Turkish words during the interview. I said, “my eyes.” When they asked how I learned later, I said I learned from the Turkish TV series (Doctors).

Vocabulary learning and pronunciation skills of international students learning Turkish as a foreign language

Vocabulary learning in foreign language teaching is a situation that the student maintains continuously in the language acquisition process. This process, which develops and continues at every learning stage, creates a rich vocabulary if used effectively. However, as seen in the international student's case above, when the frequency of use of words decreases, some remembering difficulties are experienced. Words used only a few times a day, such as “good morning,” are easily forgotten and cause difficulty remembering. However, the increasing frequency of word use and word-learning strategies in the learning process significantly contributes to vocabulary learning achievement at the
expected level, contrary to the mentioned (Biçer & Polatcan, 2015, p.813). Besides, the difficulty of pronunciation that the student has experienced is a situation that happens because of the sounds that are found in Arabic but not found in Turkish and found in Turkish but not in Arabic (Aydın, 2010, p.331). Poor vocabulary, not having enough information about the subject, and not adjusting the tone well are among the problems that can be included in this pronunciation problem (Göçer, 2015, p. 24; Yaşar & Toprak, 2017).

2. How did you begin to communicate with your environment when you first came to Turkey? How did you manage to meet your daily needs in Turkish?

I did not know any Turkish when I arrived in Turkey, and when I went outside, I was trying to express my first needs with gestures. When I went to the market, I was explaining what I wanted to buy in body language. That is why I did not remember the Turkish names of the things I bought because I met my needs in this way. But I had to go back and forth more than once when I went to the immigration administration and the police station to complete the university registration procedures. That's why I started to memorize the names of the documents requested from me. On the first day I arrived, I left the dormitory and tried to learn how to go to university. However, since I do not speak any Turkish, I did not know how to ask for directions. When I was in Lebanon, I only learned to name the university. I was trying to ask for directions with gestures by saying the university's name to those I came across. But then, I didn't even know how to say “where.” So I felt the need to learn this word and first learned the word “where” and “Where is the university?” I started saying. Then I learned the word “street.” Because while people were describing directions, I heard words like this street and that street. Apart from that, I started learning new words on the bus. Of course, I had to get a bus card first. And it was also with gestures. First, I told the buffet the word “bus” that I learned to get a card. Then I tried to show the shape of the card with a hand sign. The man understood me and gave me the card. Then I went to university.

The communicative utilitarian approach in international students learning Turkish as a foreign language

As seen in the international student's situation, the primary goal for individuals who are just starting to learn the language is communicating. However, the main factor that accelerates language learning while communicating is determining interests and needs in order of importance. As can be understood from the narrative, the international student does not need to learn much the names of the things he can handle with body language. However, he tries to catch almost every word in university registration that is important to him. Therefore, in the early stages of language acquisition, students learn words in line with their interests and needs and determine their priorities according to their needs' functional characteristics (Aydınlın, 2007). Besides, the student's effort to understand the
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descriptions made, learning words such as street and bus cards quickly with the influence of the social environment, as stated by biçer and polatcan (2015), is learned faster with the effect of the environment.

3. What kind of problems did you encounter during the university registration process because you do not know turkish? Have you ever felt anxious?

actually, I didn't think I'd have much trouble because I knew English and French. But on the contrary, I could not communicate with the authorities. Because they did not speak a foreign language, and I had a hard time getting the procedure done. There was no one around me to help. When I went to the attendant, the attendant gave me just one piece of paper (personal information form) and said, “fill it out.” At that moment, I immediately understood what the word “to fill” was. Because I felt I had to understand. Otherwise, I would not be able to complete registration. But, I did not know how to fill it. Because I did not know how to write and read in turkish, and there were long writings on paper.

Anxiety in international students learning turkish as a foreign language

As seen in the narrative example above, the international student's conflict in student affairs while learning a new language made him feel weak (Littlewood, 1984). This shows that people learning foreign languages experience communication difficulties when they feel insecure and anxious. However, considering that the student knows English and French as a foreign language, it is seen that the anxiety is not due to insecurity or fear of not being able to learn a language, but because of being exposed to too much language acquisition and feeling unsafe at the first stage of a new language learning.

4. To what extent have you improved your listening, reading, and speaking skills while in social life? What types of social activities contributed to these skills?

Listening: At first, I didn't understand most of the words I was listening to. That's why I first tried to understand what was discussed in general and in the conversations I heard. Although I did not know exactly what the other person was talking about, I was trying to understand what they were talking about. For example, while I was listening to the talks about the dormitory, I started to keep in mind the other frequently mentioned words about the dormitory. For example, when I heard words such as “bed, room, dining hall” during the talks about the dormitory, I understood that when these words were used together, even if the word dorm was not mentioned, there was something about the dormitory.
A semantic classification of words in international students learning Turkish as a foreign language

Many linguists consider listening to be one of the most important language skills (Pierce, 1988, p.13). At the same time, it is a process in which mental skills are actively used in intellectual abilities such as understanding, evaluating, and determining the relationship between what is being said (Eken, 2011). As seen in the narrative example above, although the international student cannot fully understand the speeches of the individuals he interacts with, he tries to receive and interpret the words effectively. Furthermore, trying to make sense of them by matching them with words such as “bed, room and dining hall” as seen in the example of dormitory shows that the dimension of meaning in thought is put forward.

Reading: Apart from TOMER lessons, I learned many words from advertisements and signs while wandering outside. I learned even better by seeing things like “road closed, road open, employee-waiter wanted, discount, buy three, pay for one.” In the beginning, I was thinking of what “employee” means, what “wanted” mean. I saw these words, mostly in the shops. As time passed, I started combining the two. However, as a result of the lessons I took at TOMER and my experiences outside, I began to understand some things after two months. When I started to understand some things, I went and bought a book. While reading the book, I saw too many words I didn't know. But as I read those pages, I started to notice the words in the previous pages. Frequent words, of course, started to stay in my mind. I was also trying to memorize them. However, just trying to memorize this way was not enough. But when I heard these words in everyday conversation, I remembered them because I started to catch the words I read in discussions. I had a tough time reading at first. I could not fully understand the sentences. Therefore, I first tried to understand the main topics in the texts I read. After understanding the topics, I grouped the words that belong to that topic. So I was categorizing words according to meaning. For example, when talking about “sea”, I grouped the word about the sea when I went to the dormitory. However, this time I came across metaphorical meanings, like swimming (yüzmek), a hundred (yüz), and skinning (yüzmek). I did not know how to distinguish them from the beginning. But by living and experiencing, I began to understand. For example, I heard about swimming when I went to the sea. I saw it as numbers in mathematics, and I learned during lessons that butchers also peel the skin from animals.

Reading skills and vocabulary learning in international students learning Turkish as a foreign language

As seen in the narrative example above, new words and words that attract individuals' attention in books or daily life positively affect memory and comprehension skills. As can be
understood from the international student's situation, when individuals interact with texts or writings that are compatible with the cultural background they are in, their cultural achievements become easier. The signs in the narration, the articles in the shop windows, and the book's words are a practical indicator of this situation. The international student had difficulty reading the book in the early stages when he was not fully aware of the target language's cultural characteristics; however, he enriched his vocabulary in the later stages of his cultural interaction. This shows that the sociocultural knowledge that language acquirers have consist of many elements and contributes positively to reading activities (Aygüneş, 2007, p.78). Besides, the metaphorical use of the word face signifies that cultural life affects language, according to regionality. As a matter of fact, it is not possible for a student studying in a city in Turkey's west with a beach to be the same in terms of language acquisition as a student studying in a city of Central Anatolia with no beach. As seen in the narrative, while the student living on the seashore has the opportunity to hear and use the word swimming many times in the summer, the other's lack of such an opportunity will create a difference in terms of usage frequency and affect learning. Consequently, when such examples are taken into consideration, it will be seen that culture and geography make quite a difference in language teaching.

**Speaking and Grammar**: At first, I was trying to make short and unconventional speeches. Even though I tried to use conjunctions, I was misusing them. Making long sentences was very difficult. However, after six months, I started being able to make sentences. The things I had the most difficulty in saying were suffixes. Suffixes like “I, A, dA, dAn, tAn” were challenging to say. I started to use them correctly by hearing them more. I kept saying it wrong when I thought about where and what to add. In time, when I started to say whatever came to my mind, without hesitation, I started to say the right things. I also had a lot of trouble with conjunctions. I was confusing conjunctions like “However, therefore, though.” I did not know precisely when to say which one. I started translations to learn these words. However, I could not fully understand their meaning in daily life with translations. Therefore, after their translation, as I heard these words in speech, I started to track their use. I tried to form sentences with these words to test whether I was speaking correctly. Likewise, I learned the suffix “ıp, ip” from listening to daily life. In the past, when I was going to say something, I used to make sentences one by one. “I went to BIM. I bought something. I came back to the dormitory.” But then I started to make sentences like “I went to BIM where I bought something and came back to the dormitory.” I learned this from my Turkish friends around me. While I was saying the same things at length, they expressed briefly with the conjunctions “come and go.” So I tried to learn these conjunctions by hearing more.

I also tried to use rules in social life that I learned in class but could not understand. For example, at first, I did not understand words like “if I did, if I were.” I've seen these
many times in the books. However, I also could not understand much from books. So I tried to make a sentence with these words to the manager of the dormitory. But it was wrong again. Then the dormitory manager corrected my mistake. After my errors were corrected in this way a few more times, I started using it correctly. Also, at first, I was trying to talk by thinking about the rules. I was thinking about where and what to use and saying so. However, this way, I was not catching up with the speeches and was running late. Even without being able to say anything, the topics were changing. I was hesitating whether what I said was wrong or true. I wasn't confident about speaking the right way. But now, I speak confidently without thinking. The reason I started talking without thinking was my self-confidence.

Agglutinative language structure and pronunciation difficulties preventing speaking, and grammar in international students learning Turkish as a foreign language

Speaking is one of the most effective means of establishing relationships with society and expressing oneself. The individual's physiological state, their emphasis in the narrative, the use of symbolic language and humor, his pronunciation, target-oriented speech attitude, and style are essential factors that determine the elements of speech (Telman & Ünsal, 2005, p.79). Therefore, individuals who learn Turkish as a foreign language have to achieve cultural life elements to communicate by pronouncing sounds accurately. Nevertheless, it is not easy to fulfill the requirements as there are some difficulties in pronouncing Turkish phonemes in multinational classes or societies formed by students from different language families (Tüm & Sarkaz, 2014). As seen in the narrative example above, individuals learning Turkish may experience anxiety and speech difficulties in this case. Also, according to Gregersen (2003), anxious students tend to make more mistakes.

In addition to those mentioned, another obstacle that triggers speech and grammar mistakes is that students whose mother tongue is not an agglutinative language have difficulty comprehending Turkish's linguistic logic, which is an agglutinative language (Tunçel, 2013, p.1113). In this context, the student who learns Turkish also makes grammar and speaking mistakes at the first stages because their language is Arabic. Even though he knows the grammar rules, in theory, he has grammar problems in adverbial-verbs, separation, presence, and expression suffixes. Similarly, Nunan (2003) attributes the reason why most students cannot use these rules correctly in communication, although they can define grammatical regulations because of their ineffectiveness in teaching grammar elements.

Besides, students attempting to express their misuse in different places and with different sentences is not an act of imitation, such as renewing the stereotype expressions heard in individuals' speech, as in Chomsky's view (Altınörs, 2012, p.81). On the contrary, it is carried out consciously as a
creative act. The student's attempt to make different sentences about the structure he learned by going to the dormitory manager shows that he has a creative mindset rather than imitation.

5. What effects has your cultural life had on your academic life? Could you explain briefly?

Although I could understand many things, I still had difficulties when I switched to medical school after TOMER. Because the terms were complicated. So I had to come home and translate. For example, I could not understand things like “hücre, çekirdek, çekirdēkckik” (cell, nucleus, spinal cord). At first, I thought of the “nucleus” (çekirdek) as the name of food. Also, the suffix “cık” reminded me of the child. I was confusing the “omurilik” (spinal cord) with “ömür” (life). I was trying to reason. I was thinking deeply about what life might have to do with the bone. That is why medical terms are far from everyday life. Although I did not have difficulty in daily conversations, I was having difficulties in lessons. Apart from these, I did not understand some of the different pronunciations in the lessons at first. For example, “Are you at the head of the computer?” they were telling me. Not “Are you using the computer?” I was thinking about how a person could be in the head of the computer. Because I didn't know where the head of the computer was. However, since I heard this a lot outside of school, I did not have any difficulties like other terms. In time, even when asked like that, I would even give answers like “Yes, I'm at the head” or “No, I'm not at the head of the computer.” But I still felt quite incomplete academically.

Academic success in international students learning Turkish as a foreign language

As shown in the narrative example above, there are considerable differences between academic and daily terminology in teaching Turkish to foreigners. While individuals can meet their needs with the Turkish education they receive in daily life, they fall short in academic terms. Therefore, this means that individuals who learn Turkish need different skills academically. From this thought, it is understood that to master a foreign language, it is not enough to know only the language's grammar or words and know the idioms, unique formations, and terms in the language. As it can be understood from the narrative, the student initially perceives medical terms such as “nucleus, cell nucleus” as food names since he does not have full command of academic terms. Because the brain needs to illustrate the information and make it visible to be kept in memory (Özdemir, 2013). Therefore, the student tries to meet this requirement by matching the terms with the words he knows. However, he fails due to the lack of cultural life. Therefore, as can be seen in the narrative, idioms with words far from their real meanings and metaphorical features are among the most challenging elements to learn in foreign language learning (Güneş, 2009).
6. How has your cultural life contributed to your spoken language? To what extent did these reflect on your body language? Could you briefly explain?

After coming to Turkey, I started to learn the rules of meeting someone. This place is different from Lebanon. Both in form and in speech. For example, when meeting someone here, we start asking where are you from. We do not hear about them just because we are international students. They also ask the same thing to a Turkish person. I don't usually ask questions like that either. However, since we are international students here, I necessarily ask, “Where are you from?” Just like Turks say to each other, “Where are you from, fellow?” We ask other international students, “Where are you from?” to find out if they are from anywhere near us. Moreover, when I ask a Turkish person where he is from, for example, if he says I come from Erzurum, I say, “it is too cold there.” I have not been to Erzurum, but it is often said that because Erzurum is really cold. That’s why I say it. I pretend to know.

Cultural harmony in international students learning Turkish as a foreign language

As individuals and societies interact culturally with each other, a particular cultural exchange takes place between them. As a result, positive attitudes towards other cultures and languages begin to develop. Therefore, this brings about effective learning in language learning. The student knows how to behave when speaking with the other person and embrace the target language's culture. Indeed, as seen in the narrative example, the student asked, “Where are you from?” When he received the answer “I am from Erzurum” from a person he asked, by answering, “Oh, it is freezing there” is an indication that he has adapted to the mindset of Turkish culture. In other words, it is a sign that he has become competent in that language in terms of both language and cultural structures (Okur & Keskin, 2013, p.1626). This shows that language acquisition is useful to the extent that it is reflected in both behavior and cultural knowledge.

Also, there is a head-tossing when Turkish people greet you. We greet each other by kissing on the cheeks. I just learned this here because we don't have a head-toss. This was very funny after I got to Lebanon. Because I habitually did the same there. They laughed at me because it did not make sense to them. I also learned to squeeze after hugging here. When I hug someone now, I squeeze them. “What are you doing?” is used a lot. When I first heard about this, I had no idea what to say. He both sees what I'm doing and asks, “What are you doing?” It sounded absurd. However, I later learned that when you are asked that, you will say, “I am fine.” When asked, “What's up?” You will say, “Well, same.” When it was said that way at first, I was saying, “What is up with yours?” My friends were laughing at me. My friends said that this is wrong. They said I should say, “How about you?” So I learned to use it in its correct form. I also thought a lot when I first heard about “What's up and what's not.” I thought something like,
“What's up... what's not... there is not... there is something...” Then I pretended to understand. “Nothing, brother” I said.

**Body language in international students learning Turkish as a foreign language**

Every nation has a body language structure with its unique tones. This structure, which is characteristic of cultures, also includes the logic of that language. For this reason, intercultural approaches provide individuals with versatile thinking skills in terms of communication. As can be seen in the narrative example above, the most important of these are the greetings. While greeting by a kiss on the cheek on his own country, he started head tossing in Turkey. This means he learned the lifestyle, customs, and traditions, national and spiritual values along with the language (Alyılmaz & Er, 2016, p.1393). Besides, this situation, which means cultural awareness, prevents misunderstanding and confusion. In addition to these, students also have difficulty in interpreting some idioms in the language. That is why they try to get out of the difficult situation they are in by pretending to understand the idioms as in the example (Güneş, 2009).

I also worked in a restaurant to learn Turkish faster. After a few days, I started getting used to it. I even started taking orders. But one day, one of the workers there told me, “My son, is trash standing outside?” and when I heard this, I felt as if he had never learned Turkish. (He meant is the garbage still there?) I just thought. How can trash stand? Or how can it go? I thought for a while, but when I didn't understand, I said, “No, it lies down.” I said. But when I learned its true meaning later, I realized that I was making fun of him. While working at the restaurant, customers ordered a spreading kebab. I froze. I said, okay. I was going downstairs to tell the chef. But I forgot the name until I arrived. So I went back to the customer and tried to learn his order's name again without revealing it. I said you mentioned a feature. The customer said, spreading once again. I said to the chef this time to spread it. I thought of spreading in my mind as a sauce. I felt more spice would be added. Then I took the kebabs to the customer. But the order was wrong again. Because I still don't understand, the customer said, “Don't you understand?” So I pretended to understand and switched kebabs place. Later, I went to the chef and learned what it was and how it was done. Another day, someone working there asked me for the mop. “What does a mop mean?” I thought. Then I went out. I looked around. There were cleaning supplies. But I didn't know which one. Then I came back to my coworker. “What's a mop?” I asked. My coworker laughed at me, then we went together and took the mop. Then I learned the mop. I also learned idioms and proverbs in the restaurant. For example, “Üzüm üzüme baka baka kararır.” It translates to, “Grape turns darker than the grape.” But it means, “If you lie down with dogs, you will rise up with fleas.” At first, I thought, how would the grape turn darker than the grape. I could not understand. I wondered why grape is mentioned in the restaurant. I
even thought that what we were talking about had nothing to do with grapes. But later I understood when the chef told me.

Attitudes of international students learning Turkish as a foreign language towards metaphors

One of the most important purposes of foreign language learning is to communicate smoothly. Because effective and appropriate communication in the target language prevents misunderstandings and raises sensitivity to cultural issues in daily life, however, as seen in the above narrative example, the student cannot grasp the coworker's purpose in using the sentence since he cannot yet perceive the metaphorical meanings as in the statement “Is the garbage standing?” Therefore, he experiences communication disruptions while communicating, as in the answer “No, it lies down.” According to Abisamra (2002), individuals' difficulties in making sense of metaphors and idioms are due to their inability to fully absorb the other society's linguistic and cultural structure, ways of expression, traditions, and customs, aesthetic values, lifestyle and various features, semantic and cultural differences. Likewise, the student's inability to understand the spreading kebab while working at the restaurant is due to the food cultures' specific differences. For this reason, the student has to adjust his academic life and cultural life simultaneously. Otherwise, as it can be understood from the student's situation, it is possible to experience disconnections and misunderstandings in communication.

One of the words I have learned so fondly in Turkey, “to buy” was the word. One of the words I have learned so fondly in Turkey was “ısmarlamak” (to treat). I was constantly saying, “Let me buy you a tea, treat me with something.” Another word is “atıştırmak” (having a snack). One day a teacher said, “Let's have a snack.” But we did not understand. We said “okay” to hide what we did not understand. Then, when we went to the restaurant, and the food came, we realized that this is how to have a snack. Apart from these, I learned to wave by saying, “Sen var yaaa..” (You are the man). I learned praise words like “You are a man, My lion” by hearing from my friends. One day, I was playing soccer. When I scored a goal, my friends ran and hugged me, saying, “You are my lion.” Of course, when my other friend scored, I hugged him, saying the same.

I also learned new things on the bus. People were calling each other “hocam” (teacher). After hearing such things for a long time, I started to use the word “hocam” when I wanted to say something or ask them about something. Besides, tea is essential to Turks. I actually realized this after a few days. That's why one of the first words I learned was “tea.” I learned this word quickly, as tea is served everywhere I go. When I went somewhere, I was now asking for and drinking tea. I even memorized this phrase. “Can ne çay ister ne çayhane, can sobet ister çay bahane.” (A very difficult to pronounce saying about tea) There are also jokes that don't make sense.
But everyone uses them. So I learned these things too. “Falan filan inter milan,” “Havaryu ne varyu” (Meaningless set of words like yada yada).

Attitudes of international students learning Turkish as a foreign language towards metaphors

Every society has some traditional phrases to say in certain situations. Used when greeting, thanking, on the bus, and while shopping (Erol, 2007, p.14). In this context, learning a foreign language also means recognizing society’s behaviors speaking the target language, its reactions to events, its appeal to the other, and its behaviors. Therefore, by removing the cultural barriers in front of communication, the expressions identified with Turkish culture should be taught (Yılmaz & Şeref, 2013). As seen in the narrative example above, if these obstacles are removed, and mold expressions are taught, a wealth of communication is provided. For example, the student does not have any difficulty using the word “ısmarlamak” (to treat) in social situations because he often hears it. On the contrary, he himself often uses this word. However, despite being in Turkey for a year, since he has never heard the word “atıştırmak” (to have a snack) he experiences anxiety when he first hears it. Because of his previous experiences and his cultural and social knowledge, this situation does not affect him entirely as a failure. This is only one of the steps the student must take in order to be successful (Soyupek, 2007). Therefore, when the language is learned with its culture, the degree of failure and negative influence decreases. In fact, it is seen that together with ready-made expression patterns, it facilitates the development of understanding and expression skills (Yılmaz & Şeref, 2013). Waving his hand by saying “Sen var yaaaa…” (You are the man), calling people “hocam” showing his joy with expressions such as “aslanım benim” (You are my lion) are some of these skills.

Conclusion, Discussion and Suggestions

In the study, the process an international student from Lebanon followed while learning a language and his experiences through cultural interaction were examined. The experiences are revealed through the stories (narrative) produced by the student himself. The aim here is to show the extent to which the international student's cultural experiences affect language learning. As a matter of fact, the situations that the student encounters in daily life while learning a language have a significant place in showing the effect of culture in learning Turkish as a foreign language.

In this context, it was observed in the study that the international student improved his vocabulary learning and pronunciation skills with his experiences in Turkish culture, and he grasped metaphors, idioms, and phrases better by participating in daily life. As Vygotsky (1978) stated, individuals, can learn better within their social and cultural environment. One of the main factors in this is that individuals can better use mental processes such as language, culture, and causality in different social and cultural environments (Vygotsky, 1978).
The study determined that in addition to metaphors, idioms, and stereotypes, grammar rules were better reinforced through social interaction. In fact, the student's effort to use words one by one increased the frequency of using words side by side, which contributed to learning a series of grammar rules (De Landa, 1997). Therefore, students' efforts and trials to make sentences by putting words together like “I went to BIM where I bought something and came back to the dormitory.” made him familiar with grammar rules. He started to say them together, forming longer and complex sentences. In this process, it was also determined that the student classified the words semantically in order to ensure sentence integrity. The student's making such a classification is based on activating his existing knowledge and associating previous knowledge with new information (Toms Bronows, 1982). This situation also shows that the student acts with a constructivist approach in the language learning process. As a matter of fact, the student makes an effort to learn Turkish by following the stages of “activating preliminary information, understanding new information, structuring in mind, applying and evaluating information” in the constructivist approach's learning-teaching process (Güneş, 2007).

In the study, it was understood that the student had difficulty applying the rules of pronunciation and grammar because he was in a different language family than the target language (Böyükbaş, 2011). The student's experience of this difficulty is due to the fact that Arab students generally have difficulty in vocalizing “â, i, o, ö, u, ü” vowels and c, ğ, h, y” consonants (Yılmaz & Şeref, 2015). Among the main factors of the difficulties experienced is the high level of anxiety of the classroom student. In the classroom setting, students feel as though they are in an insecure and anxious environment when they cannot pronounce the language they are just starting to learn accurately (İşcan, 2015).

In order to reduce anxiety in language learning, individuals should be included in sociocultural life. As can be seen in the narration, the student feels more secure in daily life. Therefore, efforts to learn foreign languages in sociocultural life make individuals feel safe and reduce their anxiety levels (Brown, 1994, p. 141). In this context, it is understood that the social universe and culture create an anxiety-free learning environment and make positive contributions to learning (Demirel & Mirici, 2002).

In the study, it was observed that the student could express the feelings and thoughts he wanted to convey better over time with body language. Thus, body language is an essential element that enables individuals to remember words and express themselves in spoken language (İzgören, 1999). Therefore, it is thought that cultural interaction provides a versatile perspective on the student's language acquisition.

In this study, the understanding that individuals who learn Turkish as a foreign language cannot communicate effectively when they think of the language only in terms of words is dominant.
It is clearly seen that he has a communication break in the face of questions such as “Is the garbage in standing?” and “Are you at the head of the computer?” In this context, some predictions were made based on the study's narrative to use Turkish effectively. These are;

- Suitable speaking environments can be created so that students can easily remember the words they need to learn in the early days. In this way, students can improve their vocabulary on the one hand and reduce their anxiety on the other, with the words they use frequently.

- Individual interests and needs are among the factors that accelerate language learning. Therefore, language teaching can be carried out by considering the interests and needs of the students.

- It is seen that students' anxiety decreased when they communicate with their social environment. Students can be given opportunities to express themselves by preparing activities outside of the classroom environment.

- Students who want to gain the ability to listen in the early stages of language education learn words more quickly when they classify words in terms of meaning while making sense of the subject. In environments where cultural interaction occurs, the learning process can be facilitated by presenting word groups with similar structures to students.

- Students can read texts about objects and concepts they see in their social environment to gain reading skills. In this way, the student can remember the words he sees in daily life more comfortably in the books and further accelerates reading skills.

- Since students generally encounter the words' primary meanings in the first stage of their language learning, they have difficulty comprehending these words' connotations when they move into academic life. They even confuse the words they hear in everyday life with some terms. Therefore, during the interaction, attention can be drawn to the differences between daily language and academic terms.

- For students to fully understand the target language's logic, it can be ensured that they participate in conversations that reflect the Turkish mentality and observe how the dialogues develop.

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An Investigation of the Professional Values of Elementary Teachers\textsuperscript{1}

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Abstract

The professional values of teachers in the Turkish education system have been discussed in terms of competencies of professional standards. It is important to describe the adoption level of the professional values of elementary teachers based on the views of experts. The aim of this study was to investigate and analyze the professional values of elementary teachers in the Turkish education system. The elementary teachers’ professional values were determined with a qualitative approach. For this purpose, data were collected by using semi-structured interviews with faculty members, school inspectors, school principals, and elementary teachers. According to the findings, the elementary teachers’ professional values were: recognition of students and individual-centered education, planning and organization of the learning and teaching environment, evaluation and monitoring of students, professional development and responsibility, and cooperation with the school, families and community.

Keywords: Professional Values, Teaching Profession, Elementary Teacher, Semi-Structured Interview.

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Introduction

From the founding years of the Republic onwards, under the effect of government policies and rapidly changing technologies, teacher training programs and paradigms related to the teaching profession have also undergone changes. Together with these changes in institutions that train teachers in the Turkish Education System, the paradigms in teacher training and in the professional values needed by teachers have also undergone changes. In the Turkish Education System, while these changes in the renewal process of education were being realized, during the transfer from an industrial society to an information society occurring synchronously with the rest of the world, the qualifications needed by a good teacher became standardized.

Turkey possesses considerably deep-rooted experience in teacher training. However, it has been revealed in the studies that prospective teachers cannot gain professional values at the teacher training institutions (Gökmenoğlu, 2012; Gültekin et al., 2010; Uştu et al., 2016). Professional values can be defined as the whole of the rules, standards and principles that guide and give direction to the behaviors of working individuals while pursuing their careers. Professional values are important in terms of setting forth and reflecting the cognitive, behavioral and affective dimensions of a profession. In this regard, establishing professional values and conforming to these professional values is a reflection of the importance given to one’s profession (Van Nuland, 2009; Maxwell & Schwimmer, 2016) Since professional values direct individuals in the same occupational group according to behavioral standards, they are regarded as extremely important in working life. The concept of professional values for teachers can be defined as the whole of the responsibilities, which need to be performed. In addition, the rules and principles, which need to be obeyed in relationships with students, colleagues and society while the teaching profession (Aydın, 2013). The professional values of the teaching profession can be summarized briefly as follows sense (Strike & Soltis, 2009; Vidovic & Velkovski, 2013):

1. Having a spirit of tackling difficulties while carrying out the responsibilities required by the profession under the difficult conditions created by the profession,
2. Being a role model for the individuals they educate,
3. Instilling a spirit of hard work in the students,
4. Being a teacher who is fair, honest, respectful and affectionate,
5. Being committed to the institution, school and rules,
6. Cooperating with and supporting colleagues,
7. Having the reassuring character of a person that believes in human rights and gives value to people,
8. Being a person who develops and renews him/herself and fulfils his/her responsibilities in a professional.

Although the professional values of the teaching profession are grouped under these headings, teachers’ professional values were also updated by Palmer (2015) together with the changing technology and scientific developments in the information age. These values are: (i) creating a student-centered classroom and providing individual teaching, (ii) regarding each student as an individual producer, (iii) actively using technologies for rapid access and dissemination of information, (iv) being cooperative, (v) being innovative, (vi) sustaining lifelong learning, and (vii) providing project-based learning.

The professional values of the teaching profession have also been set forth by education institutions (Association of American Educators [AAE], 2016; National Board for Professional Teaching Standards [NBPTS], 2016; National Council for Accreditation of Teacher Education [NCATE], 2016). The professional values of the teaching profession have been gathered under the headings of general knowledge and field knowledge. The general knowledge requires different competencies. These are student development and learning, differences between students, teaching strategies, learning environments, communication science and skills, planning of teaching, assessment science and skills, developing by learning from their experiences, social relationships, cooperation with the community and professional ethics, idealism, industriousness and self-sacrifice, democracy culture and human rights, critical thinking, and environmental awareness and values.

In Turkey, The Ministry of National Education has discussed the issue of teachers’ professional values. For this, international literature was used to set national standards of teachers’ professional values (Ministerial Council on Education, 2003; Ministry of National Education (MoNE), 2008; NBPTS, 2016; Teacher Development Agency (TDA) 2016; Türk Eğitim Derneği (TEDMEM), 2009). Since teachers’ professional values have not been finalized in Turkey, personal values may hold sway over the values of the profession in institutional activities (Altıncı & Yılmaz, 2011; Göztük, 1999; Pelit & Güçer, 2006; Topraç et al., 2010; Tunca et al., 2015). On the other hand, a limited number of studies have been made on the standards and values of the teaching profession in Turkey (Karabacak et al., 2015; MoNE, 2008; Tunca, 2012).

In the field of elementary teaching, great importance is given to the professional values of elementary teachers, since teaching is a profession and one of the important differences that distinguish teaching from other professions are the values that the teaching profession should possess. In the context of specific characteristics of the teaching profession, there is the necessity to possess professional values. Elementary teachers, who occupy an interdisciplinary position, must have the values required by the profession. In one sense, elementary teachers also have the duty of socializing.
the child. The elementary teacher is in a key position for fostering values in young children by formal and informal means.

The aim of this study was to investigate the professional values of elementary teachers based on the views of faculty members, school inspectors, school principals, and elementary teachers.

It is expected that the findings obtained in this study will contribute to the development of policies related to teachers’ professional values in Turkey. Therefore, the contributions to be made to the field can be classified according to the subheadings below. These can be stated as:

i. Determining the professional values that elementary teachers should possess,

ii. Assisting in the standardization of elementary teachers’ professional values in Turkey,

iii. Assisting in policies for training elementary teachers.

Method

Research Design

This research aims to determine the professional values, which elementary teachers in Turkey should possess. In order to achieve the aim of this research, a holistic multiple case study design was adopted. The case study design, one of the qualitative research designs. A semi-structured interview technique was used to collect data. The case study makes it possible for an investigation to be made in order to describe integrated and significant characteristics of events in real life (Yin, 2014). Researchers, who use this method have an opportunity to examine and interpret a certain context closely and in depth (Brown, 2008; Creswell, 2015). In this study the professional values, which elementary teachers should possess were investigated. The rich data was ensured by using semi-structured interviews with specialists who belong to professional groups with experience in the elementary teaching profession (Chmiliar, 2010).

Study Group

The study group was determined by using criterion sampling method. In criterion sampling method, participants, who meet a series of predetermined criteria are determined. The participants were: 13 academic staff with the titles of Associate Professor (Assoc. Prof.) and Professor Doctor (Prof. Dr.) employed in the primary teaching program in five different state universities in Turkey. In addition, ten education inspectors working in the National Education Directorates in the cities of Rize, Trabzon, Eskişehir and Konya affiliated to the Ministry of National Education. Moreover, ten school principals who employed in the National Education Directorates of Rize and Trabzon. On the other hand ten elementary teachers working in the National Education Directorates of Rize and Trabzon. This research was conducted based on voluntary participation.
In the process of determining the faculty members, the inclusion criteria were that they should be academic staff with the titles of Associate Professor and Professor Doctor who were employed in Education Faculties at state universities. In the process of determining the participating faculty members, the web pages of faculty members employed in the elementary teaching department were examined, and a list of participating faculty members was created by using their academic backgrounds and scientific publications as criteria. The faculty members identified in the list were contacted by the research team and asked whether they wished to be included in the study. Two of them were female and 11 of them were male, and two of them had the title of Prof. Dr. while 11 of them had the title of Assoc. Prof., and they were employed at five different state universities.

In the process of determining the school inspectors, school principals and elementary teachers, the basic criteria for inclusion were that they should have worked as elementary teachers for at least five years, have completed postgraduate studies, and have been employed as a coordinator or researcher on at least one project related to education. For the selection of the school inspectors, the National Education Directorates of Rize, Trabzon, Eskişehir, and Konya were contacted, and information was given about the aim of the research. A list of school inspectors who met the determined criteria was created. The school inspectors determined in the list were contacted by the first researcher and given information about the aim of the research. The school inspectors who agreed to take part in the study were included as participants in the research. The school inspectors were male.

For the selection of the school principals, the National Education Directorates of Rize and Trabzon were contacted, and information was given about the aim of the research. A list of school principals who met the determined criteria was created. The school principals determined in the list were contacted by the first researcher and given information about the aim of the research. The school principals who agreed to take part in the study were included as participants in the research. Two of the school principals were female and eight of them were male. Two of the elementary teachers were female, while 8 were male. Their professional seniority ranged between 9 and 30 years.

For the selection of the elementary teachers, the National Education Directorates of Rize and Trabzon were contacted, and information was given about the aim of the research. A list of elementary teachers who met the determined criteria was created. The elementary teachers determined in the list were contacted by the first researcher and given information about the aim of the research. The elementary teachers who agreed to take part in the study were included as participants in the research. Two of the elementary teachers were female, while 8 were male. Their professional seniority ranged between 9 and 30 years.

The utmost importance was given to the selection of the faculty members, school inspectors, school principals and elementary teachers who were included in the study group of the research.
While the faculty members were experts in the field of elementary teaching, the other participants served the purpose of the research in terms of enabling the research results to be revealed in the best way in the context of their professional experience in elementary teaching and their possession of professional values. In this context, it is very important for professional values to be revealed by people who work in the profession relevant to the study, since the values of the profession can best be reflected by people from this professional group.

**Data Collection Tools and Data Collection**

The data collection processes were carried out by the first researcher under the guidance of the thesis supervisor, due to the fact that the research was a thesis study. Official permission for the study was obtained from the participants’ institution to be able to carry out the processes of data collection. Permission to carry out the process of data collection for the study was obtained from the Turkish Ministry of National Education. A list of participants who met the participant criteria was created, organizations affiliated to the Turkish Ministry of National Education were contacted, and the participants of the research were determined. Individuals in the participant group were contacted by the first researcher, and information about the study was given. Appointments were made for interviews on the understanding that the participants would be able to set aside a period of one hour at times that suited themselves. Written and verbal approval was obtained for sound recordings. The semi-structured interviews were conducted with sound recording and supported by note-taking. Semi-structured interview questions to be directed to the faculty members were prepared. The interview questions were given their final form by obtaining the views of three specialist lecturers employed in the primary teaching program and working in the field of values. Three questions were directed to the participants. These questions were:

1. What are the differences that distinguish elementary teachers from other teachers. Can you describe these?

2. In recent years, the concept of values in education and based on this, the professional values of teachers have been intensively discussed. In your opinion, as an expert in the field of elementary teaching, which professional values should be possessed by teachers in general?

3. Which professional values should be possessed by elementary teachers in particular? Why?

The interviews were conducted during the period of January-March 2015. The interviews were recorded on a voice recorder with the participants’ permission. The participants were allowed to see and read the interview questions once. After each participant had been granted a period of one or two minutes, the interview was begun. The interviews lasted approximately 45-60 minutes. The data collection process was supported with note-taking.

As a result of the analysis of the data from the interviews made with the faculty members, the professional values that elementary teachers should possess were grouped under four thematic
headings. At the third stage of data collection, the participants were asked for their opinions about professional values that an elementary teacher in particular should possess. In order to find the answer to this question, semi-structured interview questions were specified. The interview questions were given their final form by obtaining the views of three specialist lecturers employed in the primary teaching program and working in the field of values. Following the pilot application, the necessary revisions were made to the interview questions, which were then given their final form. Following these procedures, six questions were addressed to the school inspectors, school principals and elementary teachers who made up the education stakeholder group. These questions were:

1. What can be the professional values of elementary teachers toward “the student and learning”?
2. What can be the professional values of elementary teachers toward “the learning and teaching environment”?
3. What can be the professional values of elementary teachers toward “evaluation and monitoring of students”?
4. What can be the professional values of elementary teachers toward “professional development and responsibility”?
5. What can be the professional values of elementary teachers toward cooperation with the school, families and community”?
6. What can be the professional values of elementary teachers toward “school development, and the school system and its development”?

The participants were allowed to see and read the interview questions once. After each participant had been granted a period of one or two minutes, the interview was begun. At the fourth stage of data collection, the list of professional values of elementary teachers was created (see Table 1) to ensure the content validity of the professional values of elementary teachers, the theoretical framework of which was determined as part of these studies, comparison was made by examining the current literature and by obtaining the views of three specialist professors. Information related to the operations carried out in the research process and the result of the research products are given as a summary in Table 1. Based on the data collection processes, the list of “professional values of elementary teachers” (see Table 2) was created by synthesizing the results of the analysis of the data obtained within the scope of the theoretical basis of the research.
Table 1. Information Related to Operations Carried out in Research Process and Result of Research Products

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Operation</th>
<th>Product</th>
</tr>
</thead>
</table>
| 1st Op. | Review of literature in order to create theoretical bases related to elementary teachers’ professional values | 1) The theoretical framework related to professional values of teachers in the field of education,  
2) The theoretical framework related to professional values of teachers in the field of education in Turkey,  
3) Learning outcomes regarding values in the primary school curriculum,  
4) The National Education Councils, and  
5) Teacher competencies specified by the National Education Ministry were examined in depth and synthesized. |
| 2nd Op. | Study conducted with faculty members: Content analysis of semi-structured interviews | “The professional values that elementary teachers should possess” were grouped into four themes. The semi-structured interview questions to be addressed to the other groups participating in the research were determined according to these themes. |
| 3rd Op. | Content analysis of semi-structured interviews made with school inspectors, school principals and elementary teachers | The professional values that elementary teachers should possess were thematically revealed in six dimensions. |
| Result  | Synthesis of professional values that elementary teachers should possess according to process steps | By means of synthesization of all content analyses obtained with theoretical knowledge in studies in the literature, the professional values of elementary teachers were determined in five dimensions. |

Table 2. List of Professional Values of Elementary Teachers

<table>
<thead>
<tr>
<th>Professional Value</th>
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<tbody>
<tr>
<td>Recognition of Student and Individual-Centered Education</td>
</tr>
<tr>
<td>1. Believing that each student can learn up to the limit of his/her potential</td>
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<tr>
<td>2. Focusing on recognizing all developmental areas of students</td>
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<tr>
<td>3. Developing students’ spirit of learning</td>
</tr>
<tr>
<td>4. Placing value on the individual</td>
</tr>
<tr>
<td>5. Being able to develop a love of people and nature students</td>
</tr>
<tr>
<td>Learning and Teaching Environment</td>
</tr>
<tr>
<td>6. Creating a learning climate based on trust in the classroom</td>
</tr>
<tr>
<td>7. Creating a democratic learning environment in class</td>
</tr>
<tr>
<td>8. Making the learning environment enjoyable</td>
</tr>
<tr>
<td>9. Bringing real life into the learning environment</td>
</tr>
<tr>
<td>10. Using new ideas and developments in the learning environment</td>
</tr>
<tr>
<td>11. Giving priority to students’ happiness in the classroom environment</td>
</tr>
<tr>
<td>12. Making the learning-teaching process student-centered</td>
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<tr>
<td>13. Using technology in the learning environment</td>
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<tr>
<td>14. Creating a diverse learning environment</td>
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<tr>
<td>15. Using time efficiently and productively</td>
</tr>
<tr>
<td>16. Organizing and using strategies for making students’ learning environment cooperative</td>
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<tr>
<td>17. Being able to use different methods and techniques according to students’ level</td>
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<tr>
<td>18. Planning every stage of teaching</td>
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<tr>
<td>19. Giving constant guidance to students</td>
</tr>
<tr>
<td>Evaluation and Monitoring of Students</td>
</tr>
<tr>
<td>20. Being able to make assessments that will enable students to acquire basic skills</td>
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<tr>
<td>21. Creating a suitable environment for reflecting students’ potential</td>
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<tr>
<td>22. Supporting development of students’ abilities</td>
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<tr>
<td>23. Assessing student’s development by observation</td>
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<tr>
<td>24. Making evaluation aimed at the individual as a whole</td>
</tr>
<tr>
<td>25. Monitoring development and changes in students over a long period and making the necessary arrangements</td>
</tr>
<tr>
<td>26. Carrying out the process of assessing students based on scientific data</td>
</tr>
</tbody>
</table>


Data Analysis

The computer-assisted NVivo 12 software in the first researcher’s possession for qualitative data preparation was utilized to analysis of the data. For the data analysis, the raw interview data obtained from the sound recording files were transcribed into a 450-page written format by the first researcher. For the accuracy and validity of the written transcripts, the texts were checked by listening to the sound recordings three times. The written texts were also read several times by the thesis supervisor to avoid misunderstanding of the responses of the participants, who would be the main data source, in the analysis and interpretation of the written texts. Following this procedure, the researcher and supervisor came together and shared information. After this procedure, the codes and themes were entered into the NVivo program by the researcher.

For the accuracy and validity of the files created, the researcher listened to the sound recordings again twice and checked them.

Analysis of the qualitative data was carried out by following the four-step analytical procedure of Moustakas (1994). These steps are 1) coding the data, 2) finding the themes, 3) organizing the codes and themes, and 4) identifying and interpreting the findings.

Coding was made by the researcher and advisers according to the concepts extracted from the data obtained with the content analysis. In order to extract the concepts underlying the data and relationships between these concepts, inductive content analysis (Corbin & Strauss, 2008) was used. The codes of the study were generated directly from the data. The themes/categories were created by
bringing together related codes having common characteristics. The framework of the themes was
defined based on the related literature, the aim of the research, the interview questions and the
statements appearing in the interviews. In the creation of the themes, the coding for the data was made separately by the coders of the research (the
researcher and thesis supervisor). Following this coding procedure, the researcher and supervisor convoked and the fit between the codes of the data analysis was tested. Accordingly, the codes were created in line with the common views of the researcher and supervisor. The data obtained were classified according to these themes and analyses were performed in the “Nodes” section of the NVivo 12 software program. In the creation of the themes, subthemes were created based on these main themes. The themes and the subthemes based on these themes that emerged as a result of the analyses were visualized by association with the “Maps” section of the program. In the figures, codes were used in order to reveal by which participant groups the themes were generated. In these codes, abbreviations have been made by using the letters SI for School Inspector, SP for School Principal and ET for Elementary Teacher.

To ensure internal validity of the study, a comprehensive review of the related literature was carried out and the theoretical framework of the study was created. The way in which the qualitative design and data collection tool used in the study were developed, and the selection of the participants, the number of participants and information related to the participants making up the sample of the study are explained in detail. In this research, care was taken in the selection of the participant group. This application can be described as an effort aimed at increasing the internal validity of the research. The methods of making comparison and correlation among the findings resulting from the data analysis were applied. In this regard, the findings were revealed to be internally consistent and to be consistent with the theoretical framework. In this case, it can be said that the internal validity of the research was achieved.

To ensure external validity of the study, the process for creating the semi-structured interview form and for selecting the study group, the data collection tool and process, the interviews conducted and the steps of the analysis are all explained in detail. The analysis and interpretation of the data are simply and clearly explained in a way that the reader can understand. By presenting the findings directly, an attempt has been made to increase the external validity of the study. Detailed description for ensuring transmissibility in a qualitative study entails transfer of the raw data to the reader by reorganizing it according to the concepts and themes that emerge and staying faithful to the nature of the data without adding an interpretation. In the themes, data are supported by direct quotations where necessary. To ensure the confirmability of this study, the procedures carried out during the research process are explained in depth. The data and codes obtained in the study were stored in an electronic environment so that they could be examined later. In a case study, it is very important that the
research results are readable (Yin, 2014). In this study, efforts were made to enrich the case study and make reading the presentation and research attractive for the readers.

Validity and reliability are the two most important criteria used for ensuring credibility of research results in qualitative studies. Detailed reporting of the data collected and explanation of how the researcher obtained the findings are among the important criteria for validity in qualitative research (Neuman, 2013).

One of the most effective ways of increasing reliability in qualitative studies is consent among the coders based on the use of multiple coders for analysis of data that is recorded in writing. Consensus is the confirmation of the results accessed in the data analysis by obtaining the assistance of experts (Miles & Huberman, 1994; Silverman, 2005). In an effort to achieve consent among the coders, the views of three faculty members (specialists in the primary teaching program, and in the fields of qualitative research and values education) (Prof. Dr.) were sought with the aim of confirming whether or not the themes obtained represented the theme in which they were located. The coding list consisting of the themes was given to the faculty members from three different state universities. This list is made up of three sections. The first section includes the themes, the second section is the part for indicating a theme as suitable (✓) and the third section is for explanation. The experts were asked to approve a theme in the coding list with a (✓) if it was suitable, and if it was not suitable, to write the theme that was most suitable in the explanation section. This is a list that contains the names and characteristics of nine conceptual themes and subthemes belonging to these themes. The specialists whose views were sought were asked to use this list and to match the nine conceptual themes in the list together (in such a way that no theme or code was excluded). After the views of the experts had been obtained, the experts, the researcher and the thesis supervisor convened. The matchings made by the specialists were compared with those made by the research team.

Since the aim of the research team was to reveal a new product via the research process of the study and to make a contribution to teacher training, the data collection and data analysis were challenging. Since teacher training and professional values studies had been carried out by the research team, the data were focused on throughout the study in order to preserve the neutrality of the research team. As a result of our efforts, the results obtained from the research data met the expectations that we specified at the beginning of the study.

Results

In this section, the results obtained from the data of the study are grouped under the headings of faculty members. The findings are grouped under nine themes and presented in depth below thematically, according to the stages of the process.
Conducted with Faculty Members of the Study

Professional Qualities Distinguishing Classroom Teaching from Other Types of Teaching

In this section, the findings obtained at the first stage of the study, conducted with the faculty members, are included. Responses given by the faculty members to the question, “Could you describe the role of teacher in teaching process in the classroom? How do you explain the professional qualities of teachers?

![Diagram of Professional Qualities of Teachers]

**Figure 1.** Professional Qualities of Teachers

As can be seen in Figure 1, ten themes emerged for professional qualities of teachers. With regard to the study findings, in the case of consensus by the faculty members, the most important professional quality of teachers was that of being an unforgettable teacher. With the view that “…A memory of the elementary teacher definitely stays in the mind. Everyone has a lot to relate about their primary school teacher. Yet they may even have forgotten the name of a subject teacher…” (P1), the elementary teacher’s quality of being an unforgettable teacher is reflected.

For the quality related to the elementary teacher being important because he/she is the first person to interact with the student in the formal education system, with the view that “The elementary teacher is the person that the child first meets, is shaped by, and, after the family, spends the most time with…” (P10), the idea that the elementary teacher is the person who, after the family, the child has his/her first experience with and spends the most time with in the education process is emphasized.
With regard to the view that the elementary teacher must establish a close relationship with the student: “He/she must touch children’s hearts, and the profession is very important in this sense. If the child loves his/her primary school teacher, he/she will love school and love studying, and if the teacher makes him/herself loved, the child will also love school and love studying…” (P3). This view, that in the classroom teaching profession, the teacher makes him/herself loved by the student and the student loves the teacher in return, is a striking finding.

For the quality of fostering basic skills, with the opinion that “The elementary teacher is a person who, after the family, gives knowledge and fosters skills related to specific aspects of life by making the student feel the warmth and sincerity he/she seeks…” (P1), the idea that basic skills are fostered by the elementary teacher, as well as the view that he/she is as close as the family, is emphasized.

Regarding the quality of classroom teaching being a profession requiring continuity in the primary school process, with the view that “The most important aspect that distinguishes classroom teaching from other types of teaching is that the elementary teacher is a teacher who remains with his/her students over a long period…” (P6) the fact that elementary teachers stay with the same students from 1st grade to 4th grade of primary school is emphasized.

As for the quality of classroom teaching being an interdisciplinary field, the view that “Classroom teaching covers a very wide area from deep knowledge of psychology to subject teaching…” (P2) stresses the idea that classroom teaching is an interdisciplinary technical field.

With regard to the quality of elementary teachers’ acquisition of the skill of effective communication with stakeholders, while the view that “Gestures, facial expressions, and eyebrow and eye signals are sometimes more effective than words. The elementary teacher should use the tone of his/her voice well. If we are to sum this up with one sentence, he/she needs to possess good communication skills” (P3) emphasizes the importance for elementary teachers to acquire the skill of communication with children, the importance for elementary teachers to acquire the skill of communication with those around them for the development of the child is stressed in the quotation, “The elementary teacher is a person who will seek every kind of help from family and people around regarding the child’s personal characteristics and in cases of special need” (P10), whereas in the quotation “A positive atmosphere of communication among colleagues will bring success in the school and development of the school with it. The development of the school improves the teacher, while the improvement of the teacher is also accompanied by the success of the student” (P4), the contribution made by acquisition of the skill of communication with colleagues to the education institution is highlighted.
Regarding the quality of elementary teachers’ ability to use different methods and techniques according to multiple intelligence theory, the view that “The teacher can utilize music or painting while doing mathematics. Elementary teachers should be able to use different methods, techniques and strategies for a lesson…” (P3) reflects the importance of the elementary teacher’s ability to use different methods and techniques according to multiple intelligence theory.

In the quality of the elementary teacher’s being a role model, with the view that “Since classroom teaching is a period when basic learning outcomes are fostered, the elementary teacher remains an idol for students throughout their lives. He/she is an idol for educational life…” (P6), the idea that the elementary teacher is a lifelong model, together with whom basic skills are acquired, is stressed.

For the quality of elementary teachers focusing on all developmental domains of the child, the view that “The elementary teacher must know how to contribute to the development of the child’s language, personality, morals and conscience…” (P12) emphasizes the elementary teacher’s responsibility in the child’s linguistic, academic and values development.

Regarding the quality of placing the student at the center, the elementary teacher’s feeling of adopting the student, which is different from other teachers, is conspicuously stressed in the view that “The elementary teacher adopts his/her student, and regards him/her as his/her own child. Subject teachers are not like that; they enter the class and teach their subjects…” (P1)

Values that Teachers Should Possess

In this section, responses given by the faculty members to the question, “The concept of values in education, and, based on this, the professional values of teachers have been intensively discussed in recent years. As an assistant/associate professor in the classroom teaching program, in your opinion, which values should teachers in general possess?” are included.

The professional values that teachers should possess, defined according to the views of the faculty members, are presented in Figure 2.

As can be seen in Figure 2, the values that teachers should possess are basic human values, democratic values, social values, aesthetic values and professional values, comprising five main themes. In this section, the method of defining the values that teachers need to have is applied based on these themes. Examples of some quotations concerning these definitions were given below.

Basic human values: the teacher’s basic human values are emphasized as respect for all differences from success to intelligence in the view that “Perhaps the most important value of a teacher is the ability to espouse respect, love, tolerance and differences. These differences are not
only ethnic or religious ones. He/she must show respect for the individual, which is one of the most important characteristics…” (P2).

Democratic values: with the view that “Teachers should possess all values in the context of democratic values, such as loyalty and justice without discrimination for people’s beliefs and lifestyles, religion, language and gender…” (P6), the need for a teacher to possess all democratic values is stressed.
Social values: with the opinion that “…Within the framework of the provisions and social rules stipulated in the constitution, which we call a country’s basic values, [they are] charged with a mission that respects the basic values of the republic in the constitution with beliefs and traditions that meet the expectations of society…” (P13), the beliefs, social rules, and basic values of the nation and republic are included in the framework of social values.

Aesthetic values: the need for teachers to possess artistic and sporting skills is emphasized in the view that “A teacher should definitely have artistic and sporting values…” (P10)

According to the research findings, the structured values that teachers should possess are defined as basic human values, democratic values, social values, aesthetic values and professional values. Elementary teachers’ professional values are defined as assimilating the profession, carrying out their responsibilities towards stakeholders, cooperating with stakeholders, keeping up to date with scientific knowledge and applying it in a scientific way with an inquiring personality, placing value on the student, and establishing communication and empathy with stakeholders. Basic characteristics of views that make up this theme are given below.

Assimilating the profession: “Teachers should be conscious of their duty, wherever in Turkey they are employed, without inquiring about the location of the flag, in all conditions, in the most distant corner of Turkey and under the most difficult conditions…” (P12).

Acquiring the skill of effective communication with stakeholders: “For an elementary teacher to be successful, knowing the child’s family, mother or father very well, being informed and being able to communicate are professional values” (P13).

Placing value on the student: “Regarding the child before you not as a child but as a whole person, and approaching him/her accordingly. This may in fact be a value of an elementary teacher” (P3).

Having a scientific attitude: “The ability to transfer information correctly and to use scientific methods is an important value” (P3).

Developing the ability to empathize: “Teaching is not an occupation of information, it is an occupation of emotion. Emotion is acquired with emotion, by sustaining emotion. A teacher should definitely be able to establish empathy with his/her student…” (P11).

Keeping up to date: “Students enjoy up-to-date examples more. Therefore, the elementary teacher should read, investigate, and travel around…” (P3).

Being an investigative teacher: “We need to train investigative teachers in our country now. Teachers should be chosen to take master’s degrees…” (P10).
Possessing the ability to cooperate with families, the community and colleagues: “A teacher should act in association with school, families and the community…” (P6).

Having responsibility towards the profession, students, the community and parents: “Teaching requires responsibility in its own right. Responsibilities such as taking an interest in students, being on duty, and making plans...are required” (P10). “Elementary teachers’ having roles that will affect, direct and shape students’ futures and in this sense, their need to be role models in all respects, are values that they should possess…” (P1). “They should be sensitive towards fostering social values. It is very important for students at that age to be taught all the values that they need to be a good person, a happy person and a wise person by their elementary teachers both as a role model and by associating these values with specific learning outcomes included in lessons…” (P11).

Values that an Elementary Teacher in Particular Should Possess

In this section, responses given by the faculty members to the question, “Which values should an elementary teacher in particular possess? Please explain why” are included. The professional values that an elementary teacher in particular should possess, defined according to the views of the faculty members, are presented in Figure 3.

![Figure 3. Professional Values That an Elementary Teacher in Particular Should Possess](image)

Based on the views shared by the participants, the professional values that elementary teachers should possess were obtained via four main themes, namely values toward the profession, toward the student, toward the parent, and toward the community. In their values toward the profession, elementary teachers must be able to carry out interdisciplinary teaching, use different methods and techniques according to multiple intelligence theory, and relate knowledge to everyday life, as well as possessing aesthetic values. In terms of having a scientific attitude, the aspect of being an investigative teacher in keeping up to date and using the latest technology was emphasized. With regard to pedagogy, the aspects of having a love of children and being a role model by giving...
consideration to students’ individual differences were expressed. Below are the views of one participant on this issue:

“First and foremost, a love of the profession. Based on love of the profession, there must also be a love of children. He/she should also possess a work ethic. He/she should act as a mentor in affection for people, placing value on them and accepting them as they are. [The teacher] should not criticize any student because of his/her religion, mother tongue, race, denomination or ethnic roots. He/she should not display an attitude that will alienate [the student] even by the way he/she looks at him/her. The teacher should be able to generate choices by providing an environment and resources whereby the student will be given the opportunity to recognize and realize him/herself socially, emotionally and physically and to reveal and develop his/her hidden strengths.” (P7)

Also based on the views shared by the participants, the professional values possessed by elementary teachers toward the student are placing value on the student, the ability to communicate and empathize with the student, fostering basic skills in the student, focusing on all the child’s developmental domains, and supporting the student’s skills. Professional values toward the parent are ability to communicate with the parent, supporting the parent and guiding the parent. Professional values toward the community are ability to foster social values in students and having the ability to cooperate with education stakeholders. Below are the views of one participant on this issue:

“An elementary teacher must be able to make every student feel special and valuable. He/she must be able to bring about the student’s development in all cognitive and affective aspects. In a professional sense, an elementary teacher should be able to instill a love of nature, a love of people and a love of animals. While working to assimilate students into society via education, he/she must be able to obtain support from parents and society as well…”.

Following analysis of the data from the interviews made with faculty members, the professional values that elementary teachers should possess were grouped under four thematic headings.

**Interviews Conducted with Education Stakeholders of the Study**

In this section of the study, based on the list of professional values that elementary teachers should possess produced from the analysis of the data, the professional values that an elementary teacher in particular should possess are presented in the context of the findings obtained from the education stakeholders working in the field, namely the school inspectors, school principals and elementary teachers. These are presented respectively under six thematic headings.
Elementary Teachers’ Professional Values toward the Student and Learning

In this section, the participants’ responses to the question, “What can be the professional values of elementary teachers toward the student and learning?” are included. The professional values of elementary teachers toward the student and learning according to the views of the education stakeholders are presented in Figure 4.

![Diagram showing professional values of elementary teachers towards the student and learning]

**Figure 4.** Elementary Teachers’ Professional Values Toward the Student and Learning

In this section, the method of defining the professional values of elementary teachers towards the student according to the views of the participants is included. The professional values of elementary teachers towards the student are 1) having a love of children; 2) knowing the student: a) reassuring the student, b) knowing the parents, c) knowing the community, and d) recognizing and supporting all the child’s developmental domains; and 3) considering the student’s individual differences: a) supporting the student, and b) using methods and techniques according to individual differences. Examples of quotations that best describe these definitions are given below.

Knowing the student: “In order to know the student, the teacher needs to be in constant contact with his/her family, and to know what kind of family structure there is…” (P7-SI).

Reassuring the student: “The teacher should also give reassurance to the child. Through his/her behaviors he/she should show that he/she has confidence in the student…” (P2-SI).

Knowing the parents: “The elementary teacher must include the family in the process very well. The family is the teacher’s common stakeholder. The child and his/her family are located in the education environment. You have to be able to manage this education environment. If you cannot manage this, problems may occur…” (P9-ET).

Knowing the community: “The teacher will know the community. He/she will know the values of the community and of the society where he/she lives. He should definitely be in a relationship with the community. The values, cultural life, and beliefs of the community…” (P6-SI).

Recognizing and supporting all the child’s developmental domains: “The teacher must address children’s cognitive and affective domains in particular. I would evaluate it thus: What can the student do inside or outside class, where did I bring the child from and where can I take him/her to?…” (P7-ET).

Supporting the student: “The capabilities of each child need to be examined. The student needs to support his/her own development by comparing him/herself with him/herself, in my opinion…” (P10-ET).

Using methods and techniques according to individual differences: “Individual differences should definitely be taken into consideration by the elementary teacher. He/she should carry out activities according to children’s individual differences…” (P1-SP).

The method of defining the professional values of elementary teachers towards learning according to the views of the participants. In this context, the professional values of elementary teachers towards learning are 1) creating a learning environment for learning by doing-experiencing, 2) relating knowledge to everyday life, 3) fostering a joy of learning in the student, 4) making learning a need, and 5) nurturing values in the learning environment. Examples of quotations that best describe these definitions are given below.

Creating a learning environment for learning by doing-experiencing: “The child should learn by touching and playing with pulleys and spinning wheels. When teaching mathematics I always have them make models. The child will learn by touching, doing and experiencing. Especially at primary school, the child should be able to touch more and be involved in life. Therefore, the child must learn
science by experiencing it. The child must experience learning. In classroom teaching the learning environment is all around…” (P₂-ET).

Relating knowledge to everyday life: “Water turns to steam and freezes. In flexible materials there is powder, flour. How is dough made? Materials take the form of materials that it will not be difficult for students to find in their daily lives, ones that they can bring from home or ones that I can bring…” (P₂-ET).

Fostering a joy of learning in the student: “Nowadays it is very easy for a student to access information. What is important is that if the teacher can teach the student what he/she needs and how he/she can learn, the student will maintain his/her excitement for learning…” (P₂-SI).

Making learning a need: “The child must know this: I will use this subject in my daily life. Learning results from need. Students need to be brought to such a point that the student should feel hungry for learning that subject…” (P₂-SP).

Nurturing values in the learning environment: “Keeping the environment clean, respect, affection… Our behaviors towards each other while socializing, our behaviors towards stray animals, apologizing to someone while walking, values such as these that life brings must be learnt first. Children should be directed towards these subjects. In terms of school, this value culture should be created first of all…” (P₂-ET).

In the context of the findings in this section, the method of defining the professional values of elementary teachers towards the student and learning has been implemented. Elementary teachers’ professional values toward the student involve accepting each student as a member of the class, based on the value of having a love of children and on the need for the student also to love the teacher, by setting out to know the parents and the community around in order to know the child, by considering the child’s individual differences, and by supporting all the child’s developmental domains according to multiple intelligence theory. Elementary teachers’ professional values toward learning involve keeping the student’s joy of learning alive in a doing-experiencing learning environment by making learning a need for students and relating knowledge to everyday life.

**Elementary Teachers’ Professional Values Toward the Learning and Teaching Environment**

In this section, the education stakeholders’ views on “elementary teachers’ professional values toward the learning and teaching environment” are included. In this context, the professional values of elementary teachers toward the learning and teaching environment are presented in Figure 5.
According to the views of the participants, elementary teachers’ professional values toward the learning and teaching environment are 1) embodiment of knowledge: a) using materials and technology, and b) utilization of primary resources; 2) organizing the learning and teaching environment: a) bringing real life into the classroom environment, b) based on multiple intelligences, c) based on experiential learning, and d) making the learning environment free and enjoyable; and 3) role of the teacher: a) sharing the learning environment with parents, b) continuous planning of learning, and c) being a guide at all times. Examples of some quotations concerning these definitions were given below.

Utilization of primary resources: with the view that “The teacher [can take the students] on a visit to the ruins of a historic castle from the old days in a place like a village in the area around them. He/she can bring an elderly person into the class. He/she can bring a traffic policeman to class during traffic week… (P₂-SI), the situation of utilizing primary resources by the teacher according to facilities in the environment is reflected.

Bringing real life into the classroom environment: in the view that “It can be a piece of rock or a piece of wood found in nature. What is important is for this to be used effectively and appropriately. Everything we use in everyday life can be taken to the classroom as a tool by the teacher… (P₉-SP), the continuity of the classroom as a part of life is emphasized.
Based on multiple intelligences: the view that “In my experience, I have learnt that if a teacher addresses a student who is a visual learner aurally, it will be useless. When conducting the lesson in class, I try to address students tactiley, aurally and visually…” (P₁₀-ET), reflects the fact that the teacher includes all students in class by using multiple intelligences.

Based on experiential learning: “You will not explain the seasons, the child will do it. Explain the world and the sun, make them play games. Let the child find out about the forming of the seasons by the rotation of the earth round the sun him/herself…” (P₈-ET). With this view, the need for the students to make discoveries by organizing the learning environment according to experiential learning is stressed.

Making the learning environment free and enjoyable: “One teacher that I went to inspect made a costume corner in a corner of the classroom; the children read a paragraph, and after reading the paragraph they go to the corner and grab the costume in order to complete the paragraph…The students in class are happy, and the teacher is also happy…” (P₄-SI). This view reflects the idea that making the learning environment free and enjoyable makes both the students and teachers happy.

Sharing the learning environment with parents: “This task cannot be done only with the teacher. The parents and other colleagues must also assist the teacher. Let the parents enter the classroom as well. Especially in the first years, children come to school with their mothers. The mother sits next to the child, and makes a different assessment of the teacher and environment in her own way. Sometimes it is useful for parents to observe the teacher in class…” (P₁₀-SI). With this view, the benefit of sharing the learning environment with families is emphasized.

Continuous planning of learning: “The teacher should plan and prepare material in order to enable the student to learn. To be able to teach a concept, the lessons will be planned, programmed and include plenty of material…” (P₁₀-PS). This view reflects the need for instruction and activities to be well planned by the teacher.

Being a guide at all times: with the view that “I am a guide for the students at every stage. What do we need, what do we have to do, which materials will I bring, which questions will we answer, when they do their homework will they do it alone or will they be aided by their parents?... (P₇-ET), the fact of planning guidance for the student, from the material to be used to the type of study done at home, is reflected.

In the context of the findings in this section, the professional values of elementary teachers toward the learning and teaching environment have been defined. These involve basing the learning and teaching environment on experiential learning supported by materials and technology, according to multiple intelligence theory, by utilizing primary resources in learning, making the learning
environment free and enjoyable and bringing real life into the classroom. With regard to the teacher’s role in this, the professional values of elementary teachers toward the learning and teaching environment involve continuous planning of learning, being a constant guide to students, and sharing the learning environment with parents.

**Elementary Teachers’ Professional Values Toward Evaluation and Monitoring of Students**

This section includes the participants’ views about “elementary teachers’ professional values toward evaluation and monitoring of students”. In this context, the professional values of elementary teachers toward evaluation and monitoring of students are presented in Figure 6.

![Figure 6. Elementary Teachers’ Professional Values Toward Evaluation and Monitoring of Students](image)

According to the views of the participants, elementary teachers’ professional values toward evaluation and monitoring of students are 1) guiding the student, 2) the teacher’s guidance to parents, 3) supporting the student’s abilities, 4) evaluating the student’s development, 5) assessing the student as a whole person, and 6) determining the student’s abilities together with experts. Examples of some quotations concerning these definitions were given below.

Supporting the student’s abilities: with the view that “The teacher will reveal the student’s abilities. One of them will be successful in mathematics, the other in art. For teachers in primary school to conduct this instruction, they should have been trained in this field. They will understand art, music, literature, aesthetics and sport…” (P3-SI), the need for the elementary teacher to support the student’s abilities as well as to be competent in this field is emphasized.

Evaluating the student’s development: “A elementary teacher should monitor the student everywhere, from his/her attitude in the family to his/her attitude in the street. You cannot understand
the psychology, emotions or thoughts of a child sitting at the desk. You can understand these from his/her relationship with a flower, a creature or a friend. If a child behaves badly towards a creature he/she sees in the street, you have to educate him/her accordingly…” (P9-ET).

Assessing the student as a whole person: “I am against evaluation in the form of giving the child a test paper and saying ‘He/she got 70, 80, 90 marks’. [Children] are all made differently. I generally look at the student’s behaviors and his/her performance during the year. His/her participation in the lessons, behaviors towards friends in class and in school…” (P7-ET).

Determining the student’s abilities together with experts: “There needs to be a very good observer in the teacher’s classroom. He/she must evaluate the students’ exercises and activities. Guiding the student is an area of expertise. The child’s ability must be detected by experts and determined together with the teacher…” (P2-SP).

In the context of the findings in this section, the professional values of elementary teachers toward evaluation and monitoring of students have been defined. The teacher’s responsibilities in evaluating and monitoring the student involve determination of the student’s ability/abilities by the teacher together with experts, enabling the student’s development by supporting his/her abilities, and assessing the student as a whole person.

**Elementary Teachers’ Professional Values Toward Professional Development and Responsibility**

This section includes the participants’ views about “elementary teachers’ professional values toward professional development and responsibility”. In this context, the professional values of elementary teachers toward professional development and responsibility are presented in Figure 7.
According to the views of the participants, elementary teachers’ professional values toward professional development and responsibility are (1) professional competencies: a) pedagogical competence, b) love of the profession, c) being a role model, and d) being versatile; (2) professional development: a) keeping up with innovations and technology, b) sharing with colleagues, and c) participating in educational/scientific activities; (3) professional career: a) being an investigative teacher, and b) setting professional goals; and (4) professional responsibility: a) planning learning according to the environment and to the level of the student, and b) developing all aspects of the student. Examples of some quotations concerning these definitions were given below.

Love of the profession: “Firstly, there must be a love of the profession. Based on this love of the profession, there must be love of children… I regard children as our own future…” (P10-ET). With this view, a love of children based on a love of the profession for professionalism in the occupation is emphasized.

Being a role model: with the view that “The elementary teacher occupies an essential place, as I regard it as the center of life. I believe that it is necessary for the teacher to be a good role model for
students by paying attention to both his/her lifestyle and to his/her value perceptions” (P_4-SI), the view that the elementary teacher should be a role model is reflected as a value.

Being versatile: “The teacher needs to display his niceties to be able to retain the students in the class mentally. The elementary teacher should be a good actor, a good performer. He/she should know the child’s psychological state and try every kind of argument for attracting the child to the lesson…” (P_6-SI). “The elementary teacher must be in a position to be able to read articles, know English, and be a researcher. At the same time, I believe he/she should be able to play a musical instrument and perform activities requiring social and theatrical skills in a social sense…” (P_2-SI). With these opinions, the need for an elementary teacher to be versatile is stressed as a value.

Keeping up with innovations and technology: “…He/she should be able to examine articles in a professional sense. He/she must keep up with new technological developments in the field, since if he/she does not follow the developments, he/she will get out of touch with the system…” (P_8-SI)

Sharing with colleagues: with the view that “A good discovery made by one of our colleagues can serve as an example to another of our colleagues. Teachers should be open to this. Communication among colleagues is very important in this respect. If individual communication supports communication among colleagues, teachers’ communication with each other can be accelerated…” (P_3-ET), the importance of sharing among colleagues through communication is stressed.

Being an investigative teacher: with the view that “In order for teachers to train a generation who know about the project-based approach and encourage project work, the teacher needs to be a researcher… Nowadays, the source of knowledge has ceased to be the monopoly of the teacher. The source of knowledge has become multiaxial. Informatics on the one hand, the newspaper on another, and visuals on the other. There are many challengers to the school and the teacher. For the teacher to be able to struggle against these challengers, he/she must be a researcher…” (P_10-SI), the necessity for teachers to be researchers and create projects, due to the fact that technology and the media are challengers to the teacher, is emphasized.

Planning learning according to the environment and to the level of the student: the view that “I teach with games. I deal with the subject with concept maps, but first of all with games. When there is a game, the children begin to listen. In this way, there is no problem with ensuring discipline in the classroom. I choose the materials from the child’s environment. I used the foam cups I prepared when teaching numbers…” (P_7-ET), stresses the importance of the effect level when planning of learning is carried out according to the environment and to the level of the student.
In the context of the findings in this section, the professional values of elementary teachers toward professional development and responsibility have been defined. The professional values of the elementary teacher involve possessing the pedagogical competence required by the teaching profession and, by transferring his/her love of the profession, being a multidimensional model for the students with his/her knowledge, experience and behaviors. Their professional development values involve sharing their knowledge and experience with colleagues and participating in education activities in order to keep up with innovations and technology. The teacher’s professional career values involve the ability to show performance in his/her role as an investigative teacher by setting professional goals. The elementary teacher’s professional responsibility goals involve the application of learning methods and techniques by planning learning according to the environment and to the level of the student so as to develop all aspects of the student.

**Elementary Teachers’ Professional Values Toward Cooperation with The School, Families and Community**

This section includes the participants’ views about “elementary teachers’ professional values toward cooperation with the school, families and community”. The professional values of elementary teachers toward cooperation with the school, families and community, defined according to the views of the participants, are presented in Figure 8.

![Diagram of Elementary Teachers’ Professional Values Toward Cooperation with The School, Families and Community](image)

**Figure 8.** Elementary Teachers’ Professional Values Toward Cooperation with The School, Families and Community

According to the views of the participants, elementary teachers’ professional values toward cooperation with the school, families and community are defined under three main headings, namely communication with families, communication with the school’s parent-teacher association, and communication with the community. Examples of some quotations concerning these definitions were given below.
Communication with families: “I always communicate with the families and can discuss the students’ problems by meeting them one-to-one. I use technology; I use telephone messaging, the internet and WhatsApp. The families come to school when we call them, while I visit the ones with problems in their homes. If the child has a problem I make this known personally in his/her home. Of course, success is not possible without communication” (P₁-ET).

Communication with the community: “The school should be made into a center that people know. This is achieved with various courses. The teacher can cooperate through adult education and sport management. Non-governmental organizations can also participate in training. Theatres can put on shows at school. In other words, it is important to keep the school functioning…” (P₃-SP).

**Elementary Teachers’ Professional Values Toward School Development, and The School System and Its Development**

This section includes the participants’ views about “elementary teachers’ professional values toward school development, and the school system and its development”. The professional values of elementary teachers toward school development, and the school system and its development, defined according to the views of the participants, are presented in Figure 9.

![Figure 9. Elementary Teachers’ Professional Values Toward School Development, and The School System and Its Development](image)

According to the views of the participants, elementary teachers’ professional values toward school development, and the school system and its development are defined under three main headings, namely teacher’s contribution to school culture, teacher’s contribution to parents, and teacher’s contribution to non-governmental organizations. Examples of some quotations concerning these definitions were given below.
Teacher’s contribution to parents: “School should not be limited to educating only the children who come to school. At the same time, families in the community around the school should also be directly or indirectly trained. The child is very important for the teacher, school and family. For the child to be successful, families should certainly be involved in the task as well…” (P6-ET)

Teacher’s contribution to non-governmental organizations: “This year we were the recycling team. As a class, every Friday in the fifth lesson we collected wastepaper and books from every class. I cooperate with NGOs. When [the depot] is full, I call them and they come and collect [it]. In this way we contribute to the environment…” (P7-ET).

In the context of the findings obtained in this study, *Elementary teachers’ Professional Values* have been thematized under six headings, namely, the values: toward the student and learning, toward the learning and teaching environment, toward evaluation and monitoring of students, toward professional development and responsibility, toward cooperation with the school, families and community, and toward school development, and the school system and its development.

**Discussion, Conclusion and Recommendations**

In this study, it was aimed to reveal the professional values of elementary teachers employed in the Turkish education system.

**Elementary teachers’ professional values toward the students and learning**

The value related to having a love of children is a striking finding in the sense that it was considered more important by the teachers in comparison to other professional values. The teacher’s warmth and affection play an important role in the respect that the student feels towards the teacher. It has been revealed in studies that in the case where the teacher possesses affection for the child, the emotional intimacy between the student and the teacher has a positive effect on the student’s learning and the student learns more easily and effectively from a teacher he/she loves (Veenman, 1984). This finding in the literature is supported by studies in which love of children is the main condition of the teaching profession, love of children as a professional value is a requirement for becoming an educator (Downing et al., 2000); and love of children is a requirement of the teaching profession for teachers employed in primary schools (Gelbal & Duyan, 2010).

The need for students’ individual differences to be taken into consideration is supported by studies of Gordon (2001). The value of recognizing and supporting all the child’s developmental domains can be explained by the concept of “integration”, which is the most important feature of the globalization process (Friedman, 2000). It can be said that there is a need for studies to be included aimed at not only the student’s cognitive domain, but also at his/her affective domain in school. Regarding the value of accepting every student as a member of the class, it is stated that when an individual ceases to judge the person before him/her in relation to that person’s physical
characteristic, the group he/she belongs to or his/her beliefs, and believes that all people possess equal rights (Batelaan, 2001), then the teacher will regard his/her student as an individual. Each student must be considered worthy of respect from the teacher (Lehr, 2003; Vidovic & Velkovski, 2013).

The values of creating a learning environment for learning by doing-experiencing and relating knowledge to everyday life have been linked with each other in the literature (Vidovic & Velkovski, 2013). Preparing individuals for life and assisting them to solve problems encountered in daily life have been expressed as professional values of elementary teachers. The teacher must be able to prepare the learning environments for students to participate in the learning process (Lehr, 2003) and ensure that the joy of learning is kept alive (Vidovic & Velkovski, 2013).

**Elementary teachers’ professional values toward the learning and teaching environment**

Students who can learn experientially can be educated by organizing the learning and teaching environment according to their basic skills, provided that it is managed effectively by the teacher (Gordon, 2001), a fact which is supported in studies. Teachers’ values in the learning and teaching environment are expressed as creating attractive learning environments, supporting a happy atmosphere in the classroom, making the learning-teaching environment student-centered, keeping up with the latest education technology and using it to create a learning environment for student development, and regarding each student as a producer (Vidovic & Velkovski, 2013; Palmer, 2015). The values of utilizing primary resources and using materials and technology have been linked with each other in studies in the literature (Tunca, 2012). Rather few studies can be found in the literature related to the value of sharing the learning environment with families. Members of the teaching profession should carry out the socially acceptable duty of sharing each student’s aims and behaviors with his/her family. The teacher is defined as a person who provides the guidance needed by students at all times by continuous planning of learning (Vidovic & Velkovski, 2013; Sezer, 2016). As a value, guidance teaches students how to access the most reliable knowledge in the quickest way and how they can interpret it correctly.

**Elementary teachers’ professional values toward evaluation and monitoring of students**

The value of supporting the student’s abilities is expressed in the literature as determining the student’s potential and guiding him/her accordingly, setting high targets suited to the student’s potential, and assisting the student in defining new learning goals. The value of evaluating the student’s development is expressed in the literature as developing and monitoring the student’s potential, and the ability to organize a student’s development by observing the student’s physical, mental and emotional development (MoNE, 2008; Vidovic & Velkovski, 2013).

The teacher’s guidance to parents is reflected as a value by students’ parents. The teacher’s ability to provide guidance to the student and families in a positive way and to work in cooperation
with them is supported by studies in the literature (Gordon, 2001). The teacher’s evaluation of the learning process by self-assessment of the data obtained together with the student and parents is included in the literature as guidance of parents in evaluation of education. According to these findings, the teacher’s guidance of parents is accepted as a value by students’ parents.

Since findings related to the value of determining the student’s abilities together with experts could not be accessed in the literature, the views of the school inspectors and school principals, who are experts in the field, in the participant group will be taken as the basis, as classroom teaching is an interdisciplinary field. To be able to discover and direct a student’s ability and guide him/her accordingly, it is necessary to be professional.

The value in which assessment must be made with regard to the child as a whole can be reflected with Covey’s (2013) “whole person paradigm”. A human is a psychological and sociological creature made up of an indivisible four dimensions, namely body, mind, emotions and spirit. An educational understanding that concentrates only on mental development, hinders an individual’s holistic development. The need to recognize and support all the child’s developmental domains and to carry out assessment according to the child as a whole can be reflected as a professional value of elementary teachers. The heart and mind must be trained together.

**Elementary teachers’ professional values toward professional development and responsibility**

Possession of pedagogical competence is a professional value of elementary teachers. As a common denominator of studies in the literature related to the subject area, the need for teachers to possess pedagogical competence is reflected in many studies (Tunca, 2012; Vidovic & Velkovski, 2013).

Pedagogical content is a specialized type of knowledge at the basis of the teaching profession that supports the teacher’s learning of the subject that he/she will teach (Shulman, 1986). In this context, pedagogical content knowledge is one of the most important items that enables a teacher to be productive and effective (Carlsen, 1999). Based on the literature related to the subject, it can be said that the teaching profession is a professional occupation and that one difference from other professions is that it requires pedagogical content knowledge for this professionalization.

The value related to love of the profession is represented in the literature in studies on the teaching profession (Çubukçu et al., 2012; Sezer, 2016; Turhan et al., 2012). Love of the profession is reflected rather strikingly with the metaphorical explanation, “…If a love of work and a love of life are present in the atmosphere of school life, then, just as the spring sun helps seeds to germinate, they will spark the development of pleasant human emotions”.
The value of being a role model is very important in that it is the value given the most importance in the literature as a value that needs to be found in teachers. There are a great number of studies that emphasize the need for teachers to be a role model. With the statement that “The teaching profession represents not only the teacher’s individual behaviors in society but also the way that he/she behaves with the school and society”, the need for the teacher to be a role model for society is emphasized (Eryaman, 2007; NEA, 2016). The teacher should be a role model for education stakeholders in the development of national and universal values (MoNE, 2008). Lehr (2003), asserted that teachers should be an ethical and moral leader in the classroom.

The results revealed that classroom teachers should be versatile. Actually, classroom teaching is an interdisciplinary area related to pedagogical content knowledge, general knowledge and field knowledge. Since classroom teaching is carried out during a period when young children acquire basic skills, it requires initiative skills and skills for organizing and conducting social, cultural, artistic and sporting activities. In the literature, there are a limited number of studies aimed at this value in teachers. With regard to this value in elementary teachers, the Ministry of National Education (MoNE, 2008) lists skills required in this field as development of artistic, aesthetic and linguistic skills, scientific and technological development, and skills in socialization, physical education and safety as performance indicators. That elementary teachers need to be artistic and versatile as a professional value is included in studies in the literature (NCES, 2006; Vidovic & Velkovski, 2013).

The value of sharing with colleagues is included as a professional value of teachers (NEA, 2016). With regard to finding solutions to environmental problems with the participation of students, parents or colleagues, conducting joint activities with institutions and organizations (MoNE, 2008); supporting professional development of colleagues and cooperating with and sharing developments in the field with colleagues in order to contribute to this (Vidovic & Velkovski, 2013), these studies support each other.

Participation in educational/scientific activities is a value that is required in a professional sense and obligatory by law. Educational activities for professional development comprise in-service training enabling development of teachers’ professional and personal skills, seminars, symposiums, workshops, projects and all activities aimed at professional development. To be able to continually develop themselves in their careers, teachers follow the road of participation in educational activities. Professional development is a process that supports teachers in increasing students’ achievement by increasing teachers’ productivity (Maurer, 2000), and in creating learning and teaching environments that support teachers’ professional knowledge, skills, values and attitudes both inside and outside school. There are studies revealing that in cases where teachers’ professional development is supported, development of the education system and increase in student achievement are contributed to (Knudsen et al., 2013).
Regarding the value of keeping up with innovations and technology, it is revealed in the related literature that teachers can develop themselves in their profession by means of following publications related to innovations and changes in their field, benefiting from the experience of senior colleagues, doing postgraduate studies, and participating in in-service training, seminars, symposiums and workshops (Boydak-Özan et al., 2014; Uştu et al., 2016).

With regard to the value of being an investigative teacher, in the information society, it is expected that individuals use and generate the knowledge they have acquired (Ergün, 2015; Palmer, 2015). In this context, in the investigative teacher identity, via postgraduate education, the aim is to provide society with a source of qualified people by raising creative individuals who can access information and generate original ideas. The teacher’s qualities of being “a continually inquiring person” (Çubukçu et al., 2012; Baş & Kıvılcım, 2017), of giving importance to innovations and developments in research in the field of education and being able to put these developments into practice (Vidovic & Velkovski, 2013), and of continuing to learn throughout life (Palmer, 2015), support this value.

The value of setting professional goals is expressed as one of the values that the teacher needs to possess as follows: the teacher’s planning of goals for the future (Harris, 2005; Urbanski & Nickolaou, 1997); having a vision “having goals in a professional sense” (Çubukçu et al., 2012); and setting goals throughout one’s career as a teacher in order to support one’s personal development as well as to attain high professional standards (Vidovic & Velkovski, 2013).

The value of planning learning according to the environment and to the level of the student is supported by studies on planning learning in the teaching-learning process according to the student’s level and by considering individual differences. When students’ individual differences are taken into consideration by the teacher in teaching activities, this is reflected in the training of active and successful students (Gordon, 2001). It is stated that if the planning of learning is carried out by taking the student as the center, students can be made to acquire investigative and inquiring behaviors (Palmer, 2015).

Regarding the value of developing all aspects of the student, it is emphasized that knowledge, skills, attitudes and behaviors that will enable students to learn can be realized with individual teaching strategies suited to the level of the student (Ursano et al., 2007). For the development of students’ social and affective domains, encouraging learning through cooperation, providing opportunities for discussion, being sensitive to students’ feelings, being a guide for students to determine their goals by considering their views, and developing the child’s personality as an individual are defined as professional values of elementary teachers.
Elementary teachers’ professional values toward cooperation with the school, families and community

The value of cooperation with the school, families and community involves the teacher’s making active and positive contributions to relations with families both in and out of school and to relationships with the school and community as a professional educator (AAE, 2016). In cooperation with the school, families and community, it is very important for a teacher to be open and ready to cooperate with his/her colleagues, experts in different organizations, families and the community, and in his/her communication with the school, families and community, to develop relationships based on different ideas, tolerance and mutual respect. In this cooperation, the teacher preserves mutual trust and personal information in his/her relationships with students, colleagues and families (MoNE, 2008; Vidovic & Velkovski, 2013), and the members of the teaching profession share their duty of reaching an acceptable conclusion regarding the aims and behaviors of each student with families. The effectiveness of many teaching methods depends on cooperation established with families. With the statement that the teacher encourages families to participate more in the education process, the value of cooperation with the school, families and community is reflected as a professional value of teaching in the literature.

With regard to placing value on the family, which is one of the values that elementary teachers give the most importance to (Aktepe & Yel, 2009), the ability of the teacher to establish mutual cooperation with stakeholders by using his/her communication skills and guiding the family in a positive way is reflected in studies in the literature (AAE, 2016). Regarding the value of communication skills, being humane in thoughts and behaviors, giving importance to the student in a sincere and modest way, ability to understand students’ feelings and ideas by getting to know them better, and ability to be more sensitive towards the students are reflected as teachers’ professional values. In Sezer’s (2016) study, communication skills are the most important of a teacher’s qualities.

Elementary teachers’ professional values toward school development, and the school system and its development

A teacher should know that schools are institutions that belong to society. He/she should share the aims of the school. He/she should attempt to inform the community about the education programs carried out (NEA, 2016). Being in constant collaboration with the school, families and community in the development of school policies; supporting the increase in value of the school as a learning environment; being open to cooperation for development of new ideas, professional sharing, and sharing of improvements and good practices; and pioneering the creation of a democratic and participatory culture of communication in the school (MoNE, 2008; Vidovic & Velkovski, 2013) are revealed as values toward school development, and the school system and its development in the literature.
Elementary teachers’ professional values toward cooperation with the school, families and community and elementary teachers’ professional values toward school development, and the school system and its development were put on a par with teachers’ communication values by the school inspectors, school principals, elementary teachers and parents of students. In this context, the professional values gathered under these two headings were combined under one single heading in the “professional values of elementary teachers”.

**Implications of the Study**

In this study, based on the conceptual framework, in the synthesis of the analyses made in the findings, conclusion and discussion, the “Professional Values of Elementary Teachers” was obtained. In this regard, elementary teachers’ professional values were revealed in 47 items and 5 dimensions (Table 2). These dimensions are: recognition of student and individual-centred education, learning and teaching environment, evaluation and monitoring of students, professional development and responsibility, and cooperation with the school, families and community.

In conclusion, classroom teaching occupies a special place among all other areas of teaching. Therefore, emphasis must be placed on who the elementary teacher is and which professional values he/she should possess. In this context, elementary teachers must possess the values required by the profession. Elementary teachers in particular have the duty of socializing the child. Elementary teachers are also the fundamental key to attaining success in education. This study can be regarded as a tool to assist in restructuring elementary teachers’ professional values in the context of being the first study carried out in Turkey towards determining “the professional values of elementary teachers”. In this regard, the following suggestions can be made:

1. With regard to identification, the extent to which current elementary teachers or preservice teachers studying in education faculties possess these values can be measured; a scale for measuring elementary teachers’ professional values can be developed; by examining each dimension found in the list of professional values of elementary teachers in detail, the details of these dimensions can be revealed; and studies can be conducted that will contribute to enabling simultaneous developments with the rest of the world by clarifying elementary teachers’ professional values.

2. By way of clarifying elementary teachers’ professional values, studies can be carried out that will help to increase the value placed on the profession.

3. Professional values of teaching should be presented as a culture to preservice teachers in undergraduate classroom teaching programs and in faculty culture.
4. With regard to developing professional values, opportunity should be given for discussion of “sample cases” reflecting real life situations. In this regard, the necessary arrangements should be made for observing real life situations in the school environment as far as possible.

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The 5 core propositions of accomplished teaching:


Identification of In-Service Teacher Education Policies in Turkey and Investigation of Their Reflections on Practices

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Abstract

The general purpose of this study is to identify the target policies for in-service education in Turkey’s main policy papers and documents of teacher training and development institutions, and to investigate reflections of these policies on practice. The study was based on historical research, which is one of the qualitative methods. The data were collected through document analysis and analyzed with content analysis. Regarding the research results, it was determined that target policies for in-service training activities in the field of teacher training in Turkey were offered within two main frameworks. When the reflections of these policies on practice were evaluated accordingly, it was revealed that putting policy theories into practice was generally achieved; however, some policies were offered as specific to several cities without being reflected across Turkey.

Keywords: Teacher Training, in-Service Education/Training, Policy Papers

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Introduction

Considering the developments that societies go through in time, it is observed that this progress result from a continuous innovation and transformation. These days when we are rapidly proceeding towards being a super smart society from a hunter-collector origin, it is an undeniable fact that the main source of this progress at an unprecedented pace is knowledge and education systems of societies.

From this viewpoint, societies have established and implemented education policies in order not to fall behind the advances, on the contrary, to pioneer them. It is possible to state many factors for the successful implementation of these policies. However, considering that teachers are the implementers of all these measures, it can easily be acknowledged that one of the greatest factors in reaching the objectives is teachers (Duman, 1991, p.2). Within this context, teachers need to have cognitive, affective and psychomotor competence to discharge this responsibility properly (Cetin, 2018, p.166). Therefore, skills development of teachers is attached great importance. As a matter of fact, one of the biggest reasons for teacher development to be given such weight is the methods and techniques specific to the process. These methods and techniques have been developed through practice and scientific research at the end of a great accumulation (Gelisli, 2018, p. 142).

One of these practices is in-service trainings aiming at development of working teachers based on the needs emerging in the process. In-service training practices are defined as providing educators, who build the future of the country and raise the new generations, with developments in science, technology and art in line with universal values and needs of the education system (Ministry of National Education, [MEB], n.d.-a). The purpose of in-service training activities is to ensure public officials’ professional inclination, increase their productivity and raise them for tasks and responsibilities to be encountered in the future (Tutum, 1979, as cited in Altinisik, 1996).

In this context, in-service training can be considered as one of the essential tools for teachers to improve professional knowledge and skills and to make up the deficiencies during their teaching period (Susam & Ozbek, 2018). Therefore, for subject integrity, it is considered necessary to briefly mention the historical development of in-service training activities in Turkey.

One of the first examples of in-service training in Turkey is that, in early 1930s, travelling headteachers were assigned to make up deficiencies of teachers working in the country to meet educational needs of the society living in villages up to 80%. These travelling headteachers visited teachers in villages and provided pedagogical support through model practices during their visit. In 1960, “On-the-Job Teacher Training Agency” was officially founded in Turkey to train in-service teachers. The relevant institution published 16 books to guide teachers and extended its activities gradually. In 1975, the name of the institution was changed into “Department of In-Service Training”.

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There are no detailed documents on the structure and content of in-service trainings arranged until the 1980s; however, developments were observed beginning especially in that period and gaining speed in the early 2000s. In 2012, the institution was renamed one more time as “General Directorate for Teacher Training and Development”, which still continues its operation today (Gunel & Tanriverdi, 2014).

In-service training today is generally divided into two categories, which is based on purpose and venue of application. Relevant brief information is presented in Table 1.

Table 1. Types of In-Service Training

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<tr>
<th>In-service Training Based on Purpose</th>
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<tbody>
<tr>
<td>Orientation Training</td>
<td>It is provided for adaptation before or right after starting work.</td>
</tr>
<tr>
<td>Basic Training</td>
<td>It is arranged to bring in basic knowledge, skills and attitudes required by the job.</td>
</tr>
<tr>
<td>Development Training</td>
<td>It is aimed at teaching job-related innovations.</td>
</tr>
<tr>
<td>Integration Training</td>
<td>It is provided for those with change of duty to be qualified for the new position</td>
</tr>
<tr>
<td>Promotion Training</td>
<td>It is organized to meet the requirement for promotion of the staff and personnel within the organizational structure</td>
</tr>
<tr>
<td>Special Field Training</td>
<td>It is held to train the personnel in various fields (first aid, foreign language, computer etc.)</td>
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<table>
<thead>
<tr>
<th>In-service Training Based on Venue</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On-the-job Training</td>
<td>It is provided for the personnel on the job, keeping them at work.</td>
</tr>
<tr>
<td>Off-the-job Training</td>
<td>It is provided for the personnel off the job, in or out of the organization.</td>
</tr>
</tbody>
</table>


Considering Table 1, it is observed that in-service training activities are categorized under two titles as purpose-based and venue-based. When trainings are classified based on venue, it is important whether they are organized on or off the job, and when the classification is based on purpose, there are six types of trainings as in Table 1.

With the update of in-service training activities by the General Directorate for Teacher Training and Development in line with the standard criteria, ‘Standard In-Service Training Programs’ have been developed to standardize trainings and certificates that the Ministry and all its provincial units provide in the same field. In-service trainings under the Ministry of National Education either in the central organization or in the provinces will be organized within this program which was last updated in 2020 (MEB, 2020). Training categories and what they involve are summarized in Figure 1.
When Figure 1 is examined, it is observed that in-service training programs in Turkey are planned based on four main categories comprising of personal development trainings, teacher trainings, special quality trainings and managerial and institutional trainings. Moreover, various fields are intended for teacher training in each category. In-service education policies for teacher training in Turkey proceed within this general framework. Therefore, it is of great importance that these policies are investigated.

In the studies conducted to determine in-service education policies for teacher training in Turkey, it is observed that only one policy paper is generally reviewed, and policies for in-service education in those papers are presented under education policies. For instance, Akca, Sahan and Tural (2017) discovered, in their studies, that policies to increase the number of in-service trainings for teachers were presented in some development plans.

In his study, Coban (2018) identified the policies regarding the profession of teaching in government programs of Republican period in Turkey and discovered that these policies were mostly for improving teachers’ living conditions, training them well and compensate for the teacher shortage. He also presented the policies for in-service training of teachers together with the target policies for training good teachers. Urun (2019), in his/her master’s thesis, investigated opinions, decisions and suggestions accepted on teacher training, and those offered for in-service education of teachers in National Education Councils. In another master’s thesis, teacher training policies between 2006 and 2018, Development Plans, National Education Councils and MEB Strategic Plans were examined, and among the teacher training policies presented, the ones regarding in-service education were
mentioned (Calisici, 2019). In their study; Eroglu, Ozbek and Senol (2016) investigated Council resolutions regarding professional development, listed the resolutions adopted, and referred to their importance in the education system.

When the relevant literature is reviewed, it is observed that another important issue with regard to in-service training policies is the studies to determine the in-service training needs of teachers, which forms a basis for the development of these policies and contributes to the improvement of education in schools. As a matter of fact, Tekin & Ayas (2006) concluded in their study that teachers mostly needed in-service training activities for ensuring students’ active participation in lessons and teaching methods. In another study, it was revealed that teachers needed in-service education for new teaching methods and techniques, and for the effective use of computers, the internet and technology (Akar, 2007). In a study conducted by the Ministry of National Education to determine the in-service training needs of teachers, it was found out that the need was mostly for new approaches in education, methods of coping with stress, development and use of assessment and evaluation tools (MEB, 2008). In the study by Ergin, Akseki & Deniz (2012), it was concluded that teachers needed in-service training to comply with scientific, technological and social changes and to acquire knowledge, skills and behaviors brought by the developments in the field of education. In another relevant study, it was identified that teachers need in-service training on assessment and evaluation, teaching methods and techniques, and classroom management (Kucuktepe, 2013). In a study presenting similar research results, it was observed that teachers mostly needed in-service training on classroom management, lesson planning and learning-teaching processes (Serin & Korkmaz, 2014). Furthermore, in another study, classroom control and teaching methods were determined as the training subjects that teachers needed most (Karasu, Aykut & Yılmaz, 2014). In addition, Budak & Demirel (2003) concluded in their study that the majority of teachers, whether they had attended any training before or not, needed in-service education on basic professional issues.

There are also studies in the literature that examine teachers’ views on the effectiveness of in-service training practices. It is indicated in most of the studies that in-service training activities provided for teachers have effective results; in other words, in-service education is helpful for teachers to make up for their deficiencies in various subjects (Arslan & Sahin, 2013; Basturk, 2012; Dogan, 2009; Gultekin & Cubukcu, 2008; Ozen, 2005). In addition, studies examining opinions of education directors and inspectors on in-service training practices are encountered (Sahin, Cek & Zeytin, 2017; Ozcan & Bakioglu, 2010).

When the development of in-service training practices in Turkey and relevant studies are evaluated overall, it can be concluded that in-service education of teachers has gained speed mostly in 1980 and after, and that detailed information and documents could not be found for the periods before 1980. It is considered important to determine the policies of Turkey regarding in-service training
activities, which are essential in meeting teachers’ educational needs and improving education at schools, and to examine their reflections on practice starting from 1980 when the relevant activities accelerated. Consequently, based on the in-service training policies targeted in the process, teacher-based educational needs and changes in these needs over time will be revealed regarding improvement of instruction at schools, and whether teachers’ educational needs are met or not will be determined by investigating the reflection of these policies on practice. Besides, it has been observed that research on determination of Turkey’s in-service education policies in the field of teacher training is limited, and generally one or a few policy papers have been studied. Therefore, in order to treat the relevant subject as a whole, it is considered necessary to determine the target in-service education policies in main policy papers that lead Turkey’s development in any field and in documents of institutions responsible for teacher training and development, starting from 1980, when in-service training practices gained speed, till 2020, when the study was conducted.

In this context, the general purpose of the study is to identify in-service education policies for teacher training in Turkey and investigate the reflections of these policies on in-service training practices. For this purpose, answers to the following questions are sought;

1. What are the in-service education policies adopted for teachers in Turkey?
2. How do these policies followed reflect on in-service training practices?

Method

In this section, research model, population and sample, data collection tools and data analysis are described.

Research Model

This study aims at identifying in-service education policies for teachers in Turkey between 1980 and 2020; therefore, it is a descriptive study. In this kind of descriptive studies, the purpose is to present the findings to the readers in an organized and interpreted way (Yıldırım & Simsek, 2016, p.239). Accordingly, qualitative approaches were utilized in the study. It was intended to identify the in-service education policies aimed at fulfilling educational needs of in-service teachers in main policy papers of Turkey and documents of institutions responsible for teacher training and development, and to present the reflections of these policies on practice through survey model. The main feature of this model is that it aims at describing a situation, which existed in the past or still exists, as it is. There is no attempt to change or affect the situation in question; the purpose is to investigate and identify the situation without intending to change it (Karasar, 1999).
Population and Sample

The population of the study, which examines the in-service education policies for teacher training in the country, consists of Turkey’s Main Policy Papers; in other words, Top Policy Documents along with institutional policy papers of teacher training and development institutions. The sample of the study comprises of Government Programs, Development Plans, Presidency Annual Programs developed between 1980 and 2020, and Strategic Plans, Councils, MEB Quality Framework, Teacher Strategy Paper, Education Vision 2023 prepared within the Ministry of National Education, and Turkey’s Higher Education Strategy Paper. The criterion sampling method, which is one of the purposeful sampling methods, was utilized to constitute the study sample. The basic feature of this method is that situations meeting a predetermined set of criteria are studied (Yildirim & Simsek, 2016, p.122). The main criterion in selecting the papers constituting the sample of this study was that the papers have been published starting from 1980 when in-service training activities accelerated in the field of teacher training in Turkey, and that educational issues have been treated in the relevant documents. The list of the documents in the sample is presented in Table 2 in detail.

Table 2. The List of Documents in the Study Sample

<table>
<thead>
<tr>
<th>GOVERNMENT PROGRAMS</th>
<th>CABINET</th>
<th>DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabinet Akbulut</td>
<td>9.11.1989 – 23.06.1991</td>
<td></td>
</tr>
<tr>
<td>Cabinet Yilmaz I</td>
<td>23.06.1991 – 20.11.1991</td>
<td></td>
</tr>
<tr>
<td>Cabinet Demirel VII</td>
<td>20.11.1191 – 16.05.1993</td>
<td></td>
</tr>
<tr>
<td>Cabinet Ecevit IV</td>
<td>11.01.1999 – 28.05.1999</td>
<td></td>
</tr>
<tr>
<td>Cabinet Gul</td>
<td>18.11.2002 – 14.03.2003</td>
<td></td>
</tr>
<tr>
<td>Cabinet Erdogan I</td>
<td>14.03.2003 – 29.08.2007</td>
<td></td>
</tr>
<tr>
<td>Cabinet Erdogan II</td>
<td>29.08.2007 – 06.07.2011</td>
<td></td>
</tr>
<tr>
<td>Cabinet Erdogan III</td>
<td>06.07.2011 – 29.08.2014</td>
<td></td>
</tr>
<tr>
<td>Cabinet Davutoglu II</td>
<td>28.08.2015 – 24.11.2015</td>
<td></td>
</tr>
<tr>
<td>Cabinet Davutoglu III</td>
<td>24.11.2015 – 24.05.2016</td>
<td></td>
</tr>
<tr>
<td>Cabinet Binali Yildirim</td>
<td>24.05.2016 – 09.07.2018</td>
<td></td>
</tr>
</tbody>
</table>

| DEVELOPMENT PLANS            | 4th 5-Year Development Plan | 1979 – 1983 |
|------------------------------| 5th 5-Year Development Plan | 1985 – 1989 |
|                              | 6th 5-Year Development Plan | 1990 – 1994 |
|                              | 7th 5-Year Development Plan | 1996 – 2000 |
|                              | 8th 5-Year Development Plan | 2001 – 2005 |
|                              | 9th 5-Year Development Plan | 2007 – 2013 |
|                              | 10th 5-Year Development Plan| 2014 – 2018 |

| PRESIDENCY ANNUAL PROGRAMS   | 2019 Presidency Annual Program | 2019 – 2020 |
|------------------------------| 2020 Presidency Annual Program| 2020 – 2021 |

<table>
<thead>
<tr>
<th>MINISTRY OF NATIONAL EDUCATION DOCUMENTS</th>
<th>Strategic Plan</th>
<th>2010 – 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEB 10th Council</td>
<td>Strategic Plan</td>
<td>2015 – 2019</td>
</tr>
<tr>
<td>MEB 11th Council</td>
<td>Strategic Plan</td>
<td>2019 – 2023</td>
</tr>
<tr>
<td>MEB 12th Council</td>
<td>MEB 10th Council</td>
<td>1981</td>
</tr>
<tr>
<td>MEB 13th Council</td>
<td>MEB 11th Council</td>
<td>1982</td>
</tr>
<tr>
<td>MEB 14th Council</td>
<td>MEB 12th Council</td>
<td>1988</td>
</tr>
<tr>
<td>MEB 15th Council</td>
<td>MEB 13th Council</td>
<td>1990</td>
</tr>
<tr>
<td></td>
<td>MEB 14th Council</td>
<td>1993</td>
</tr>
<tr>
<td></td>
<td>MEB 15th Council</td>
<td>1996</td>
</tr>
</tbody>
</table>
In Table 2, it is observed that the sample of the study includes thirty-nine documents in total. These documents were investigated thoroughly to identify Turkey’s in-service education policies for teacher training, and findings were revealed.

**Data Collection Tools**

In order to collect data on in-service teacher education policies of Turkey adopted in 1980 and after, document analysis technique was utilized. In document analysis, written resources involving information related to target research subjects are analyzed (Yıldırım & Simsek, 2016, p.189). In the analysis, some steps are followed, and they are presented in Figure 2.

![Figure 2. Steps of document analysis](image)


In the process, first, the documents in the study sample were reached, and their originality was checked. Then, the documents were examined in line with the purpose of the study, and the relevant data were obtained. Finally, the data were organized and presented in tables and figures.

**Data Analysis**

The documents included in the study sample were analyzed through content analysis, in which the main purpose is to describe the obtained data as findings written in alternative ways (Yıldırım & Simsek, 2016, p.242). Consequently, in the documents of the sample, Turkey’s in-service teacher education policies were determined, and policies of similar qualities were categorized and presented in themes. For instance, the policy “Teacher development will be ensured by paying attention to in-service education” in the Government Program of Cabinet (1989) and the target “To perpetuate personal and professional development of teachers” in Teacher Strategy Paper (2018) and
policies similar to these examples in other policy papers were grouped under “to develop, support and maintain in-service education programs” and presented within the theme of “General Policies on In-Service Education”. Likewise, policies regarding the content of in-service education for teachers such as “To provide special education formation for classroom teachers” and “To ensure that each teacher will receive counselling education” were placed in the theme of “Target Policies on Contents of In-Service Education”. All the policies determined in this way were categorized into relevant themes, and the findings obtained were presented in tables and figures. Then, the reflections of the findings on practice were examined, and the data were interpreted.

For the validity and reliability of the study, several practices were performed. Within this context, in order to provide internal validity, external audit strategy was followed. In this strategy, the meanings attached to contents and findings reported are checked for correct description (Ozturk, 2014, p.266). As for the reliability of the study, it was tested within the scope of verification strategies (Yildirim & Simsek, 2016). At this point, in order for the validity and reliability of the study to be tested, the data obtained at the end of the research were consigned to three experts who had mastery in the field of assessment and evaluation, and were competent in qualitative research, and they were requested to compare the findings. The consistency between the raw data and findings was tested based on Miles and Huberman (1994)’s formula (Reliability = Consensus / (Consensus + Disagreement)). Considering the result of the expert evaluation, a consensus by 94% was indicated for the consistency between the raw data and interpretations of the researcher and themes for the findings.

Results

In this section, the data obtained in line with the sub-problems of the study are presented.

Findings Regarding the Target Policies for Teachers’ In-Service Education in Turkey

All the documents included in the research sample were investigated to determine Turkey’s in-service education policies for teacher training, and within this context, and it was first identified which documents involved the relevant contents. In Table 3, the related findings are presented.

Table 3. The Documents with or without the Contents for In-Service Education of Teachers

<table>
<thead>
<tr>
<th>The Documents with the Contents for In-service Education of Teachers</th>
<th>The Documents without the Contents for In-service Education of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabinet Akbulut Program</td>
<td>Cabinet Ulusu Program</td>
</tr>
<tr>
<td>6th 5-Year Development Plan</td>
<td>Cabinet Ozal Program</td>
</tr>
<tr>
<td>X. National Education Council</td>
<td>Cabinet Yilmaz I Program</td>
</tr>
<tr>
<td>XI. National Education Council</td>
<td>Cabinet Demirel VII Program</td>
</tr>
<tr>
<td>XV. National Education Council</td>
<td>Cabinet Erbakan Program</td>
</tr>
<tr>
<td>XVI. National Education Council</td>
<td>Cabinet Ecevit IV Program</td>
</tr>
<tr>
<td>XVII. National Education Council</td>
<td>Cabinet Gul Program</td>
</tr>
<tr>
<td>10th 5-Year Development Plan</td>
<td>Cabinet Erdogan I Program</td>
</tr>
<tr>
<td>XVIII. National Education Council</td>
<td>Cabinet Erdogan II Program</td>
</tr>
</tbody>
</table>
When Table 3 is examined, it is observed that policies regarding in-service education of teachers were presented in sixteen out of thirty-nine documents included in the study. In the other twenty-three documents, no relevant policy was encountered. The policies presented for in-service teacher training practices in Turkey are given in Table 4.

**Table 4. Target Policies on In-service Education Programs for Teachers in Turkey in 1980 and After**

<table>
<thead>
<tr>
<th>Policy Paper</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabinet Akbulut (1989)</td>
<td>Teacher development will be ensured by paying attention to in-service education.</td>
</tr>
<tr>
<td>6(^{th}) 5-Year Development Plan (1989)</td>
<td>In line with educational needs of teachers, in-service education programs will be carried out.</td>
</tr>
<tr>
<td>X. National Education Council (1981)</td>
<td>In-service education will be ensured for teachers, managers and experts.</td>
</tr>
<tr>
<td>XI. National Education Council (1982)</td>
<td>In-service trainings of teachers and experts should be improved.</td>
</tr>
<tr>
<td></td>
<td>In-service trainings of teachers should be brought to a level that conforms to modern standards and that train teachers of quality to meet the needs of the society.</td>
</tr>
<tr>
<td>XV. National Education Council (1996)</td>
<td>Teachers will be provided with in-service training for special education. Permanence of in-service education should be ensured.</td>
</tr>
<tr>
<td>XVII. National Education Council (2006)</td>
<td>Classroom teachers should be given special education formation.</td>
</tr>
<tr>
<td>10(^{th}) 5-Year Development Plan (2013)</td>
<td>Teachers’ ability to use information and communication technologies will be improved.</td>
</tr>
<tr>
<td>XVIII. National Education Council (2010a)</td>
<td>Values education should be included in in-service training programs.</td>
</tr>
<tr>
<td>MEB 2010 – 2014 Strategic Plan (2010b)</td>
<td>Classroom teachers will be provided with knowledge and skills on special education.</td>
</tr>
<tr>
<td>MEB 2015 – 2019 Strategic Plan (2015)</td>
<td>Teachers’ ability to utilize knowledge, communication and technology infrastructure will be improved.</td>
</tr>
<tr>
<td>MEB Education Vision 2023 (2018)</td>
<td>In order to support professional development of teachers and school administrators, cooperation with universities and nongovernmental organizations will be developed for face-to-face and/or distance education.</td>
</tr>
<tr>
<td>Turkey’s Higher Education Strategy (2007)</td>
<td>The support provided for national or local in-service teacher training programs organized by MEB should</td>
</tr>
</tbody>
</table>
be maintained and increased.

<table>
<thead>
<tr>
<th>Year</th>
<th>Target Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 Presidency Annual Program (2018)</td>
<td>Face-to-face in-service trainings on algorithmic thinking in uncomputerized environment will be organized for classroom teachers.</td>
</tr>
<tr>
<td>2020 Presidency Annual Program (2019)</td>
<td>Minor and professional counseling skills of classroom teachers will be improved. Contents of in-service trainings will be renewed within the framework of current needs of teachers and school administrators; vocational and technical trainings will be held in the work environment.</td>
</tr>
</tbody>
</table>

When Table 4 is examined in detail, it is identified that target policies for in-service teacher training are presented in two themes in the main policy papers and documents of teacher training and development institutions. The first theme includes the general policies on in-service education, and the second theme involves the policies presented to regulate the contents of in-service education programs. The policies in the relevant themes are presented in Table 5 in detail.

**Table 5. Themes Based on Policies for In-Service Teacher Training in Turkey and the Policies Included in the Themes**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Target Policy</th>
<th>Frequency</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL POLICIES ON IN-SERVICE EDUCATION</td>
<td>To develop, support and maintain in-service education programs</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>To implement school-based professional development model</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>POLICIES ON CONTENTS OF IN-SERVICE EDUCATION</td>
<td>To provide special education formation for classroom teachers</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To improve teachers’ ability to use information and communication technologies</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To organize face-to-face in-service trainings on algorithmic thinking in uncomputerized environment for classroom teachers</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>To improve minor and professional counseling skills of classroom teachers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To include values education in in-service education program</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To provide teachers with in-service training on special education</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To ensure that each teacher will receive counselling education</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

It is observed in Table 5 that target policies for in-service education of teachers are stated in general terms in most of the policy papers; in other words, general policies are targeted to support, renew and ensure continuity of in-service training activities. It is also indicated that a new professional development model for teachers is aimed within this theme. Besides, policies to regulate contents of in-service education programs are discovered. Some of the policies in this group are determined to regard the field of classroom teaching. In this context, target policies for classroom teachers such as providing special education formation, improving algorithmic thinking skills in uncomputerized environments, and developing minor and vocational guidance skills are identified. In
addition, it is observed that contents of in-service trainings are planned to be regulated for values education in all branches and for teachers’ ability to use information and technology tools.

**Findings Regarding the Reflections of In-service Education Policies for Teachers in Turkey**

In this section of the study, how in-service education policies targeted for teacher training are reflected on practice is investigated based on main policy papers and documents of teacher training and development institutions. In this context, first, the reflections of the target policies regarding development, update and permanence of in-service education programs within the framework of general policies for in-service teacher training were identified. The relevant findings are presented in Figure 3.

*Figure 3. The number of in-service training activities organized between 2001 - 2020*


As it is seen in Figure 3, in-service training activities made progress and increased in number from the beginning of 2000s but decreased starting from 2011; however, even in 2013, when the number was the lowest, approximately three hundred in-service training activities were held. Compared to the last three years, in 2020, an increase has been observed in the number of trainings organized. In this context, target policies in theory for training teachers on the job and ensuring continuity of these activities are identified to have been put into practice. Moreover, when the target policies within the scope of general policies for in-service education programs are examined, it is revealed that a professional development model that enables continuous development of teachers is intended in practice. Within the context of these plans, in 2007, the Ministry of National Education published ‘School-Based Professional Development Guide’, in which career planning for teachers were presented, and target policies were put into practice as indicated in policy papers (MEB, 2007).
Besides, the other area investigated for reflections was policies presented to regulate contents of in-service teacher training programs. The reflections of target policies for the relevant contents are presented in Table 6.

**Table 6. Reflections of Target Policies for In-Service Education Program Contents in Main Policy Papers and Institutional Policy Papers on In-service Training Activities**

<table>
<thead>
<tr>
<th>Target Policy</th>
<th>In-Service Training Activity Number</th>
<th>In-Service Training Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing special education formation for classroom teachers</td>
<td>(2001)184</td>
<td>Education of children with language and speech impediment seminar</td>
</tr>
<tr>
<td></td>
<td>(2001)192</td>
<td>Development of individualized education programs seminar</td>
</tr>
<tr>
<td></td>
<td>(2001)291</td>
<td>Development of individualized education programs in special education course</td>
</tr>
<tr>
<td></td>
<td>(2003)237</td>
<td>Methods and techniques used in education of children with mental disabilities course</td>
</tr>
<tr>
<td></td>
<td>(2005)507/550</td>
<td>Education of children with superior intelligence and special abilities seminar</td>
</tr>
<tr>
<td></td>
<td>(2005)613</td>
<td>Special education and guidance service seminar</td>
</tr>
<tr>
<td></td>
<td>(2006)563/570/571/575 578/579/584/639</td>
<td>Special education and guidance course</td>
</tr>
<tr>
<td></td>
<td>(2007)705</td>
<td>New approaches in education of children with superior abilities</td>
</tr>
<tr>
<td></td>
<td>(2013)109</td>
<td>Developing activities for education of children with superior abilities seminar</td>
</tr>
<tr>
<td></td>
<td>(2013)239</td>
<td>Methods and techniques to identify children with superior abilities course</td>
</tr>
<tr>
<td></td>
<td>(2015)225 - 248</td>
<td>Training of qualified instructors to support special education course</td>
</tr>
<tr>
<td></td>
<td>(2016)137</td>
<td>Training of educators in supportive education rooms for kids with special needs course</td>
</tr>
<tr>
<td></td>
<td>(2017)82</td>
<td>Training of educators in supportive education rooms for kids with special needs course</td>
</tr>
<tr>
<td>Developing vocational counselling skills of classroom teachers</td>
<td>(2002)233/314</td>
<td>Counselling course</td>
</tr>
<tr>
<td></td>
<td>(2004)443/444</td>
<td>Counselling formation course</td>
</tr>
<tr>
<td></td>
<td>(2005)464</td>
<td>Counselling formation course</td>
</tr>
<tr>
<td></td>
<td>(2005)554</td>
<td>Investigative counsellor training course</td>
</tr>
<tr>
<td></td>
<td>(2006)200</td>
<td>Counselling seminar</td>
</tr>
<tr>
<td></td>
<td>(2006)329/388</td>
<td>Classroom counselling course</td>
</tr>
<tr>
<td></td>
<td>(2006)577/581</td>
<td>Classroom counselling coaching in primary education institutions course</td>
</tr>
<tr>
<td></td>
<td>(2007)731/746</td>
<td>Counselling service seminar</td>
</tr>
<tr>
<td></td>
<td>(2007)809</td>
<td>Counselling course</td>
</tr>
<tr>
<td>Improving teachers’ ability to use information and technology tools</td>
<td>(2002)295/296</td>
<td>Use of information and communication technologies in education course</td>
</tr>
<tr>
<td></td>
<td>(2007)729</td>
<td>Bases of information technologies course</td>
</tr>
<tr>
<td></td>
<td>(2007)730</td>
<td>Bases of computer networks course</td>
</tr>
<tr>
<td></td>
<td>(2010)30/514/526/546</td>
<td>Web-based content development course</td>
</tr>
<tr>
<td></td>
<td>(2010)448</td>
<td>Computer programming course</td>
</tr>
<tr>
<td>Organizing in-service trainings for values education</td>
<td>(2016)480</td>
<td>Values education educator training</td>
</tr>
<tr>
<td></td>
<td>(2018)303</td>
<td>Values education educator training within the scope of renewed curriculum</td>
</tr>
<tr>
<td>Improving algorithmic thinking skills of classroom teachers</td>
<td>(2019)295/354</td>
<td>Algorithmic thinking course (Teachers in Ankara)</td>
</tr>
</tbody>
</table>

As it is observed in Table 6, target policies for contents of in-service education programs in Turkey’s main policy papers and documents of teacher training and development institutions have been put into practice, and in-service trainings in line with these policies have been organized. In other words, it can be stated that target policies for in-service education have been reflected on the relevant programs. However, ‘improving algorithmic thinking skills of classroom teachers’, as one of the target policies, has been partially actualized because the in-service education program adopted in line with the relevant target was not carried out across Turkey; it was only put into practice for some classroom teachers working in Ankara.

**Discussion, Conclusion and Recommendations**

This study aims to identify the target policies for in-service education practices in the field of teacher training in Turkey and to investigate reflections of these policies on practice. Based on the findings obtained, teacher-based educational needs for the improvement of instruction at schools were determined, and changes in these needs between 1980 and 2020 were observed. Moreover, the reflections of the policies aimed at meeting teachers’ educational needs on practice were identified. In this context, based on the research findings, it was observed that target policies for in-service education in the field of teacher training in Turkey were presented in two main perspectives. The first one was discovered to be “general policies” targeted to ensure continuity of in-service training practices through updates and to come up with a new professional development model. The other perspective involved the target policies for the contents of in-service education, and these policies shed light on the teacher-based deficiencies on the way to improve instruction at schools. When the findings were examined, it was observed that in-service education contents targeted in policy papers were mostly for classroom teachers.

When the reflections of these target policies on practice were examined, it was concluded that the policies, within the scope of the general policies theme, offered to ensure the continuity of in-service education programs through updates and to establish a school-based professional development model did not remain a theory and were implemented. As a matter of fact, it was observed that in-service training activities, tending to increase in number since the beginning of the 2000s, reached the peak especially in 2010. Even though there were occasional decreases afterwards, the planned activities started to increase as of 2019 (MEB, n.d. -b). In addition, it is acknowledged that the piloting of school-based professional development model began in Turkey with the Ministry of National Education’s decision no. 665, dated 2010 (MEB, 2010c).

When the reflections of the policies regarding in-service education contents, which is another theme determined as a result of the research, were examined, it was concluded that most of the contents targeted for teachers’ educational needs were put into practice; however, several trainings were kept on a regional basis without spreading across the country. For instance, it was seen in the
findings that the in-service education plan to improve the algorithmic thinking skills of classroom teachers was applied only in Ankara, and teachers who continued their educational activities in other provinces could not make use of the training in question.

Another noteworthy result of the research is that there are similarities and differences between in-service education policies offered to teachers in Turkey’s main policy papers and documents of institutions responsible for teacher training and development, and results of the studies conducted to identify teachers’ educational needs to improve education at schools. Indeed, it can be stated that improving teachers’ ability to use information and communication technologies, which is one of the policies targeted most for in-service education contents, is among the educational needs identified most in the relevant research results. In her study, Akar (2007) emphasized the need for teachers to improve their skills for effective use of computers, internet and technology. Basturk (2012) concluded in his research that teachers needed in-service education on the effective use of educational technologies. Furthermore; Ergin, Akseki & Deniz (2012) stated in their studies that teachers needed training to adapt to technological changes. On the other hand, some needs identified in the studies conducted to determine in-service training needs of teachers were not encountered in the in-service education policies. Actually, Kucuktepe (2013) revealed in his study that teachers needed training on assessment and evaluation, and classroom management. Similarly, Tekin & Ayas (2006) highlighted that teachers should receive in-service education to ensure active participation of students in the lesson. In another study, it was pointed out that teachers should be provided with in-service training on teaching and learning processes, and lesson planning (Serin & Korkmaz, 2014). Likewise; Karasu, Aykut & Yılmaz (2014) concluded in their study that teachers required in-service education regarding classroom control and teaching methods. In conclusion, it is observed that the issues identified in the studies conducted to determine teachers’ educational needs, which is considered quite important to improve instruction and increase the quality of education at schools, are not represented adequately in the in-service education policies developed.

Another important point to consider here is teachers’ opinions on the effectiveness of practices, as the most important subjects of in-service education programs. Indeed, when studies reflecting teachers’ views on the relevant subject are investigated, it is revealed that there are different opinions. In some studies, the view that in-service education programs contribute to teachers is dominant (Basturk, 2012; Gultekin & Cubukcu, 2008; Ozen, 2006;). Nevertheless, in some other studies, it is stated that in-service trainings do not serve their purpose, and they are not effective enough (Dogan, 2009; Ozcan & Bakioglu, 2010; Sahin, Cek & Zeytin, 2011).

Based on the research results, it is recommended that comprehensive in-service training programs meeting the educational needs of all teachers should be implemented, without focusing on a specific branch, to improve instruction and increase the quality of education at schools. Moreover, in
the planning of in-service trainings to be provided for teachers in Turkey, it is considered necessary to pay more attention to the results of studies conducted to determine teachers’ educational needs.

**References**


Examining Social Studies Prospective Teachers’ Active Citizenship Self-Efficacies within The Scope of Levels of Empathy and Acceptance of Differences

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Abstract

As is known, social studies course is taught from 4th grade to the end of 7th grade within the scope of basic education. Social studies course, focused mainly on raising active citizenship, is given (lectured) by teachers who received training on this field. This study was carried out to reveal social studies prospective teachers’ active citizenship self-efficacies within the scope of levels of empathy and acceptance of differences. For this, scales of active citizenship self-efficacies, of empathy level and acceptance of differences were applied to 378 in total of prospective teachers who are studying at faculty of education at two state universities. Data obtained of scales were analysed using SPSS package software. Relationship of the applied scales with faculty, class, rural-urban origin was examined. Independent t test for unrelated two samples, and one-way analysis of variance for unrelated k-sample were carried out, and multiple regression analysis was performed to reveal predicting situation/state of level of active citizenship self-efficacies by level of empathy and acceptance of differences. As result of the analysis, it was found that prospective teachers’ active citizenship self-efficacies and level of empathy were high; that of acceptance of differences was very high. According to this, empathy and acceptance of differences explain the situation/state of active citizenship self-efficacies by 24%. In terms of multicultural education, empathy and acceptance of differences are effective in raising active citizens. active citizenship requires not only participation in politics, but also high acceptance and empathy for different segments of society

Keywords: Social Studies, Active Citizenship, Empathy, Acceptance of Differences, Prospective Teachers, Regression Analysis

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Introduction

In the most general sense, citizenship is a political bond that arranges relationships between the state and the individual (Sejersen, 2008). Throughout history, main purpose of system, called as state, has been to raise good citizen. Although the concept “good citizenship” has undergone some changes during historical process, it indicates mainly commitment (dedication) to that state. As a matter of fact, it was stated that city inhabitants can not go out of the city in Sumerian and Assyrian Laws (Codes of Sumerian and Assyrian) (Karakoç, 2012). In Ancient Greece, the concept “citizen” was used, which states affiliation (belonging) to city-state (Polat, 2011); however, right of participation to political life was entitled to a certain section only. It can be said that women and slaves could not take advantage of public rights, that is, they had not been accepted as citizen in the Romans who had used similar legal (law) system, as well (Osmanağaoğlu, 2004). That “the citizenship fact” gained a political meaning came true through 1789 French Revolution (Demirbaş & Aydinözü, 2020).

Bond providing an individual’s affiliation (belonging) to a state is citizenship, and person who is affiliated (is committed/attachment) to that state with nationality bond is called as citizen. In a state, it is necessary for individuals to be affiliated (attached/committed) to that state with citizenship bond so that they can take advantage of rights granted by the state (Karaman-Kepenekçi, 2008). Citizenship can be defined as a set of relationships between rights, duties, participation in civil society and identity (Delanty, 2000). Citizenship is a political and legal bond that is forged between the state and the individual. This bond affects fundamental rights such as right to vote, choice of residence and taking advantage of public services etc. (Güngör, 2019). In other words, citizenship is key criterion for relationship between the state and the individual (Pazarç, 2018). Individuals can have various rights and responsibilities within the citizenship law. In a democratic state, citizenship is individuals’ the only identity element that is shared equally by everybody, such as religion, race, social class and gender etc. (Bakioğlu & Kurt, 2009). Active citizen is individuals who are conscious of fundamental rights and freedoms and have potential to carry society they are living in forward through this consciousness (Saripek, 2006). Active citizens are persons who are sensitive to problems of country in which they are living. They struggle for laws to be changed, which have lost their functionality within the process and could not meet need of the society. In the century within which we are, active citizenship fact contains such skills as having policial knowledge, taking social responsibilities and being participant etc. Active citizenship includes quite wide of activities from political participation to social responsibility, environmental sensitivity (Çetin, Dil, Arslan & Yazıcı, 2019). On the other hand, each state tries to secure unity and solidarity in the country by maintaining its political, cultural and economic integrity within its political borders. Maintaining political integrity actualizes through the citizen’s commitment (loyalty/attachment) to the state. Individual’s having occupational right and
(right) to elect and be elected, and one’s participating to administration as active citizen increase one’s commitment to political system (Celkan, 2014).

Citizenship education, on the other hand, gives citizens the opportunity to make meaningful contributions to society from a young age and thus become responsible and active citizens. Therefore, meaningful democratic citizenship education requires citizens to share a subjective sense of national citizenship membership while developing a common commitment to global citizenship (Williams, 2003). Global Citizenship places more responsibility for the world in the hands of ordinary citizens to ensure that society is central to its political and economic development (Penner & Sanderse, 2017). It consists of a number of elements such as active citizenship, responsibility, political participation, civic participation, traditional political participation and non-traditional political participation. While political and civic participation requires individuals to be aware of civic or political issues, civic and political participation refers to specific actions such as voting as an individual or as part of a social group (Bee & Kaya, 2017).

In the literature, there are a good deal of studies on active citizenship. Bıçak and Ereş (2018) examined teachers’ views on civic (citizenship) education. For this study, teachers find important that values of students’ critical thinking and participation to social activities should be improved in civic education; think that patriotism value should be brought in/added for a good citizenship. In a study (Aydın & Çelik, 2017) where secondary school students’ metaphoric perceptions on active citizenship and rules of law were examined, students regard the active citizen as individual who works for one’s country. Another study in which civic education at level of primary and secondary education was examined belongs to Som and Karataş (2015). In a study, carried out by Şahbudak and Ayan (2011) upon faculty members’ consciousness of citizenship, at Cumhuriyet University in Sivas city, it revealed that some faculty members were in the position of passive citizen. Demirtaş and Aydmöüzü (2020), who had examined university students’ perceptions of citizenship, reached the conclusion that their perceptions of citizenship varied by gender and place where they live. In study by Değirmenci and Euskici (2019), it revealed that prospective students associated active citizenship to social responsibilities. In another study where social studies prospective teachers’ experiences of active citizenship were examined, a phenomenological study was carried out upon political & social roles, services and benefits of non-governmental organizations from prospective teachers’ point of view (Ersoy, 2014,a).

Competencies concerning active citizenship, such as having political knowledge, taking responsibility and being participant etc., necessitate to respect to others’ thoughts and to behave different thoughts and life styles respectfully. In a globalized world, education places more emphasis on equipping individuals with the knowledge, skills, attitudes and behaviors they need to become citizens with high empathy skills from an early age (UNESCO, 2014). Citizenship education focuses
on developing worldwide justice, acceptance of differences, and adherence to the universal principles of the human community (Banks, 2004). active citizens must have a sense of responsibility and tolerance and a willingness to cooperate with each other. Moreover, respect for individual differences, recognition of diversity in society, working together for common good, and conflict resolution are well-known characteristics of active citizens (Stubbs, 1995). From this perspective, it can be said that being active citizen is related to competences of empathy skill and acceptance of differences. Because, skill of active citizenship has today become global beyond legal borders (territories) of states. In this context, active citizens take/undertake a role as a citizen of the world (global citizen); respect to socio-cultural diversity; and they value this (Yıldırım, 2018).

Empathy is an individual’s skill to establish identification with someone else/another one by putting oneself in someone else’s place while one is trying to understand (Barret-Lennard, 1981). Individuals having skill to understand others (another ones’) feelings (Voltan-Acar, 2009) can evaluate both them from others (another ones)’ point of view and others from other people’s point of view (Gürüz and Eğinli, 2008). Individuals evaluating events from the opposite person’s point of view behave others’ views respectfully (Akduman et al., 2018). Rather, empathy skill is related to the fact that understanding and perceiving/feeling the person (who is opposite the individual)’s emotion are transferred/conveyed and making feel/evoking to that person, again (Kaya & Siyez, 2010). Individual needs firstly to put oneself in the opposite person’s place in order for one to establish empathy with another one/someone else. However, matter what is important here is to correctly understand the opposite person’s feelings and thoughts. Later on, the one who has established empathy needs to transfer/convey empathic understanding, which one has created in one’s mind, to the opposite person (Dökmen, 2004). At this point, it is seen that empathy is composed of two components: First one is dimension of individual’s understanding the opposite person’s thoughts by putting oneself the opposite person’s place, i.e., cognitive dimension of empathy; second one is dimension of feeling the opposite person’s emotions, i.e., affective dimension. Empathy skill is also associated to social sensitivity (Kabapınar, Tabak & Yavuz, 2019).

There are studies on empathy skill in the literature. One of those is the study (Yılmaz, 2016) where secondary school students’ achievements during development of the empathy in social studies courses were examined by qualitative method. In another study, effect of empathy skill on developing/raising environmental awareness and on academic achievement was presented (Konuk & Yıldırım, 2018). Koçoğlu (2018), as a result of interviews which he had with the teaching instructors who are working at department of social studies education of faculty of education at eight universities, concluded that academicians had different perceptions from each other, on empathic thinking skill. Elikesik & Alim (2013) stated that social studies teachers’ empathic skills differed by variables of gender, educational background/state of education, seniority, department based on teachership and
receiving in-service training. Social studies prospective teachers’ empathic perceptions were examined by Uymaz & Çalışkan (2018).

Empathy provides the individual with establishing good relationships with persons from different culture (Pala, 2008). Empathy, a social activity, is positively related to self-actualization/realization, socialization and social adaptation (Uymaz & Çalışkan, 2018). Individuals whose empathic skills have improved can state/express their own feelings and thoughts correctly, (Dökmên, 2004). They can establish stronger social relationships with their environments and for this reason, can be healthier and happier (Şimşek & Öztürk, 2014). Because, empathy skill provides for inter-individual relationships to carry on healthily in the social life. In addition to this, empathy provides the individual with being understanding and respectful to individuals’ thoughts, who are different from one.

Acceptance of differences is pretty important in that a democratic society is created. Acceptance of differences emerged firstly within approach to multicultural education in USA in 1980s; in our country, it was addressed in the 2005 curriculum. The concept ‘difference’ can be defined as characteristics/features that distinguish an event/a case or fact from others (TDK, 2020). Differences can be classified as “alterable differences” and “unalterable differences” (Öksüz and Güven, 2012). Cultural elements such as ethnic origin, belief, value judgments, sexual orientations, personality structures, occupation (profession), socio-economic level and family structure can be an element of difference as well as that physical elements such as gender, age, skin colour, weight and height etc. could constitute a difference. Also, mental capacity and state of physical disability can constitute element of difference. It can be thought that some elements of difference would be able to change within the process and some would be able to continue for individual’s lifetime.

Inborn/ascribed differences are unalterable ones (impossible to be altered). For example, elements of difference such as gender, race and origin etc. are differences that exist beyond individual’s own choice. Such differences are observable ones. However, differences such as economic level, status, belief and profession etc. are named as alterable (possible to be altered) since they acquired. Alterable differences constitute unobservable differences (Point & Singh, 2003). Because, effect of these kinds of differences on individual’s life are more variable in comparison with others. The individual has the right to be able to keep secret such differences, from one’s environment (Hubbard, 2004). But there is both individual and social dimension of differences. For this reason, to distinguish them from each other is not a right approach (Ewijk, 2011). What is important here is the individual’s manner (behaviour) and attitude that one takes against them, rather than type of differences. It is necessary for differences to be accepted and to be respected to these so that conflicts originating from differences can be precluded, individuals having these differences can feel sense of belonging and social disturbance (confusion/disorder) can be prevented. Social studies course accepts
the idea that individual is unique and special (exclusive) and for this reason, each individual is valuable. Acceptance of differences bears the meaning that they should be seen as a natural situation.

In the literature, there are studies on acceptance of differences. One of these is the study, carried out by Baştürk & Yiğit (2019), where prospective teachers’ level of respect to differences, who are studying at department of basic education was evaluated by different variables. Koc and Duygu (2019), in their study, concluded that secondary students had high level of respect to differences. In a similar study was carried out by Gørmez (2019). In a study on social studies prospective teachers gain/bring in skill of respect to differences and of empathy, storyline was recommended as a method that can be used in values education (Çatlak & Yiğit, 2017).

In this study, active citizenship self-efficacy of social studies teacher candidates was examined within the scope of their empathy levels and acceptance of differences. The study was based on the following research questions,

1. What are the pre-service teachers' self-efficacy levels of empathy, accepting differences and active citizenship?

2. Do teacher candidates' levels of empathy, acceptance of differences and active citizenship self-efficacy vary according to grade levels?

3. Do teacher candidates' levels of empathy, accepting differences and active citizenship self-efficacy differ according to their rural-urban origins?

4. Do teacher candidates' levels of empathy, acceptance of differences and active citizenship self-efficacy differ according to the faculty they studied?

4. Does social studies teacher candidates' empathy levels and acceptance of differences tire their active citizenship self-efficacy?

**Method**

In this study, relational research model, one of the quantitative research methods, was used. Relational screening (correlational survey) models are ones aiming to reveal/determine presence of covariance change between two or more variables; or if any, to specify its degree (Karasar, 2014). Relational research design is one (research) that relationship between two or more variables is examined without intervening these variables in any way (Büyüköztürk, Çakman, Akgün, Karadeniz, & Demirel, 2018).

**Sample**

Social studies teacher candidates constitute the universe of the research. The sample group consists of 378 teacher candidates studying in the social studies department of two state universities in the academic year of 2019-2020. 234 of them are social studies teacher candidates who are studying at Buca Education Faculty and 144 from Demirci Education Faculty.
Data Collection Tools

In this study we used personal information form containing prospective teachers’ place of birth, rural-urban-town origins and faculty&class/grade information; Active Citizenship Self-Efficacy Scale; Empathy Quotient Scale (Empathy Level Determination Scale); and Scale for Acceptance of Differences.

Active Citizenship Self-Efficacy Scale: The scale consists of 18 items and three dimensions. Developed by Aslan, Dil, Çetin & Yazıcı (2017), in the scale’s exploratory factor analysis, percentage of total variance explained (total variance explanation rate) of three factor-structure of the scale was determined by 57.17%; and in confirmatory factor analysis, chi-square value was found meaningful. Thus, construct validity of the scale was proved. Sub-dimensions of the scale were named as “political literacy”, “participation” and “protest and responsibility”. Cronbach’s alpha reliability coefficient was determined as .90 in the whole of the scale; as .84, .82 and .89 for sub-dimensions. In this study, reliability is .88 for whole of the scale. There are no reverse items in the scale.

Empathy Quotient Scale (Empathy Level Determination Scale): The scale consists of 13 items and three dimensions. Developed by Lawrence, Shaw, Baker, Baron-Cohen & David (2004), the scale was adapted by Kaya and Çolakoğlu (2015) to social studies prospective teachers. Dimensions of the scale were named as “Social Skills”, “Affective/Emotional Reaction” and “Cognitive Empathy”. Cronbach’s alpha reliability coefficient was determined as .91 in the whole of the scale; as .61, .75 and .74 for sub-dimensions, respectively. In this study, reliability was calculated as .81 in whole of the scale. There is one reverse item in the scale (3rd Item).

Scale for Acceptance of Difference: The scale consists of 9 items and three sub-dimensions. It was developed by Deniz & Ünal (2019). Relationship/correlation of sub-scales which constitute The Scale for Acceptance of Differences with each other was found at medium (r:0.41; r:0.46 and r:0.40) level; and their relationship/correlation with total at high (r:0.78 and r:0.79). Sub-dimensions of the scale were named as “Acceptance of Different Religious/Ethnic Structures”, “Acceptance of Difference Appearances” and “Acceptance of Difference Thoughts/Values”. Cronbach’s alpha reliability coefficient was determined as .77 in the whole of the scale; as .67, .63 and .56 for sub-dimensions, respectively. In this study, whole of the scale reliability was calculated as .851. There is one reverse item in the scale (2nd Item).

Five-point rating was used in all scales. Score (point) averages were evaluated between range of 1 – 1.80 point as very low; of 1.81 – 2.60 point as low; of 2.61 – 3.40 point as medium; of 3.41 – 4.20 point as high; and of 4.21 – 5.00 point as very high.
Analysis of Data

SPSS statistical package program/software was used in analyzing data. Firstly, descriptive statistics on social studies prospective teachers’ rural-urban and place of birth were produced. Later, mean (average) score, standard deviation, minimum and maximum values, obtained from scales, were calculated. Before data were analyzed, whether or not data were normally distributed were checked. In order to determine whether or not scores taken from scales were of normal distribution, analysis results of Shapiro-wilk, Histogram and Q-Q Plot and Kolmogorov-Smirnov test were benefitted from (p>.05). Kurtosis and Skewnessis values are assumed to be normal distribution/variance when they are between -1.5 and +1.5 (Tabachnick & Fidell, 2013). All tests were evaluated and it concluded that scores, obtained from tests which were performed in order to determine whether or not the applied three scales were of normal distribution, satisfied normality assumption. Kurtosis value was calculated as .370 for active citizenship self-efficacy scale and Skewness value as -.531; Kurtosis value as -.033 for empathy level scale; Skewness value as -.386; and Kurtosis value as 1.351 for scale for acceptance of differences and Skewness value as 1.277. Independent t-test for unrelated two samples (faculty and rural-urban origin) and one-way analysis of variance for the unrelated k-sample (class/grade) were carried out (Büyüköztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2018).

Pearson Correlation Test was applied to determine relationship/correlation between scales which were used in the study. As a process of multi regression, operation of diagnosing collinerarity (diagnostic operation/transaction to collinearity) was carried out. Tolerance and VIF values were determined (Pallant, 2017). Finally, multi regression analysis was performed to reveal regression/predictive situation of level of active citizenship self-efficacy by that of acceptance of differences. In all analyses performed, meaningfulness/significance was tested at level of p<.05 and findings were presented in tables.

Results

61.40 percent of social studies prospective teachers, who attended into the study, are studying at Buca Faculty of Education and 38.60 of them are at Demirci Faculty of Education. 22.02 percent of social studies prospective teachers, who attended into to study, consist of first grade; 22.54% of second grade; 21.76% of third grade; and 33.68% of fourth grade.
Table 1. Information on Prospective teachers’ place of birth

<table>
<thead>
<tr>
<th>Place of Birth (Region)</th>
<th>Total (%)</th>
<th>Rural-Urban (%)</th>
<th>Region (%)</th>
<th>Total (%)</th>
<th>Rural-Urban (%)</th>
<th>Region (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>İzmir</td>
<td>22,0</td>
<td>28.4</td>
<td>94.0</td>
<td>20.9</td>
<td>4.6</td>
<td>6.0</td>
<td>21.8</td>
</tr>
<tr>
<td>Aegean</td>
<td>13.2</td>
<td>13.2</td>
<td>68.4</td>
<td>10.1</td>
<td>17.0</td>
<td>31.6</td>
<td>14.8</td>
</tr>
<tr>
<td>Mediterranean Anatolia</td>
<td>10.2</td>
<td>10.2</td>
<td>70.0</td>
<td>7.4</td>
<td>12.0</td>
<td>30.0</td>
<td>10.4</td>
</tr>
<tr>
<td>Eastern Anatolia</td>
<td>5.5</td>
<td>5.5</td>
<td>53.3</td>
<td>4.0</td>
<td>14.0</td>
<td>46.7</td>
<td>7.8</td>
</tr>
<tr>
<td>Blacksea</td>
<td>7.6</td>
<td>7.6</td>
<td>36.2</td>
<td>5.6</td>
<td>3.6</td>
<td>63.8</td>
<td>15.0</td>
</tr>
<tr>
<td>Marmara</td>
<td>6.8</td>
<td>6.8</td>
<td>59.4</td>
<td>5.6</td>
<td>5.6</td>
<td>40.6</td>
<td>16.1</td>
</tr>
<tr>
<td>Central Anatolia</td>
<td>6.8</td>
<td>6.8</td>
<td>93.5</td>
<td>5.6</td>
<td>5.6</td>
<td>6.5</td>
<td>6.0</td>
</tr>
</tbody>
</table>

As seen in Table 1, while 72% of prospective teachers were urban-born, 28% of them were born in villages and towns. When evaluating on city basis, rate/percentage of İzmir-born ones are 21.8% while that of cities (Balıkesir, Bilecik, Çanakkale, Edirne, Istanbul, Bursa, Kırklareli, Kocaeli, Tekirdağ) from Marmara Region is 16.1%. Later, those take a place/appear in order, who were born in cities from Eastern Anatolia Region ( Ağrı, Bingöl, Bitlis, Elazığ, Malatya, Şırnak, Tunceli, Muş, Van, Ardahan, Erzincan, Erzurum, Kars); Aegean Region ( Aydın, Manisa, Muğla, Denizli); Mediterranean Region (Mersin, Adana, Hatay, Osmaniye, Antalya, Kahramanmaras); Blacksea Region (Zonguldak, Karabük, Bolu, Giresun, Trabzon, Rize, Samsun, Sinop, Gümüşhane); and Southeastern Anatolia Region (Diyarbakır, Gaziantep, Şanlıurfa, Mardin).

Table 2. Descriptive statistics for scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number</th>
<th>Mean/Average</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Citizenship Self-Efficacy</td>
<td>378</td>
<td>4.1449</td>
<td>.48363</td>
<td>2.33</td>
<td>5.00</td>
</tr>
<tr>
<td>Empathy Level</td>
<td>378</td>
<td>4.1435</td>
<td>.46675</td>
<td>2.23</td>
<td>5.00</td>
</tr>
<tr>
<td>Acceptance of Differences</td>
<td>378</td>
<td>4.3257</td>
<td>.70133</td>
<td>1.67</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Values of arithmetic mean, standard deviation, minimum-maximum for scales were given in Table 2. According to this, score average, which prospective teachers got/obtained from active citizenship self-efficacy scale, is at high level by 4.14; that of which they got from empathy level scale is at high level by 4.14; and that of which they got from the scale for acceptance of differences is at very high level by 4.32.
Table 3. T-test results of scales by prospective teachers’ faculties

<table>
<thead>
<tr>
<th>Faculty</th>
<th>N</th>
<th>Average/Mean</th>
<th>St. Deviation</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Citizenship Self-Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEF</td>
<td>234</td>
<td>4.0897</td>
<td>.48658</td>
<td>-2.854</td>
<td>.005*</td>
</tr>
<tr>
<td>DEF</td>
<td>144</td>
<td>4.2346</td>
<td>.46669</td>
<td>.48658</td>
<td>.48658</td>
</tr>
<tr>
<td>Empathy Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEF</td>
<td>234</td>
<td>4.1039</td>
<td>.47288</td>
<td>-2.136</td>
<td>.03*</td>
</tr>
<tr>
<td>DEF</td>
<td>144</td>
<td>4.2078</td>
<td>.45084</td>
<td>.2136</td>
<td>.03*</td>
</tr>
<tr>
<td>Acceptance of Differences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEF</td>
<td>144</td>
<td>4.2045</td>
<td>.80700</td>
<td>2.657</td>
<td>.01*</td>
</tr>
</tbody>
</table>

As a result of Independent sample t-test, performed to determine Social Studies prospective teachers’ active citizenship self-efficacies, their empathy levels and acceptances of differences, active citizenship self-efficacy, empathy level and acceptance of difference show a meaningful difference by faculty at which they are studying. As seen in Table 3 prospective teachers’ score average of active citizenship, self-efficacy and empathy level, who are studying at Demirci Faculty of Education (DEF), is higher than those who are studying at Buca Faculty of Education (BEF). Prospective teachers’ score average of scale for acceptance of differences, who are studying at Buca Faculty of Education, is higher than those who are studying at Demirci Faculty of Education.

Table 4. Anova test results of scales by prospective teachers’ grade levels

<table>
<thead>
<tr>
<th>Grade</th>
<th>N</th>
<th>Mean</th>
<th>St.Deviation</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Citizenship Self-Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>83</td>
<td>4.1954</td>
<td>.45461</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>87</td>
<td>4.0600</td>
<td>.48722</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>82</td>
<td>4.2547</td>
<td>.46456</td>
<td>3.036</td>
<td>.771</td>
</tr>
<tr>
<td>4</td>
<td>126</td>
<td>4.0988</td>
<td>.49992</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>83</td>
<td>4.1520</td>
<td>.44998</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>87</td>
<td>4.1645</td>
<td>.49854</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>24</td>
<td>4.1632</td>
<td>.45715</td>
<td>.325</td>
<td>.808</td>
</tr>
<tr>
<td>4</td>
<td>126</td>
<td>4.1105</td>
<td>.46486</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>83</td>
<td>4.3802</td>
<td>.71191</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>87</td>
<td>4.2912</td>
<td>.74752</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acceptance of Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>82</td>
<td>4.3564</td>
<td>.71044</td>
<td>.375</td>
<td>.029*</td>
</tr>
<tr>
<td>4</td>
<td>126</td>
<td>4.2937</td>
<td>.65959</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<.05

As a result of Anova test, performed to determine situations of active citizenship self-efficacies, empathy level and acceptance of differences, by social studies prospective teachers’ grade/class level in which they are studying, active citizenship self efficacy and empathy level show no significance difference, by grade/class level. A meaningful relationship was determined between acceptance of differences and grade level. In addition to these, first grade students’ score averages of acceptance of differences were found to be higher than those of other grade levels.
Table 5. Scheffé test results according to the grade level of the acceptance of the differences.

<table>
<thead>
<tr>
<th>Grade</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>the difference is important</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>the difference is important</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 was created as a result of the analysis made to reveal the reason for the difference according to the acceptance of the differences. Accordingly, it was revealed that there is a significant difference between second grade students and third grade students.

Table 6. T – Test Results by prospective teachers’ rural-urban origins

<table>
<thead>
<tr>
<th>Scales</th>
<th>Origin</th>
<th>N</th>
<th>Mean</th>
<th>St.Deviation</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Citizenship Self-</td>
<td>Urban</td>
<td>275</td>
<td>4.1337</td>
<td>0.45948</td>
<td>3.127</td>
<td>0.496</td>
</tr>
<tr>
<td>Efficacy</td>
<td>Ural</td>
<td>103</td>
<td>4.1748</td>
<td>0.54419</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy Level</td>
<td>Urban</td>
<td>275</td>
<td>4.1731</td>
<td>0.46335</td>
<td>2.028</td>
<td>0.045*</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>103</td>
<td>4.0642</td>
<td>0.46878</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acceptance of Differences</td>
<td>Urban</td>
<td>275</td>
<td>4.3939</td>
<td>0.64223</td>
<td>3.127</td>
<td>.002*</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>103</td>
<td>4.1435</td>
<td>0.81481</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<.05

Result of Independent t-test, performed to determine active citizenship self-efficacies, empathy level and acceptance of differences, by social studies prospective students’ rural-urban origins, are shown in Table 6. According to this, while there is no meaningful difference between active citizenship self-efficacy and rural-urban origin; empathy level and acceptance of differences show meaningful difference by rural-urban origins (p<.05). According to mean rank, urban-born ones’ score averages of empathy level and acceptance of differences are high.

Table 7. Correlation coefficients by variables of the study

<table>
<thead>
<tr>
<th>Variables</th>
<th>Active Citizenship Self-Efficacy</th>
<th>Empathy Level</th>
<th>Acceptance of Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Citizenship Self-</td>
<td>-</td>
<td>.498**</td>
<td>0.094*</td>
</tr>
<tr>
<td>Efficacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy Level</td>
<td>.498**</td>
<td>-</td>
<td>.218**</td>
</tr>
<tr>
<td>Acceptance of Differences</td>
<td>.094*</td>
<td>0.22**</td>
<td>-</td>
</tr>
</tbody>
</table>

When correlation coefficients of the study have been examined, it is seen that no relationship at high level was determined between variables. As a matter of fact, as is seen in Table 7, correlation values are below 70.

Table 8. Multi-collinearity values of predictor variables for dependent variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>VIF Values</th>
<th>Tolerance Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy Level</td>
<td>1.050</td>
<td>.952</td>
</tr>
<tr>
<td>Acceptance of Differences</td>
<td>1.050</td>
<td>.952</td>
</tr>
</tbody>
</table>
In Table 8, VIF values of active citizenship self-efficacy level (dependent variable) of predictor variables, determined as empathy level acceptance of differences, are seen to be below 3. Tolerance value is above .10. These results indicate that data are linearly distributed.

Table 9. Multi-regression analysis results of predictive role of empathy levels and acceptance states of differences for active citizenship self-efficacies

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Standard Error</th>
<th>B</th>
<th>T</th>
<th>p</th>
<th>binary r</th>
<th>partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable</td>
<td>2.038</td>
<td>0.215</td>
<td></td>
<td>9.478</td>
<td>0.000**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy Level</td>
<td>0.520</td>
<td>0.048</td>
<td>0.502**</td>
<td>10.933</td>
<td>0.000**</td>
<td>.498</td>
<td>.489</td>
</tr>
<tr>
<td>Acceptance of Differences</td>
<td>-0.011</td>
<td>0.032</td>
<td>-0.015</td>
<td>-0.337</td>
<td>0.737</td>
<td>0.017</td>
<td>0.015</td>
</tr>
</tbody>
</table>

n=378, R=.498, R²=.244, F=61.962, Sig=.00,
*p<.05, **p<.01

Multi-regression analysis results, of whether or not social studies prospective teachers’ empathy levels and states of acceptance of differences predicted their active citizenship self-efficacies, were presented in Table 9. The model is statistically meaningful/significant (Sig=.00). Empathy and acceptance of differences predict level of active citizenship self-efficacy by the rate of .24. In other words, these two variables, together, explain 24% of change in belief of active citizenship self-efficacy. According to the standardized regression coefficients, order of importance is in empathy level ($\beta=0.502$) and acceptance of differences ($\beta=0.032$). When significance/meaningfulness tests of regression coefficients have been considered, variable of empathy level ($p<0.01$) is seen to be a meaningful predictor over active citizenship self-efficacy.

Discussion, Conclusion and Recommendations

The term “active citizenship” is defined as participation into a society and political life that is characterized by mutual respect, in compatible with human rights and democracy in the context of Europe (Hoskins and Mascherini, 2009). In this study, we examined social studies prospective teachers’ active citizenship self-efficacies, who have important responsibilities for raising future citizens, within the scope of levels of empathy and acceptance of differences. Social studies prospective teachers’ active citizenship self-efficacies were found to be high/as high. Ersoy (2014,b), in his study which he carried out with prospective teachers, revealed that non-governmental organizations have made contribution to active citizenship education in dimension of social and ethical responsibility and social involvement (community participation). In the literature, we encounter studies which indicate prospective teachers have positive attitudes to multiculturalism/polyculture (Ünlü and Örten, 2013) and cultural difference (Çoban, Karaman and Doğan, 2010). In addition to these, Utku (2015) indicates that social studies prospective teachers have high perception of citizenship. Active citizenship self-efficacy is at higher level on social studies prospective teachers who are studying at Demirci Faculty of Education. It can be said that Demirci’s being a small settlement/dwelling unit has an effect on this. It is possible to say prospective teachers’
being able to reach easily to various institutions, organizations and authorities in Demirci also has an impact on occurring this situation. It is remarkable that active citizenship self-efficacy did not differ/vary by both grade level and state of rural-urban origin. This can be interpreted as widespread the use of means of communications and partially raising level of consciousness, have an effect on emerging this situation. Also in study by Doğanay, Çuhadar & Sari (2007), prospective teachers’ levels of political participation do not vary/differ meaningfully by place where the family lives. It is seen that effective/active citizenship efficacies showed no differences by settlement unit where families were residing, in Sağlam (2011)’s study. Ersoy (2014b), in his studies, states that students with low socio-economic structure have passive, nationalist, obedient, religious and ethic perception/sense of citizenship while those with higher socio-economic sub-structure have active, democratic and critical sense/perception of citizenship. Place, where prospective teachers have spended a considerable part of their lives, do not effect their active citizenship self-efficacies. This situation can be interpreted as means of communications could increase level of knowledge on active citizenship.

Social sciences prospective teachers’ empathy levels were found to be/as high. Akbulut & Sağlam (2010) found class (elementary school) teachers’ empathy level to be/as high whereas Ata (2010) found that of preschool teachers. While Arslanoğlu (2012) found students’ empathy level, from department of physical education and sports, as high, Öncü, Kılıç & Korus (2016) found it at medium level. Elikesik &Alım (2013) determined social studies teachers’ empathy level as ‘‘indecisive/neutral’’. Empathy level is at higher level on social studies prospective teachers at Demirci Faculty of Education. That empathy level is high on social studies prospective teachers at Buca Faculty of Education where is located in the metropole is an expected result. As is known, empathy level is associated with interpersonal relationships. Based on this, it is quite normal/natural for prospective teachers to have opportunities of being able to get to know eachother well in Demirci that is a small settlement unit. But, in the literature, there are studies in which 4th grade prospective teachers’ empathy level was found to be/as high (Canbulat, Küçükkaragoğ, Erdoğan & Yeşilöğlu, 2015; Karataş, 2012). Empathy skills may differ depending on variables such as family, upbringing and living environment, which have different dynamics of their own. Thus, empathy level shows a meaningful difference by variable of prospective teachers’ being rural-urban born. Empathy level is higher on urban-born ones than rural-born ones. In the literature, there are studies where district-born students’ empathy skills are higher than those of students who are born in villages (Akgün & Çetin, 2018). Another study, where students’ cognitive empathic level, who are living in town/village, is significantly/meaningfully less than students’ scores, who are living in other settlement places, belongs to Cangür et al. (2020). These findings in the literature match up with our study.

Social studies prospective teachers’ level of acceptance of differences is very high. dolapçı (2002) states one of the most important factors in success of schools with high academic achievement
is that ethnical differences should be added into curriculum (Atasoy, 2012). Ateş (2017) found students’ perceptions of multi-culturalism to be/as high. Ünlü & Örten (2013) point out social studies prospective teachers’ positive attitudes to multi-culturalism. Self-efficacy for understanding differences is high in study by Dolapçı & Kavgacı (2020), as well. Acceptance level of differences shows a meaningful difference by faculty at which education is received/students are studying. According to this, prospective teachers who are studying at Buca Faculty of Education have high level of acceptance of differences. This situation can be considered as a result of living in metropole. Acceptance level of differences showed a meaningful difference by the grade/class variable. First and third grade students’ acceptance level of differences was found to be higher. However, Baştürk & Yiğit (2019) state that students’ respect level to differences, who are from Basic Education Department, shows no differences by grade/class. On the other hand, urban-born prospective teachers’ acceptance level of differences is higher than that of rural-born ones. Cities are places where social change is experienced more rapidly than rural environment and different cultures exist together (Altay, 2009). It can be thought that urban-born ones’ acceptance level of differences in comparison with rural-born ones depends on their state of urbanizing.

In the study, it revealed that social studies prospective teachers’ empathy level and state of acceptance of differences are a meaningful predictor of active citizenship self-efficacy. It can be said that, with high empathy and acceptance level of differences, individuals have strong skills to establish communication. In this respect, teachers and prospective teachers, with high effective communication skill, can be more successful in establishing empathy, as well. Through methods and techniques which they would employ, they arrange/regulate learning environments by individual differences, and for this reason, bringing in skills of empathy and acceptance of differences should be among priorities of education (Çatlık & Yiğit, 2017). As a matter of fact, Sever & Bayır (2020) revealed that empathy predicted respectfulness. That intercultural sensitivity is a meaningful predictor of empathy was stated by Abaslı (2018), too. Empathy and acceptance of differences are a skill that should be possessed in multi-cultural implementations of education. Teachers and prospective teachers, having these skills, can be more successful in raising citizen, one of the most important targets of social studies course. On the other hand, also in the study which was carried out upon global curriculum, increase was observed in values of empathy and tolerance belonging to students who were subjected to global curriculum. Again, in this study, it was determined that increase in students’ levels of attitudes and values through a global curriculum had a wide influence potential from social justice to tolerance, identity building as global citizenship (DeNobile, Kleeman & Zarkos, 2014). It reached the conclusion that prospective teacher. Again, prospective teachers regarded tolerance to differences in society, concerning active citizenship as necessary, but, they found state of becoming member of political party less important. This case/situation matches up with findings, reached by Ontaş and Koç (2020).
Active citizenship is a skill that in general prospective teachers and in particular social studies prospective teachers should have. Active citizenship should not be perceived as individual’s having knowledge of political subjects and as individual’s active participation into decision-making processes on politics. That individual’s being respectful to individuals who have belief, view, culture and life style contrary to individual oneself or the society-wide, is an important situation in terms of functioning of democratic life. Again, high empathic skill provides individuals having different cultural background with establishing good relationships as well as being useful in terms of individual’s moral development and psychological health (Aydın, 2017). Acceptance of differences and empathy skill in a social life in which cultural diversity increased is a quite important issue in social studies education. For this reason, skills such as empathy and acceptance of differences, predicting democratic life and active citizenship, should be taught. It is thought that teachers, whose the said skills have developed, would raise more successful individuals in practice.

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Investigating Secondary School Music Teachers' Views about Online Music Lessons During the COVID-19 Pandemic

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Abstract

In education systems, learning/teaching activities designed based on a specific curriculum for a specific age group are carried out following a work schedule. As long as conditions permit, the work schedule continues without interruption. However, crises such as pandemics disrupt this schedule and lead to problems in the planning and timely-execution of educational processes. The present study aimed to investigate secondary school music teachers' views about online music lessons during the COVID-19 pandemic and to offer outputs that will contribute to the implementation of distance education activities, which are expected to be more widespread in the future. The study employed the general screening model. The study group comprised 24 music teachers working in the central district of Kastamonu, a city in the north-west of Turkey. An interview form was developed to obtain the music teachers' views about the conduct of online lessons. Necessary permissions were obtained, and the interview form was distributed to the participants via e-mail. The data obtained from the interview forms were tried to be interpreted within them by taking the opinions of the experts. The study employed the content analysis method, one of the qualitative data analysis methods. The study found that the majority of secondary school music teachers thought that distance education was not suitable for music lessons. It was also determined that most of the participants had no prior experience with distance education, had difficulty using instruments in online lessons, and had synchronization problems in all music activities. Furthermore, internet connection problems, low motivation on the student side, the inefficiency of online lessons, digital fatigue, and the risk of children being exposed to harmful content on the internet emerged as other problems encountered by the participants.

Keywords: Covid-19, Music Lesson, Distance Education, Secondary School.

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Introduction

Education can be defined as the process of equipping the individual with the behaviors and competencies needed by the environment in which he/she lives. This process is carried out between the individual and an organization with many participants. In addition to the competencies specified in curricula, learning outcomes that are not included can also turn into behaviors in the individual. The contribution of the behavior to the individual varies depending on its content. In addition, every moment of this process affects all developmental domains of the individual (Başar, 1994).

Each nation creates its own education system, and these education systems determine different learning outcomes for different learning areas. Undoubtedly, these learning outcomes should contribute to both the individual and the society the individual interacts with. Activities aimed at achieving these outcomes can be carried out face-to-face in the classroom, as well as outside the school under certain circumstances. Out-of-school learning, which is defined as "distance education," actually caused some concerns among people. These concerns may be due to the fact that the distance education system has only recently started to be implemented widely (Odabaş, 2003).

Developments in technology and science, especially after the 1970s, affected all fields, including education. Without a doubt, the fastest and most obvious change occurred in the communication network. Postal services that took days or even months have been replaced by e-mails, which take only a few seconds to reach the recipient. This still ongoing development of the communication network is affecting the field of education, providing lifelong learning for all people, and making functional contributions to education systems. The ever-increasing use of information communication technology in education is making self-learning possible by taking the learner beyond the boundaries of the school (Arat & Bakan, 2011). In the conduct of self-learning activities, we can say that technology provides two important resources for education: the internet and the computer (Tuncer & Taşpınar, 2018).

There is an important connection between the development level of societies and educational activities. Developed countries aim to invest large amounts in education systems to be able to deliver education services to all parts of the country, and thus to promote nationwide development. In addition, developed countries tried to make education compulsory in order to ensure that the entire society goes through the educational process. However, due to problems such as adverse economic conditions, the ratio of the school-age population to the general population, the insufficient number of educators, and the lack of technological infrastructure, problems emerged in reaching each individual across the country during this process (Gelişli, 2015).

Novel methods and innovations are needed to overcome such problems and to provide the same educational opportunities for each individual. To this end, both educators and system builders
have tried to produce various plans, studies, and methods. Technology has emerged as one of the most important tools employed to solve such problems in education. One of the technology-based education applications is distance education (Gelişli, 2015).

Distance education is an education model that does not require a physical on-site presence of teachers and students and where educational activities are carried out via postal services and information communication technologies (İşman, 2011). In distance education, learning activities are carried out in a different environment than the classroom. It is arranged according to the needs of many people and offers mixed and multiple possibilities to contribute to the individual's learning. In distance education, students must both take more responsibility for their own learning and study more. Nevertheless, distance education provides an important opportunity for those who have not had the opportunity to attend face-to-face education (Kaya, 2002).

Demiray & İşman (2001) note that the idea of distance education dates back approximately 150 years ago. Kiryakova (2009) states that the idea of distance education was born in the 19th century. Distance education was carried out in the early years through existing communication technologies such as postal services. At that time, postal services were a cost-effective means of communication and formed the basis of distance education. Teachers used to mail teaching materials such as lectures, instructions, and assignments to students, and students mailed back these to their teachers. Revisions, corrections, or assessments were also carried out in this way (Kiryakova, 2009).

Modern distance education can be seen as a virtual learning environment, as it is carried out internet-based. The virtual classroom represents an interface between the students and a virtual teacher and provides personalized learning materials to the users (Kimovski, Trajkovic & Davcev, 2001). This integration of virtual and distance system not only provides certain advantages but also leads to certain disadvantages.

As the use of the internet in education is increasing, many studies are carried out and discussions are held for more efficient internet use. In fact, the level of use of information and communication technologies in education systems leads to differences in the development levels of countries. In addition, other than educational purposes, the information and communication network is used as a means of colonialism and propaganda (Tuncer & Taşpinar, 2018).

Distance education has a close relationship with social, economic, and technological conditions. Therefore, better literacy rates and more comprehensive education are needed to achieve the desired level of distance education. Distance education gives each individual lifelong learning opportunities. The quality of distance education activities depends on the development of information and communication technologies. Indeed, distance education can be as efficient as traditional education with the use of appropriate methods and technologies (Kiryakova, 2009). Yet, it will
undoubtedly take time to achieve this efficiency and to expand the use of distance education in educational processes.

Motivation in education is also very important. Students who are motivated to learn participate in lesson activities. When faced with difficulties, they try harder than give up (Schunk, 2009). The use of technology in education makes the individual feel special and motivated due to specially-tailored and personalized learning experiences. Distance education provides the individual with the freedom to learn the information at the desired place and time. It not only enables the learner to learn difficult topics but also prevents shy students from in-class nervousness and hesitation (Tecimer, 2006).

Although disputes over distance education were held in Turkey from 1923 to the 1960s, after 1970, some experience was gained and progress, albeit little, was achieved in the secondary education level. With the establishment of Anadolu University Open Education Faculty after 1980, distance education applications started to be implemented at the higher education level. It began to be used in primary, secondary, and higher education institutions between 1980 and 1990, and since then, has evolved into an institutional structure with high student potential. Since the 2000s, it has reached a student capacity of millions (Bozkurt, 2017).

Distance education studies in Turkey have now approached the desired levels. However, as of now, it is not possible to say that distance education is applicable at the same level at all educational levels and in all fields. Still, despite the fact that the frequency of use of distance education applications varies in different lessons, it can be said that there is an increase in the use of distance education applications in music education. It has also been determined that most of the distance education practices in music education are based on instrument education and that these studies are effectively carried out (Yungul, 2018).

In many countries across the world, learning/teaching activities in music education are carried out with the support of technology. Thanks to the latest developments, training programs have been developed to provide support for teachers in many topics from the history of music to solfege training. In music lessons conducted via distance education, activities can be offered to students for all learning areas such as playing (an indispensable learning area that continues to be used in music education even though it has not been included in the new program), chanting, and reading. Distance education offers teachers the opportunity to improve themselves, as well (Tecimer, 2006).

Due to major crises, it may be necessary to re-arrange the work schedule, re-plan educational plans and goals, and even re-specify the learning outcomes in curricula. All plans can change in the face of crises such as the COVID-19 pandemic. After the pandemic, activities in the field of education were interrupted in Turkey, as in the whole world, and the distance education process was initiated for
educational activities. In Turkey, face-to-face education was suspended on March 16, 2020, and the distance education process was initiated on March 23, 2020.

Due to COVID-19, which caused a global crisis, schools were closed in 191 countries around the world after 17 April 2020, and 1,724,657,870 students were affected by this situation. After this date, the distance education system became the key element in the continuity of educational activities. Educators and school administrations, some of whom did not have sufficient familiarity with the internet, computer, communication tools, and video conferencing services (e.g., Zoom, etc.) that can be used in distance education, were suddenly faced with the necessity to use these tools. Teachers had to support their students' learning and well-being with different methods and tools other than face-to-face teaching, to which they were more accustomed, as well as cope with the social and psychological challenges caused by the pandemic (Çetinkaya Aydin, 2020; Erbaş, 2021).

The use of the internet and communication tools in educational activities provides benefits in achieving the learning outcomes. Although we can say that as in all fields, the use of the internet and communication tools have certain advantages in music teaching activities too, it differs quite a lot in this field. Taking these as a starting point, the present study aimed to investigate music teachers' views on online music lessons and to offer possible contributions to future distance education activities.

**Purpose of the Study**

The aim of this study is to determine the views of middle school music teachers working in the central district of Kastamonu, on the 13-week (23 March 2019 - 19 June 2019) online music lessons in the second semester of the 2019-2020 academic year and to offer recommendations for distance education processes in line with the findings. To this end, a questionnaire form was developed to obtain information about the teachers' knowledge about and experience with distance education, to explore their positive and negative opinions about distance education, as well as to learn about their views about the effect of distance education on student motivation and self-control and on regulating teacher roles, about strengths and weaknesses of distance education, and about increasing the quality of education in distance education.

**Method**

The study employed the survey model. The general screening model seeks to describe a past or current situation. Here, care should be taken to ensure that the current situation is stable. It has some limitations such as data finding and controlling (Kincal, 2013).
Research Group

The study group comprised of 24 music teachers working in the central district of Kastamonu, a city in the north-west of Turkey. Those who volunteered to participate were included in the study. Table 1 presents some demographic characteristics (gender, teaching experience, faculty, educational background) of the participating teachers.

Table 1. Distribution of the Study Group by Gender, Department, and Teaching Experience

<table>
<thead>
<tr>
<th></th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
</tr>
<tr>
<td>Faculty of Education</td>
<td>14</td>
</tr>
<tr>
<td>Faculty of Fine Arts</td>
<td>8</td>
</tr>
<tr>
<td>Conservatory</td>
<td>2</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td>10</td>
</tr>
<tr>
<td>6-10 years</td>
<td>7</td>
</tr>
<tr>
<td>11-15 years</td>
<td>4</td>
</tr>
<tr>
<td>16-20 years</td>
<td>1</td>
</tr>
<tr>
<td>21 years and above</td>
<td>2</td>
</tr>
<tr>
<td>Educational Background</td>
<td></td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>21</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>3</td>
</tr>
<tr>
<td>Doctor's Degree</td>
<td>-</td>
</tr>
</tbody>
</table>

As can be inferred from Table 1, of the participants, 83% are female teachers and 17% are male teachers. 59% are graduates of faculties of education, 33% of faculties of fine arts, and 8% of conservatories. 42% have a teaching experience of 1-5 years. 29% have a teaching experience of 10 years and above, which indicates that they are quite experienced teachers. On the other hand, 71% have a teaching experience of fewer than 10 years. 88% hold a bachelor's degree, while 12% hold a master's degree. None of the participants in the study group holds a doctor's degree.

Data Collection Tool

The data were obtained through an interview form consisting of two parts. The first part includes questions about demographic characteristics such as gender, faculty, and teaching experience. The second part includes nine open-ended and seven multiple-choice questions. The items were developed based on scales used in similar studies (Barış & Çankaya, 2016; Süer, et al., 2005; Adnan & Boz, 2015; İşman, et al., 2004; Çetin, et al., 2013). Afterward, to ensure content validity, experts were consulted.

Data Collection

Before the interview form was applied to music teachers, it was first presented to the Kastamonu Provincial Directorate of National Education. After obtaining permissions from the Governorship and the Provincial Directorate of National Education, the heads of music teachers in schools were contacted, and the scale was applied to the teachers. The interview form was uploaded to
the online form and questionnaire building site "jotform" and the relevant link was sent to the music teachers through the heads of music teachers. These online data were then collected via e-mail.

**Data Analysis**

The descriptive analysis technique was used to analyze the data. In this analysis method, data are summarized and interpreted according to predetermined themes. In addition, direct excerpts are frequently used to reflect the opinions of the individuals in the study group as accurately as possible (Kıncal, 2013).

Demographic information of the participants is presented with frequency and percentage distributions. Responses to open-ended questions in the interview form were reviewed, themes were determined, and relevant theme tables were created. The theme tables were examined by the researcher and two experts, and a joint decision was made.

Thus, the views of participating teachers about the advantages and disadvantages of distance education, problems encountered in the process, etc. were tried to be systematically described.

**Limitations of the Research**

The research is limited to music teachers working in the central district of Kastamonu, the second semester of the 2019-2020 academic year, and the scale items used in the research.

**Results**

**Music Teachers' Knowledge about and Experience with Distance Education**

![Chart showing music teachers' knowledge about distance education.](chart.png)

- 58% of the music teachers reported that they did not have any knowledge about distance education.
- 42% stated that they had some knowledge on the subject.
- None of the participants had a sufficient level of knowledge about distance education.

**Figure 1. Music Teachers' Knowledge about Distance Education**

58% of the participating music teachers reported that they did not have any knowledge about distance education, while 42% stated that they had some knowledge on the subject. Accordingly, none of the participants had a sufficient level of knowledge about distance education.
17% of the music teachers stated that they had had some experience with distance education, while 83% stated that they had had no experience. As can be inferred from both Graphic 1 and 2, a majority of the music teachers did not have sufficient knowledge and competency about distance education.

**Findings Regarding the Online Teaching Process**

**Table 2 Teaching Materials Prepared Before the Lesson**

<table>
<thead>
<tr>
<th>Materials and Documents</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruments (guitars, pianos, melodicas, flutes)</td>
<td>9</td>
</tr>
<tr>
<td>Instruments prepared at home (maracas, drums, glasses)</td>
<td>4</td>
</tr>
<tr>
<td>Videos and slides related to the subject being taught, computers</td>
<td>10</td>
</tr>
<tr>
<td>Written resources (books, PDF files)</td>
<td>10</td>
</tr>
<tr>
<td>No Preparation</td>
<td>7</td>
</tr>
</tbody>
</table>

As seen in Table 2, nine teachers used instruments in their online lessons. Four teachers prepared rhythm instruments with home materials and used them in their lessons. On the other hand, ten teachers reported using both written sources (Books, PDF files) and videos and slides about the subject being taught (n: 10). Also, it was determined that seven teachers did not use any teaching materials in their lessons. (Since some teachers reported using more than one teaching material, the total number of teaching materials used by the teachers is higher than the total number of teachers.)

**Table 3. Whether Chanting Activities Could Be Carried Out**

<table>
<thead>
<tr>
<th>Status</th>
<th>Number of Participants</th>
<th>Number of Chanting Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>46</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>54</td>
</tr>
</tbody>
</table>

As can be inferred from Table 3, 46% of the teachers reported that they were able to carry out chanting activities in their online lessons while 54% reported that they were not. Those who reported that they were able to carry out chanting activities carried out a total of 56 chanting activities, 30 of
which they used in rhythm activities. Some excerpts from the interviews with those who reported that they were not able to carry out chanting activities are as follows:

P15: We tried to chant, but the goal was to sing as a choir, and we failed because the audio quality of the app did not allow us.

P10 and P17: No, it was not possible.

**Table 4: Student Attendance (Ratio to Class Size)**

<table>
<thead>
<tr>
<th>Attendance Rate</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>7</td>
</tr>
<tr>
<td>40%</td>
<td>11</td>
</tr>
<tr>
<td>60%</td>
<td>3</td>
</tr>
<tr>
<td>80%</td>
<td>3</td>
</tr>
<tr>
<td>100%</td>
<td>-</td>
</tr>
</tbody>
</table>

As can be inferred from Table 4, which indicates the rates of student attendance in online music lessons, seven teachers reported an attendance rate of 20%, eleven 40%, three 60%, and three 80%. Accordingly, none of the teachers reported 100% student attendance in their lessons.

**Table 5. Problems Encountered in Online Lessons**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Connection Problems</td>
<td>12</td>
</tr>
<tr>
<td>Communication Problems</td>
<td>6</td>
</tr>
<tr>
<td>Synchronization Problems</td>
<td>6</td>
</tr>
<tr>
<td>Lack of Motivation on the Student Side</td>
<td>2</td>
</tr>
<tr>
<td>Failure to Carry Out Group Activities</td>
<td>6</td>
</tr>
</tbody>
</table>

As can be inferred from Table 5, the most frequently encountered problem in distance education is internet connection problems (n: 12), followed by communication problems (n: 6), synchronization problems (n: 6), and failure to carry out group activities (n: 6). The least frequently encountered problem emerged as the lack of motivation on the student side (n:2). Note that since some teachers reported more than one problem, the total number of problems encountered by the teachers is higher than the total number of teachers.

Some excerpts related to the problems encountered in online lessons are as follows (Care was taken to include as many excerpts as possible to provide a clearer picture of the problems encountered):

P3: We usually have internet problems, problems with the audio or video quality. (Online lessons) are not as funny as face-to-face lessons, of course, we have difficulty understanding (what the students say).

P5: Chanting as a choir was not possible due to the connection problem and I could not achieve enough efficiency in showing and doing activities.
P7: We had a problem with our chanting activities due to the synchronization problem. Also, rhythm exercises were not efficient, either. We tried to chant with melodicas. However, most students hesitated to sing (maybe because they were not alone at home). (Distance education) has been a process where the teacher is generally active. However, music lessons require interaction and student involvement. I don't think it has been efficient.

P11: There was a problem while playing melodicas in the activities, we had to do it over and over again because some of my students had internet connection problems.

P12: We experienced disruptions while chanting together due to the synchronization problem. When we tried to do (the chanting activity) individually, participation was insufficient as some students felt shy. Since music lessons require practicing, the student should be more active than the teacher. But the opposite was the case.

P15: The problem with the audio quality... When we want to chant together, it is not possible to achieve harmony because some audio reaches later than some other (network delay). Since the music lesson is a practical lesson, it is important to use one-to-one teaching (when necessary). It is quite difficult to teach music lessons in distance education.

P16: My students can't sing as a choir. They also can't see the teacher. So their microphone must be off. There is also a connection problem.

P18: It is impossible to chant altogether. Problems occur when practicing the flute. Since we cannot ask students to turn on their cameras, we cannot control the keys (of their melodica). Class hours are too insufficient.

**Distance Education in terms of its Suitability for Music Lessons**

![Figure 3. Suitability of Distance Education for Music Lessons](image)

Do you think the distance education system is suitable for music lessons?

- 0% No
- 38% Partially
- 62% Yes
As can be seen in Graphic 3, most of the music teachers in the study group stated that distance education was not suitable for music lessons (62%; n: 15). On the other hand, 38% stated that distance education was partially suitable for music lessons. However, none of the participants was of the opinion that distance education was completely suitable for music lessons.

**Positive Aspects of Distance Education**

**Table 6: Positive Aspects of Distance Education**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fosters self-control in students</td>
<td>1</td>
</tr>
<tr>
<td>Shows the importance of music lessons</td>
<td>1</td>
</tr>
<tr>
<td>Can be used under extraordinary circumstances</td>
<td>2</td>
</tr>
<tr>
<td>Contributes to the teacher-student relationship</td>
<td>1</td>
</tr>
<tr>
<td>Provides a comfortable learning environment</td>
<td>1</td>
</tr>
<tr>
<td>No positive aspects</td>
<td>18</td>
</tr>
</tbody>
</table>

As can be inferred from Table 6, only a few teachers mentioned the positive aspects of distance education. "Fosters self-control in students," "shows the importance of music lessons," "contributes to the teacher-student relationship," and "provides a comfortable learning environment" were each stated by one music teacher. Some excerpts related to the positive aspects of distance education are as follows:

P11: I don't think distance education has any advantages for the music lesson. The only advantage is that since we can't meet students face to face due to school closures, it sustains communication between us and them.

P13: Children are more comfortable and safer at home. They can focus better.

**Negative Aspects of Distance Education**

**Table 7. Negative Aspects of Distance Education**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet connection problems causing disruptions</td>
<td>5</td>
</tr>
<tr>
<td>Limited communication</td>
<td>2</td>
</tr>
<tr>
<td>Causes digital fatigue</td>
<td>3</td>
</tr>
<tr>
<td>Inefficient lessons</td>
<td>11</td>
</tr>
<tr>
<td>Prevents learning by doing</td>
<td>2</td>
</tr>
<tr>
<td>The risk of children being exposed to harmful content on the internet</td>
<td>1</td>
</tr>
</tbody>
</table>

As can be inferred from Table 7, the most frequently stated negative aspect of distance education is that lessons are inefficient. Other negative aspects reported by the teachers are "internet connection problems causing disruptions" and "digital fatigue." Also, one teacher noted that online lessons carried the risk of children being exposed to harmful content on the internet.

Some excerpts related to the negative aspects of distance education are as follows:

P1: We cannot interfere with the psychomotor skills and performances of the students due to the lack of effective communication (in online lessons).
P5: We can't achieve harmony in musical activities, we can't find the opportunity for one-to-one teaching, students have difficulty in actively participating in lessons due to frequent disconnection problems.

P7: Staying in front of the computer and phone for a long time causes digital fatigue. We can't reach every student. A student who is present one day may not be present the other day. So, we can't achieve continuity in the teaching of the subjects.

Distance Education in terms of Student Motivation and Self-Control

Table 8. Distance Education in Terms of Motivation and Self-Control

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive in terms of motivation and self-control</td>
<td>4</td>
</tr>
<tr>
<td>Negative in terms of motivation and self-control</td>
<td>17</td>
</tr>
<tr>
<td>Positive in terms of motivation but negative in terms of self-control</td>
<td>2</td>
</tr>
<tr>
<td>Negative in terms of motivation but positive in terms of self-control</td>
<td>1</td>
</tr>
</tbody>
</table>

As can be inferred from Table 8, most of the music teachers (n: 17) think that distance education negatively affects students' motivation and self-control in music lessons. On the other hand, only a few participants (n: 4) think that distance education has positive effects on students' motivation and self-control. Some music teachers think distance education positively affects students' motivation alone, while some think that it positively affects students' self-control alone.

Some excerpts related to the effects of distance education on students' motivation and self-control are as follows:

P1: Lack of factors such as school, classroom, and classmates to motivate students to lessons, as well as children behaving more comfortably at home, causes low motivation and reluctance on the student side.

P3: The students were enthusiastic about music. Children are a little more motivated with funny rhythm games and songs, we are having a good time with the children.

P12: There may be problems with students' self-control. Since the cameras are turned off, we can't see what they are doing (in lessons). Some students may be in a crowded environment, so background noise such as TV and other people talking may be distracting.
Contributions of Distance Education to Teachers (Achievements on the Teacher Side)

Table 9. Distance Education in Terms of Its Contributions to Teachers

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using technology effectively and efficiently</td>
<td>6</td>
</tr>
<tr>
<td>Using different teaching methods and techniques</td>
<td>2</td>
</tr>
<tr>
<td>Leads to research</td>
<td>1</td>
</tr>
<tr>
<td>Improves creativity</td>
<td>4</td>
</tr>
<tr>
<td>Improves communication skills</td>
<td>1</td>
</tr>
<tr>
<td>Preparation of teaching contents and materials</td>
<td>1</td>
</tr>
<tr>
<td>Standardization of lessons</td>
<td>6</td>
</tr>
<tr>
<td>No contribution</td>
<td>3</td>
</tr>
</tbody>
</table>

As can be inferred from Table 9, a majority of the teachers are of the opinion that distance education contributes to teachers’ competencies. The most frequently stated contributions are "using technology effectively and efficiently" (n:6) "standardization of lessons" (n:6). On the other hand, three teachers stated that they did not think that distance education contributed to them at all.

Some excerpts related to the contributions of distance education to teachers are as follows:

P7: It helped me learn to use technology more effectively. It led me to do more research.

P13: For example, I think a lot about how I can teach a subject in other ways, how I can concretize it. And I do research on different activities I can do for teaching different subjects.

P18: It has had no contribution at all.

Effect of Distance Education on the Quality of Education

Table 10. Teachers’ Views about Whether Distance Education Would Increase the Quality of Education

<table>
<thead>
<tr>
<th>Does It Increase the Quality of Education?</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
</tr>
</tbody>
</table>

As can be inferred from Table 10, to the question, "Do you think distance education increases the quality of education?" twenty-one teachers responded with 'No.' On the other hand, three teachers responded with 'Yes.'

Teachers’ Preferences for Distance Education Platforms

Table 11: Music Teachers’ Preferences for Distance Education Platforms

<table>
<thead>
<tr>
<th>Distance Education Platform</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Information Network (EBA) Infrastructure</td>
<td>11</td>
</tr>
<tr>
<td>Other Open Source Platforms (Zoom, Skype, Microsoft Teams, etc.)</td>
<td>13</td>
</tr>
</tbody>
</table>

As can be inferred from Table 11, a majority of the teachers (n:13) prefer open-source platforms such as Zoom, Skype, etc. for their online lessons. On the other hand, the number of
teachers who use the Education Information Network (EBA) of the Ministry of National Education is almost half the number of participants (n:11).

**Music Teachers' Preferences for the Delivery of Music Lessons**

<table>
<thead>
<tr>
<th>Table 12. Music Teachers' Preferences for the Delivery of Music Lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Delivery Method</strong></td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>Face-to-face education</td>
</tr>
<tr>
<td>Distance education</td>
</tr>
</tbody>
</table>

As can be inferred from Table 12, all of the participating teachers preferred face-to-face education for the delivery of music lessons.

**Discussion, Conclusion and Recommendations**

Countries may need to make partial changes in their education systems when they deem it necessary. Sometimes, in global crises such as a pandemic, they try to overcome the process with the least damage possible. To this end, some critical steps are taken while dealing with this undesirable situation in the social structure, especially for health and education. Due to the global COVID-19 pandemic, some arrangements have been made in education and training activities in our country as in other countries. At first, some measures including school closures for short periods were taken. It was later decided that lessons would be carried out through distance education. Distance education methods, which had not been used widely in our country until then, were initiated at all educational levels, and all teachers from all educational levels had to use many new technology-based teaching methods. The transition to distance education has been a laborious and challenging process not only for all personnel included in the education system but also for education policymakers. Indeed, similar processes have been experienced in many other countries. Therefore, taking these as a starting point, the present study aimed to develop some insights into secondary school music teachers' experiences in the distance education process. The study reached some concrete results in this regard.

Based on the views of the music teachers who participated in this study, it can be said that distance education is not a suitable system for music lessons. To effectively carry out individual and group activities and to ensure that students achieve the desired learning outcomes during the teaching of the music lesson, some prerequisites need to be met, such as effective communication between the teacher and the students, the ability to carry out group activities in accordance with the essentials of basic music elements, and access to necessary materials to carry out activities. Küçük (2020) stated that they preferred the document and lecture video in his work to follow the lessons within the scope of distance education most of the candidate music teachers. It is a study that supports that documents and lecture videos are not enough in music lessons. The music teachers who participated in the study stated that online music lessons failed to reach the specified goals and learning outcomes due to the failure to meet the necessary conditions.
Contrary to popular belief, music lessons address all cognitive, affective, and psychomotor domains. Activities in this lesson are carried out both individually and in groups. Although the music lesson is considered a lesson with learning outcomes mainly for the affective domain, the study conducted by Akarsu (2017) determined that a significant portion of the learning outcomes (44.26%) specified in the music teaching program of the Ministry of National Education targeted the psychomotor domain, followed by learning outcomes for the cognitive domain (34.97%) and for the affective domain (20.77%). To ensure that the learning outcomes specified for all these three domains are achieved, teaching/learning activities specific to each domain need to be designed/carried out. Also, interaction and communication between the teacher and the student, as well as the integration of effective feedback into the educational processes, are very important.

58% of the participating music teachers reported that they did not have any prior knowledge about distance education, while 83% stated that they did not have any prior experience with distance education. This result indicates the necessity of meeting this need for experience. Music teachers need to use instruments in their lessons. Moreover, instrument-related learning outputs have an important place among music lesson outcomes. However, in the study, only nine of 24 participants reported that they could use an instrument in their online music lessons, while seven stated they could not. Other participants (n:8) stated that they used in their lessons the rhythm instruments they prepared with home materials. Unsurprisingly, it will be difficult for music lessons conducted in this way to achieve the targeted learning outcomes.

Another important activity in music lessons is chanting activities. Akıncı (2018) stated that it is within the scope of the material of song activities in music education. Also singing activities emphasized that it contributes to success and aesthetic perspective. Chanting activities have many important contributions such as ensuring the transfer of cultural values, enhancing children's aesthetic development, and contributing to the development of children's affective domain. However, most of the teachers who participated in this study reported that they were unable to carry out chanting activities in their online lessons. The main reason why they are unable to carry out these activities is the synchronization problem in distance education. Işıkhan (2017) stated that is “coordination” another name for synchronization. He also stated that two or more pieces in the music should adapt in terms of speed and time. The synchronization problem arises in the activities required to be performed at the same time by students because the audio reaches at different times, which, in turn, disrupts the harmony. Sağer, Özkişi & Yüceer (2020) have reached some findings about synchronization and instrument training in their music education. In their work, stated that they had synchronization problems and the sound quality is poor, the sound is cut off, in collective playing activities, uncontrollable compliance when students are not together.
In this work teachers reported that when they wanted to do a chanting activity with the students, the audio from students reached at different times due to the internet speed problems. Such problems may have negative consequences not only for the educational dimension of music but also for the learning outcomes aimed at the affective development in children, which is one of the general purposes of music education. Therefore, tempo and harmony in musical performance should be free from the negative effects of network delay in online lessons. The participants reported that they experienced such problems not only in chanting activities but also in instrument-playing activities. They also stated that they avoided using instruments in their lessons at early hours for fear of disturbing their neighbors.

Another problem that the participants experienced during the distance education process is internet connection problems. İşman (2011) emphasized that internet opportunities in distance education are different. He stated that rapid developments in satellite, fiber optic, television, radio, computer, internet and other information technologies affect the structure and form of education. He also added that educators tend to develop new educational programs and learning-teaching models. This situation creates a disadvantage for learners and teachers. The participants reported that this was a problem not only for themselves but also for the students: student attendance was negatively affected by this problem. Eighteen of the 24 participants reported that student attendance was below 50%. Student attendance, as well as student involvement in lessons, affects not only the overall success average of the class but also the motivation of teachers and students. “The motivation level and type of students affects their level of involvement in the lesson. Unmotivated students may display negative behaviors such as excessive reluctance, disobedience, rebellion, etc. in lessons, extrinsically motivated students exhibit withdrawal or passive or symbolic participation in the lesson, whereas intrinsically motivated students tend to actively participate in classroom activities” (Nayıır, 2016).

In the distance education process, secondary school music teachers faced some problems such as limited communication, failure to perform group activities, and lack of motivation on the student side, as well as internet connection problems. Music lessons are conducted jointly with both individual and group activities. Therefore, it was determined that music teachers could not perform the activities at the desired level to reach the learning outcomes.

The participating teachers also stated that online lessons caused other problems such as the inefficiency of online lessons and the risk of children being exposed to harmful content on the internet, and affected negatively children's motivation and self-control, as well as the quality of education. In addition, a majority of the teachers stated that they preferred open-source platforms such as Zoom, Skype, etc. for their online lessons rather than the Education Information Network (EBA) of the Ministry of National Education. It was determined that the only advantage of this distance
education process for music teachers was that they had an opportunity to effectively use technology, which contributed to their teaching competencies. Also, all of the participating teachers stated that they preferred face-to-face education rather than distance education for the delivery of music lessons.

From a realistic perspective, finding solutions to all these problems that have arisen due to the pandemic in the education system is not easy. It is possible to prevent or alter any situation that you can control. However, developments that occur out of our control can sometimes leave the entire humanity desperate. Nevertheless, countries must take all possible steps and all possible measures to ensure that systems in all areas remain functional. During the school closures due to the pandemic, music lessons have been tried to be carried out online. Some measures can be taken to enable teachers to use the internet effectively and efficiently, which is among the problems faced by music teachers. This problem can be solved through online in-service training programs to be organized by Provincial Directorates of National Education. Some solutions such as strengthening the internet infrastructure and providing technology opportunities to every student are tried to be put into effect by the country's administration in the long term. However, in terms of music lessons, even if the best conditions are provided, some problems may still arise in the conduct of online activities. The synchronization problem is one of these problems. Individual music activities can be carried out online. However, some problems may arise in the performance of group activities. Because rhythm and harmony are two of the basic components of music. To discuss this problem and offer solutions, Provincial Directorates of National Education can organize online meetings for music teachers.

References


Turkish Education System from the Eyes of Future Teachers: Metaphorical Perceptions

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Abstract
The aim of this study is to determine preservice teachers’ metaphorical perceptions regarding the following concepts: school, school principal, Turkish education system, teacher and student. This qualitative study was designed according to the principles of phenomenological model. The participants of the study are 160 preservice teachers attending the Education Faculty of a state university located in Mid-Anatolia region of Turkey during the Spring semester of 2019-2020 academic year. The data was collected by asking the participants to complete the following sentences “I liken “school” (and others) to …. because…” The data were analyzed through content analysis. The results of the study revealed 4 themes for school, 5 themes about school principal, 4 themes about Turkish Education System, 4 themes for teacher and 4 themes about student. Teacher candidates generally likened school, school principal, Turkish Education System and student to negative things, while they likened teacher to positive things.

Keywords: Metaphor, School, School principal, Turkish Education System, Teacher, Student

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Introduction

Defined as “a word figuratively used for association and resemblance purposes” or “using a word or concept in a way to mean something else rather than its lateral meaning” (Turkish Language Institution, n.d.), metaphor can be considered a part of our thought system. Derived from the word “metaphora” in Greek language, the word “metaphor” is the combination of two words: “meta” signifying “beyond” and “pherein” meaning “to carry”, so the word means ‘carry over’ together (Lakoff & Johnson, 2005). In addition, metaphors can be used to benefit from other concepts to explain a particular concept, to present different points of view, to provide hints about our thought system by enriching the language and to strengthen the meaning. According to Saban (2004) metaphors, which are one of the most powerful mental tools allowing us to provide a basis for our thoughts regarding manipulation, control and development and continuity of events, are defined as “language of experience” because it sheds light on how we give meaning to our personal experiences (Miller, 1987).

Metaphors, which we can consider as outcomes of our life experiences, mean much more than just similarities and provide clues about our thought process (Martinez et al., 2001). Similarly, Draaisma (2007) suggests that metaphors are reflections of individuals’ actions and thoughts. Accordingly, it can be concluded that metaphors emphasize a creative process in which individuals associate between concepts and try to discover new connections between them (Aydoğdu, 2008). This relationship is due to the connection between abstract concepts and the concrete, the more noticeable and the more familiar ones, which in turn reveals new point of views (Oxford et al., 1998).

It is also known that metaphors are a strong mental tool that an individual might use while trying to understand and explain a complex and abstract concept (Yob, 2003) and they have the power to exhibit different dimensions of a situation since it is a product of our perception of life and thought system (Morgan, 1998). Many different metaphors can be stated even for one single situation, because metaphors allow concretization of mental models developed by individuals according to their previous experiences. Saban (2006, 2009), in parallel with this idea, claims that metaphors have many functions in addition to shaping our perceptions, thoughts and, in turn, our actions. It is also pointed out that metaphors are a tool for reflection because it functions like a mirror that helps us to see different and similar dimensions of a situation, and to understand and visualize them in our minds (Morgan, 1998). Another important function of metaphors is that it is used in research and evaluation processes as a meaning discovery tool. Arslan and Bayrakç (2006) also emphasizes that metaphors can be used as data collection tool in studies conducted in different fields of science.

Thanks to the recent rapid transformation in social sciences, qualitative studies are now believed to considerably contribute to knowledge produced in social sciences because individual experiences and opinions are of great importance in this type of studies (Yıldırım & Şimşek, 2006).
Yalçın et al. (2016) suggest that the studies focusing on metaphors can be classified under 3 categories: (i) studies dealing with structure and formation of metaphors, (ii) use of metaphors while teaching a subject, (iii) use of metaphors to identify various mental perceptions. Studies in which metaphors are used to identify mental perceptions are considered quite rich sources of qualitative data that are obtained by using qualitative data collection methods (Fennel, 1996).

Providing valuable clues to understand organizational life, metaphors also introduce a wide range of thoughts for educational organizations. In addition, it is highlighted that metaphors can be used in educational research to create an image related to educational activities and to restructure them accordingly (Cerit, 2006); therefore, it is stated that metaphors can be used in educational research to investigate and explain a different phenomena, cases and concepts (Çam-Aktas & Tunca, 2018). Thus, it is possible to see many studies dealing with education systems and concepts related to education systems with the help of metaphors.

A thorough review of national and international literature has revealed that the metaphors stated for the following concepts were examined in many studies conducted in the field of educational sciences: education (Akbaba-Altun & Apaydın, 2013; Botha, 2009); school, school administration, Turkish education system (Gözler, 2018; Kasapoğlu, 2016; Nalçacı & Bektas, 2011; Örücü, 2014; Özdemir & Akkaya, 2013; Saban, 2008; Silman & Şimşek, 2006); school principal (Cerit, 2008; Johnson, 2006; Tnvacvevic & Vaupot, 2009, Yalçın & Erginer, 2012); inspector (Töremen & Döş, 2009); teacher (Aslan, 2013; Cerit, 2008; Ekiz & Koçyiğit, 2013; Kalyoncu, 2012; Kasoutas & Katerina, 2009; Marshall, 1990; Oçak & Gündüz, 2006; Pektaş & Kildan, 2009; Saban, 2004; Yıldırım et al., 2011; Tut et al., 2018); student (Murphy, 2002; Saban, 2009); learning and instruction (Bas & Kıvılcım, 2020); university, academician and research assistant (Koşar, 2016; Oyman & Şentürk, 2015; Yalçın et al., 2016); classroom management (Akar & Yıldırım, 2009), Civil Servant Selection Test (Güven & Dak, 2017; Karadeniz, 2016).

In most of these studies, the data were collected from teachers and preservice teachers, and they were asked to provide metaphors to determine their professional perceptions. The reason lying behind this preference might be that metaphors function like a bridge between theory and practice by allowing teachers and preservice teachers to think about vocational practices and express implicit ideas behind these practices, because such implicit beliefs can largely affect classroom practices (Leavy et al., 2007). Therefore, it is believed that metaphors related to the concepts involved in education systems are important in explaining and interpreting preservice teachers’ perceptions about teaching profession and their possible classroom practices in future. The student identity that preservice teachers have as individuals coming from within the education system and the prospective teacher identity they gain due to the fact that they will step into the profession after completing their education at the university make their perceptions of educational concepts important (Örücü, 2014).
The opinions of the teacher candidates through their observations and experiences affect the functioning and sustainability of the education system. Noyes (2004) is of the opinion that conducting studies on pre-service teachers' perceptions, attitudes and beliefs will contribute to their professional development. In addition, when the contribution of preservice teachers’ in-depth mental models about education and teaching processes to the success of education system (Konaklı & Göğüş, 2013) is considered, the current study is believed to be significant in terms of determining how preservice teachers perceive and give meaning to the most basic education system related concepts that come to mind: school, school principal, Turkish education system, teacher and student. There are many studies dealing with these concepts separately. However, the current study deals with these concepts together and provides a holistic point of view regarding preservice teachers’ opinions about education system. Accordingly, the aim of this study is to determine preservice teachers’ perceptions about school, school principal, Turkish education system, teacher and student through the use of metaphors.

**Method**

This section consists of the following subsections: research design, study group, data collection, data analysis and validity and reliability.

**Research Design**

Qualitative research methods and techniques were used in the design of this study and analysis of the data. Qualitative research is a process of investigation that starts with assumptions, a world view and a possible use of a theoretical paradigm (Creswell, 2007) and uses unique methodological traditions to understand and explain a social or individual problem (Creswell, 1998). Qualitative research involves various designs that reflect various approaches and traditions (Yıldırım & Şimşek, 2006). Phenomenological design was preferred in this study, which aims to identify preservice teachers’ perceptions about school, school principal, Turkish education system, teacher and student. Specifically dealing with life experiences, phenomenological design focuses on how people describe their experiences and how they experience them through their senses, how they give world a meaning and finally how they bring together their experiences in order to develop a world view (Husserl, 2012). Therefore, it allows us to obtain an in-depth and detailed understanding of phenomena by describing their basic structures.

**Study Group**

160 preservice teachers attending Education Faculty of a state university located in Mid-Anatolia region of Turkey participated in the study. Participants were selected by convenience sampling which is one of non-random sampling and Table 1 displays demographic information about the participants.
Table 1. Demographic information about the study group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>%</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>81.88</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>18.12</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>160</td>
</tr>
<tr>
<td>Department</td>
<td>Primary School Teaching</td>
<td>56.87</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>Primary School Mathematics Teaching</td>
<td>43.13</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>160</td>
</tr>
<tr>
<td>Class Year</td>
<td>Sophomore</td>
<td>64.38</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>35.62</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>160</td>
</tr>
</tbody>
</table>

According to Table 1, the percentage of females in the study group is 81.88% while 18.12% of the participants are males. Similarly, 56.87% of the participants attend Department of Primary School Teaching and 43.13% Department of Primary School Mathematics Teaching. Finally, 64.8% of the participants is sophomore and 35.2% is senior.

Data Collection

Data were collected during the spring semester of 2019-2020 academic year. The printed data collection tool consists of two parts. The first part includes questions aiming to collect demographic information about participants. In the second part, the participants are asked to complete the following semi-structured sentence in order to identify the metaphors they produce for school, school principal, Turkish education system, teacher and student: I liken school (and others) to ________ because _________. The data was collected personally by the researchers by entering the students' classes. The students were requested to fill out the data collection instrument after they were informed about the aim of the study. It took the participants approximately 30 minutes to fill out the tool.

Data Analysis

Each participant was given a code before the data were analyzed. The code consisted of first the order number of the participant, second the gender (F for females and M for males), next the department (P for primary school teaching department, M for primary school mathematics teacher) and finally, class year (2nd or 4th). For example, 105KS4 means that the participant is 105th participant, a female and a fourth-year student in primary school teaching department. Thus, the codes given at the end of each extract clearly guide readers in finding out the demographic characteristics of the participants.

There are basically three steps in a qualitative study: (i) to prepare and organize data for analysis, (ii) to determine themes after coding, and (iii) to present data in tables, figures or as discussion (Creswell, 2007). Suggesting a more detailed analysis process, Yin (2011) states that analyses in qualitative research are carried out in five circular phases, which are namely compiling a database, disassembling data, reassembling data, interpreting data, and concluding the data. In the compiling phase of the current study, the data were organized for a stronger analysis and conclusion;
forms that were not filled out properly were excluded from the analysis. The next phase is disassembling and reassembling data according to Yin’s (2011) classification or defining, classifying and interpreting according to Creswell’s (2007) classification. The data were disassembled by giving codes to data sets. The codes were classified according to the justification of the metaphors. Therefore, different justifications for the same metaphors may exist. For instance, factory metaphor for school takes part in both theoretical and practical knowledge and a place that educates standard stereotypes categories. Additionally, metaphores in the same category quite a change. For instance, a CEO in a company and prison director metaphores belong to money category for school principals. The coding phase was followed by interpretation phase in which the themes were interpreted by the researchers through references to the literature and they are later presented in the discussion section.

**Validity and Reliability**

The following actions were taken to ensure validity and reliability in the study.

In order to ensure construct validity in this study, Yin’s (2003) suggestion maintaining proof chain was followed. Accordingly, it is significant to obtain expert opinion except researchers themselves (Creswell, 2007; Denzin, 1970; Merriam, 2009). Another reader who is not involved in the research should provide his/her opinion about whether same proofs might be collected during data collection process when he / she has an overall look at the research (i.e when he/she follows the correct route from research questions to conclusions or from conclusions to research questions (Yin, 2011). An expert opinion was taken in this study from an expert other than the researchers in order to maintain proof chain.

Yin (2011) suggests an explanatory structure to ensure internal validity. Researchers can increase internal validity by explaining research procedure in detail. Therefore, the researchers explained how data collection instrument was formed, the participants and data analysis process in detail.

In order to ensure reliability, which means consistency or soundness in qualitative studies (Neuman, 2006), Creswell (2007) suggests using “blinding” method in which the data are analyzed by other experts except researchers so that it is possible to increase internal validity. In this study, blinding method was used and the analysis was done without knowing who the replies belong to.

**Findings**

The findings about metaphorical perceptions regarding school, school principal, Turkish education system, teacher and student were presented under separate titles and demonstrated in Figure 1.
Preservice teachers’ metaphorical perceptions regarding school

According to the findings of the study, 142 preservice teachers stated 120 different metaphors about school and the 13 categories were classified under 4 themes: (i) learning place, (ii) a place that molds students to a certain shape, (iii) a place that cannot achieve its purpose, and (iv) a place for socialization. The results were presented in Table 2 below.

**Table 2. Themes and metaphors regarding school**

<table>
<thead>
<tr>
<th>LEARNING PLACE</th>
<th>Metaphors</th>
<th>Music practice</th>
<th>Preview of what to be done when employed or in front of public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Theoretical and practical knowledge</td>
<td>Factory, Tree, Book, Four seasons, Center of Information, Home, House, the Sun, Stone Mine, Mine, Computer Programming, Cocoon, A field where you can plant anything</td>
<td>Music practice, Preview of what to be done when employed or in front of public, Question Bank for All Courses, Life itself, A place where I can improve myself</td>
<td></td>
</tr>
<tr>
<td>2 Students’ qualifications</td>
<td>Field, Fruit tree, Flower</td>
<td>Garden, Photo Frame</td>
<td></td>
</tr>
<tr>
<td>3 Foundation of education</td>
<td>a missing brick in one corner of a house</td>
<td>Foundation of building</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 1. Summary of the Findings**

- Learning place
- A place that molds students to a certain shape
- A place that cannot achieve its purpose
- A place for socialization

- Responsible for administration
- Physical and personality characteristics
- Unnoticeable presence
- Non-educational works
- Hierarchical structure

- Continuously changing
- Not well-established
- Not functional
- Guiding

- Shedding light into future
- Second parents
- Students’ qualifications
- Hierarchical structure

- A place that is responsible for administration
- A place that has physical and personality characteristics
- A place that is unnoticeable
- A place that performs non-educational works
- A place that has a hierarchical structure

- School principal
- Not functional
- Not well-established
- Guiding

- Elementary education
- Not well-established
- Not functional
- Guiding

- Teacher
- A person who is developing himself
- A person whose feelings are ignored
- A person who tries to survive
- A person who is a passive creature

- Students
- Responsible for administration
- Physical and personality characteristics
- Unnoticeable presence
- Non-educational works
- Hierarchical structure
According to the findings, preservice teachers produced the highest number of metaphors related to theoretical and practical knowledge category under learning place theme. 40MP4, who likened school to a cocoon, explained the reasons behind this situation as follows:

<table>
<thead>
<tr>
<th>A PLACE THAT CANNOT ACHIEVE ITS PURPOSE</th>
<th>Categories</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Function / Uselessness</td>
<td>Dump</td>
<td>Waiting lounge</td>
</tr>
<tr>
<td></td>
<td>Shopping Mall</td>
<td>Mirage in desert</td>
</tr>
<tr>
<td></td>
<td>An empty chest</td>
<td>Broken microwave oven</td>
</tr>
<tr>
<td></td>
<td>An empty place</td>
<td>Broken watch</td>
</tr>
<tr>
<td></td>
<td>Zoo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mental Hospital</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kindergarten</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A PLACE FORSOCIALIZATION</th>
<th>Categories</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Cozy Place</td>
<td>Home</td>
<td>A lovely place</td>
</tr>
<tr>
<td></td>
<td>Family</td>
<td>A place to socialize with friends</td>
</tr>
<tr>
<td></td>
<td>Podium</td>
<td>Social Media</td>
</tr>
<tr>
<td></td>
<td>My house</td>
<td></td>
</tr>
</tbody>
</table>

| Variety                  | Forest     | Greengrocer |
|                         | Four seasons | Asylum      |
|                         | Farm       | Concentration Camp |
|                         | Dairy farm | Taksim (a square in Istanbul, Turkey) |
|                         | Noah’s pudding |                       |

| Relaxing                 | Movie      |                       |
|                         | Cave       |                       |
When a person gets education at school, it becomes a different person when he graduates when compared to his first days at school.

In addition, preservice teachers stated certain metaphors which emphasize that if school has high quality, students will also be also qualified in this theme. They also produced some metaphors reflecting that schools are foundation of education because of knowledge provided for students and educating qualified teachers at school.

The second theme obtained from the metaphors stated by preservice teachers is that school molds students to a certain shape. According to the participants, everybody has to attend a school; otherwise, he cannot survive in this modern world. 153FM2, who likened school to “drinking water” states the reason as follows:

Even if we want or not, we have to drink water regularly to continue our lives healthier. The reason why I liken it to school is that we need to go to school regularly so as to have a better life.

The participants stated that the freedom of students who are obliged to attend a school have been restricted. Although they produced the highest number of metaphors about the belief that school provides information, the most frequently repeated metaphor is prison metaphor, which is classified under the theme a place that restricts freedom. The statements related to this situation are as follows:

High number of class hours despite students’ reluctance, low percentage of absenteeism right; in short, students are forced to attend schools or similar places (80MP2)

Being under surveillance inside a building where everything is restricted between certain hours (154FM2)

School aims to educate stereotype students by restricting their freedom. Using the factory metaphor for this, 19MP4 explained the reason as follows:

Today’s schools provide standard education according to a certain framework. It is clear that this will be true for all students but we are still being mass-produced. Our imagination power is taken away from us.

In addition, it takes a long time to finish school, which might mean longer time of freedom restrictions. The metaphors and extracts related to this belief are as follows:

You study for many years and it never ends (life imprisonment – 43FP4)

Sometimes, the only reason to come to school is obligatory attendance. When you step in a school, you just enter and cannot leave it (a house without keyhole- 125MP2)
The third theme regarding the school is that the school fails to achieve its purpose. There were some metaphors reflecting the ideas that school cannot help students achieve full learning, some schools have more qualified graduates because these schools are more qualified than others, some students learn better while others cannot and some schools do not care about students. 31FP4, who uses question mark metaphor for this theme, provides the following explanations for this situation:

While some schools carry out their educational activities in a quality way and educate their students well enough, others fail to fulfil their mission effectively.

According to some participants, schools fail to fulfil their education function, so they are considered useless and people do not need their existence. The metaphors and the related explanations are as follows:

Designed as recreation places to disguise high unemployment rates (waiting lounge 114FP2)

Students graduate without being equipped with skills, without being mature – not well cooked enough. It is just like taking the cake out of the oven before it is cooked. No matter how well you prepare the cake, you do not have a cake in your hand if the oven is out of order (broken microwave oven- 140FM2)

The fourth theme related to school is about school’s function in socializing students. According to the participants, school is a place for socialization in addition to its education function. The explanations about the metaphors provided under this theme are as follows:

There are many magazine-like actions during out of class hours. It helps us socialize (social media -155 FM2)

Quite a few of the participants had a perception of school as a relaxing place. The metaphors and the reasons lying behind these metaphors are as follows:

When you are there, you think about what you will do with your friends. You are far away from the chaos of life in those one or two hours. This makes me feel as if I am in a movie (movie – 81FP2).

Preservice teachers’ metaphorical perceptions regarding school principal

According to the findings of the study, 134 preservice teachers stated 116 different metaphors about school principal and the obtained 15 categories were classified under 5 themes: (i) responsible for administration, (ii) physical and personality characteristics, (iii) unnoticeable presence, (iv), non-educational works, and (v) hierarchical structure. The results were presented in Table 3 below.
### Table 3. Themes and metaphors regarding school principal

<table>
<thead>
<tr>
<th>RESPONSIBLE FOR ADMINISTRATION</th>
<th>Categories</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Decision Maker</td>
<td>Referee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Judge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minister of Justice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Head Guard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Control mechanism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brain</td>
</tr>
<tr>
<td></td>
<td>2 Responsible for the process</td>
<td>Administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organizer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Door</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Team captain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Queen Bee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Factory director</td>
</tr>
<tr>
<td></td>
<td>3 Backbone of school</td>
<td>Steering Wheel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fishbone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neighborhood representative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pilot pen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remote control battery</td>
</tr>
<tr>
<td></td>
<td>4 Helper and Protector</td>
<td>Father</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Roof</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shepherd</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PHYSICAL AND PERSONALITY CHARACTERISTICS</th>
<th>Categories</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 Big ego</td>
<td>Inaccessible man</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ward chief</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cell nucleus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>King</td>
</tr>
<tr>
<td></td>
<td>6 Dictator</td>
<td>Dictator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>king</td>
</tr>
<tr>
<td></td>
<td></td>
<td>commander</td>
</tr>
<tr>
<td></td>
<td>7 Fearful</td>
<td>Stray dog</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fear</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scarecrow</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Door creak</td>
</tr>
<tr>
<td></td>
<td></td>
<td>shepherd</td>
</tr>
<tr>
<td></td>
<td>8 Chatterbox</td>
<td>Technic director</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coach</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drum</td>
</tr>
<tr>
<td></td>
<td>9 Stereotypes</td>
<td>Old man</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boss slave</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNNOTICEABLE PRESENCE</th>
<th>Categories</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 Invisible</td>
<td>Alien</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zero</td>
</tr>
<tr>
<td></td>
<td></td>
<td>An active ant</td>
</tr>
<tr>
<td></td>
<td>11 Not working</td>
<td>Steering wheel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uncle Mehmet who always goes to the coffee house harvest fly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Market owner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flowerpot</td>
</tr>
<tr>
<td></td>
<td></td>
<td>An extra that appears in the most important scene in a soap opera</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A lion in the forest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A hatching chicken</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carefree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Love</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Broken watch</td>
</tr>
</tbody>
</table>
### NON-EDUCATIONAL ACTIVITIES

<table>
<thead>
<tr>
<th>Categories</th>
<th>Metaphors</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Money</td>
<td>Money counter</td>
<td>A CEO in a company</td>
</tr>
<tr>
<td></td>
<td>Vampire</td>
<td>Revolving fund</td>
</tr>
<tr>
<td></td>
<td>Apartment superintendent</td>
<td>Head of the family</td>
</tr>
<tr>
<td>13 Paperwork</td>
<td>Trinket</td>
<td>Prison director</td>
</tr>
<tr>
<td></td>
<td>An exhausted pen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boss slave</td>
<td></td>
</tr>
</tbody>
</table>

### HIERARCHICAL STRUCTURE

<table>
<thead>
<tr>
<th>Categories</th>
<th>Metaphors</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Controller</td>
<td>Guardian</td>
<td>Inspector</td>
</tr>
<tr>
<td></td>
<td>Father</td>
<td>Control Center</td>
</tr>
<tr>
<td>15 Follower of the commands</td>
<td>Old grandfather</td>
<td>Foreman in the factory</td>
</tr>
<tr>
<td></td>
<td>Photocopy machine</td>
<td>A belly forced to slip into the pants</td>
</tr>
<tr>
<td></td>
<td>Slave</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pawn</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cast system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Guardian</td>
<td></td>
</tr>
</tbody>
</table>

Most of the metaphors preservice teachers produced about school principals were related to their decision-making characteristics, which was listed under responsible for administration theme. In addition, there were some metaphors reflecting the belief that they are responsible for the process. Also, they pointed out that school principal is helper and protector to ensure a more productive process. One of the participants 13FP4 likened school principal to father and explained the reason by stating “He keeps an eye on everybody and sort everything out”

The second theme for school principals is related to similarities in terms of their physical and personality characteristics. In addition, principals talk a lot and have high egos. 96FP2, who thought that most principals display dictator-like characteristics, explained her ideas as follows:

They think that strict rules about clothes, hair and beard are enough for educational goals. When they sit in their warm and comfortable rooms in the mornings, they make students wait outside in cold or hot weather as much as they want (dictator)

In addition to his dictatorship, it was emphasized that the principal created a fearful perception. The related metaphors and some extracts from the participants are presented below:

You flinch as soon as you hear his voice (door creaking – 147FM2)

He looks harmless but very frightening (insect – 156FM2)

The third theme is about school principals’ unnoticeable presence because they emphasize that principals are not visible. The participant 81FP2 likened school principal to an extra acting in soap operas:

His presence or absence are the same. He makes himself visible only in important announcements in ceremonies.
The participant 146FM2 likened school principles to alien to express his invisibility.

There are some signs for his presence. But he has never been seen, never communicated with a person, you never know how he lives his life.

The second highest number of metaphors are related to the belief that principals do not work. The extracts reflecting this belief are as follows:

Today’s principals mostly sit. I mean they just want to sit and earn money (hatching chicken – 39FP4)

Most of them just sit and earn money (harvest fly – 121FP2)

The fourth theme for school principals is about their spending more time on non-education works. Although there are metaphors stating that school principal is the backbone of school, and he is helper and protector, some participants think that principals are mostly interested in money and paper works.

Compulsorily, they are trying to keep people in an inflexible order. Most of principals are unhappy and they do this job for money and the comfort it provides (prison director – 30FP4)

School principals, whose main duty is to be interested in students and their problems as I know, are just dealing with paperwork (trinket – 145FM2)

According to the findings, the last theme is related to hierarchical structure. The participants believe that school principals follow the orders of their seniors. The participant 115FP2 likens principal to photocopy machine:

He just put the rules into practice. He applies what he was ordered by seniors

However, 25FP4 used the metaphor “belly forced to slip into pants” in order to emphasize that school principals sometimes should bend the rules:

School principals should act as if they were shaped into a certain mold, they need to feel relaxed by unbuttoning their pants

Preservice teachers’ metaphorical perceptions regarding Turkish Education System

According to the findings, 143 preservice teachers stated 129 metaphors regarding Turkish Education System. A total of 12 categories were classified under 4 main themes; (i) a continuously changing, (ii) not well-established, (iii) not functional, and (iv) guiding. The results are displayed in Table 4 below.
Table 4. Themes and metaphors regarding Turkish Education System

<table>
<thead>
<tr>
<th>A CONTINUOUSLY CHANGING</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Changing</td>
</tr>
<tr>
<td></td>
<td>Chameleon, Harvest, Locksmith, Incomplete,</td>
</tr>
<tr>
<td></td>
<td>Change, Soup, Rubber band, Monkey, Gemini,</td>
</tr>
<tr>
<td></td>
<td>Lego toy, Update, My mood, My hair</td>
</tr>
<tr>
<td></td>
<td>Recipe, An indecisive person, Changing weather,</td>
</tr>
<tr>
<td></td>
<td>Toy, Rubbish, Seasons, Rebooted telephone,</td>
</tr>
<tr>
<td></td>
<td>Waterfall, Tumbler, The projects initiated with</td>
</tr>
<tr>
<td></td>
<td>enthusiasm but ends with frustration</td>
</tr>
<tr>
<td>2</td>
<td>Inconsistent</td>
</tr>
<tr>
<td></td>
<td>Bipolar, Gemini male</td>
</tr>
<tr>
<td>3</td>
<td>Ambiguous</td>
</tr>
<tr>
<td></td>
<td>Black hole, Outer space, An unleashed object</td>
</tr>
<tr>
<td></td>
<td>An irregularly flowing river bag, Wheel of</td>
</tr>
<tr>
<td></td>
<td>fortune</td>
</tr>
<tr>
<td>4</td>
<td>Complicated</td>
</tr>
<tr>
<td></td>
<td>Elflock, Salad, Noah’s pudding, A not well-cooked ezogelin soup, Foreign series</td>
</tr>
<tr>
<td></td>
<td>Ultra-lights, Unnecessary crowd, Something complicated, puzzle pieces that are not related to each other</td>
</tr>
<tr>
<td>5</td>
<td>Negative effect</td>
</tr>
<tr>
<td></td>
<td>An annoying alarm in the morning, Mental hospital, Black hole</td>
</tr>
<tr>
<td></td>
<td>An unpleasing book, A cold day, Cactus</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOT WELL-ESTABLISHED</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Lacks a strong foundation</td>
</tr>
<tr>
<td></td>
<td>A building that lacks a strong foundation,</td>
</tr>
<tr>
<td></td>
<td>A building that lacks a strong foundation,</td>
</tr>
<tr>
<td></td>
<td>A decayed bridge, Rotten apple, Trash can,</td>
</tr>
<tr>
<td></td>
<td>Broken watch, Coin, Leaf, tree without a root,</td>
</tr>
<tr>
<td></td>
<td>A lost train on a circular rail, Ottoman Empire</td>
</tr>
<tr>
<td>7</td>
<td>Irrelevant</td>
</tr>
<tr>
<td></td>
<td>Bloom’s Taxonomy, Puppet, The singer</td>
</tr>
<tr>
<td>8</td>
<td>Needs developing</td>
</tr>
<tr>
<td></td>
<td>Stray dog, Fear, Scarecrow, Computer game,</td>
</tr>
<tr>
<td></td>
<td>Insect, Avocado</td>
</tr>
<tr>
<td>9</td>
<td>lacks attempts</td>
</tr>
<tr>
<td></td>
<td>Old version computer that need updating,</td>
</tr>
<tr>
<td></td>
<td>Electric circuit with plucked cable connections</td>
</tr>
<tr>
<td></td>
<td>Dried trees, Pine tree, Cactus, Treadmill,</td>
</tr>
<tr>
<td></td>
<td>Turtle, A man trapped in a swamp Swamp,</td>
</tr>
<tr>
<td></td>
<td>Garbage truck, A car stuck in the mud, Burn mark,</td>
</tr>
<tr>
<td></td>
<td>A patient who knows about his illness but refused to get treatment, A crawling baby</td>
</tr>
</tbody>
</table>
Most of the metaphors used for Turkish education system are about the belief that it continuously changes. Participants 149FM2 thought that this situation is similar to a recipe and explained its reason as follows:

There have been many attempts in our country for many years but success is not achieved. They try it just like a recipe that does not work, the result is frustration.

105FP2, who likened education systems being useless to buying star from space, stated that “It is valid in theory but it is rubbish in practice”. Similarly, 80MP2 stated that the education system is suffering from uncertainties and likened it to an irregularly flowing river: “What will happen in our education system is not clear. An irregular river is also like that. It is not clear what it will carry and where”. According to the participants, some changes and improvements are made in the education system; however they are not sufficient in number and quality. 154FM2 likened Turkish education system to a garbage truck and explained the reason behind his perception as follows:

Turkish education system is like a garbage truck that does not lose its essence in today’s modernizing Turkey. According to my observations, I realize that although they try to use different garbage truck, it still keeps its first original characteristics

Some participants lost their hopes for the improvement of the system despite betterment attempts:

No matter how hard you try, it never gets better (Burn mark – 53FP4)

<table>
<thead>
<tr>
<th>NOT FUNCTIONAL</th>
<th>Categories</th>
<th>Metaphors</th>
<th>Guiding Categories</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Unnecessary</td>
<td>Redundant good at home</td>
<td>Rubbish</td>
<td>12 Guide</td>
<td>Institution educating soldiers</td>
</tr>
<tr>
<td></td>
<td>Lace on a TV set</td>
<td>Dump</td>
<td>Factory</td>
<td>Martial arts</td>
</tr>
<tr>
<td></td>
<td>Buying a star in the space</td>
<td>coins in the wallet</td>
<td>Instruction</td>
<td>Livestock market</td>
</tr>
<tr>
<td></td>
<td>Empty plate</td>
<td>High-heeled shoes</td>
<td>Laws</td>
<td>Arranges the height and width</td>
</tr>
<tr>
<td></td>
<td>Empty notebook</td>
<td>Broken machine</td>
<td>Turkish Football Federation</td>
<td>of the stairs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitchen cupboard</td>
<td>Poem</td>
<td>Bourgeoisie</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Watermelon</td>
<td>Breath</td>
<td>Genetic illness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Predetermined route</td>
<td></td>
</tr>
</tbody>
</table>

|                | Factory producing chocolate bars | Tree that is about to decay |
|                | Factory producing wrong/faulty products | Tree without leaves |
|                | China | Chicken trying to climb a tree |
|                | Dump | Washing machine |
|                |                | Mental illness |
Highlighting that betterment attempts are not original, 27FP4 likened education system to a wannabe young singer and explained her ideas as follows:

We have a wannabe system. We try to apply whatever we hear and pretend that it is our invention. Fake success rate is the bonus.

The participants stated that education system affects people’s lives in addition to guiding educational practices:

Unsuccessful individuals in the education system are somewhat isolated from the society (bourgeoisie - 70FP2)

When something happens to us, its positive and negative effects continue until we die. It also affects new generations very easily (a genetic illness - 22FP4)

**Preservice teachers’ metaphorical perceptions regarding teacher**

According to the findings, 142 preservice teachers stated 110 different metaphors regarding teacher. A total of 11 categories were classified under 4 main themes; *(i) shedding light into future, (ii) second parents, (iii) students’ qualifications, and (iv) hierarchical structure. The results are displayed in Table 5 below.

**Table 5. Themes and metaphors regarding teacher**

<table>
<thead>
<tr>
<th>SHEDDING LIGHT INTO FUTURE</th>
<th>Categories</th>
<th>Metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enlightening</td>
<td>The sun</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Candle</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lamp</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Star</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rainbow</td>
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<tr>
<td></td>
<td></td>
<td>Book</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Online encyclopedia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Search engine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wiseman</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mr-know-it-all</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conductor</td>
</tr>
<tr>
<td>2</td>
<td>Guide</td>
<td>Light</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A leading and enlightening person</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lighthouse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compass</td>
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<tr>
<td></td>
<td></td>
<td>Navigation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lifeguard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pioneer</td>
</tr>
<tr>
<td>3</td>
<td>Shaping</td>
<td>Sculptor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scissors</td>
</tr>
<tr>
<td>4</td>
<td>Indispensable</td>
<td>Water</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The sun</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bread</td>
</tr>
</tbody>
</table>
According to the finding, the participants produced metaphors mostly about teachers’ enlightening their students. Among these metaphors are objects that radiate light such as the sun, candle, lamp, star etc. Similarly, teachers’ guidance to students was the second category in which the most metaphors were generated. For instance, 60FP2 claimed that teachers resemble to lighthouse and said “He becomes a light for his students, gives them hand. If he is a knowledgeable and self-developed teacher, he is an entity spreading light in an enormous sea. He shows the way in the dark”. Another category suggested is that teachers shape their students by educating them. The final category is that they are considered indispensable in the society. One example metaphor for teachers’ being considered the backbone of society is as follows:

It is expected that life is impossible without the sun. Just like the sun, which provides light for each creature directly or indirectly, a teacher also sheds light on whole society (the sun – 32MP4)

According to the replies provided by the participants, the second theme for teachers is about the fact that they are secondary parents to students. For instance, teacher is self-sacrificing just like a mother. To exemplify, the participant 30FP4 likened teacher to a puppet by stating “a person who tries to make people happy, being a bridge between students and parents and tries to educate students within the framework of a certain system but is always faulty somehow” Similarly, teachers are interested in students’ problems. Finally, the participants opine that teacher is full of love and

<table>
<thead>
<tr>
<th>SECOND PARENTS</th>
<th>Categories</th>
<th>Metaphors</th>
<th></th>
<th>Coach</th>
<th>Head commander in the war</th>
<th>Puppet</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Self-sacrificing</td>
<td>Mother</td>
<td>Candle that finishes as it burns</td>
<td>everblooming tree</td>
<td>Fertile tree</td>
<td>Coach</td>
</tr>
<tr>
<td>6</td>
<td>Affectionate</td>
<td>Mother</td>
<td>Source of love</td>
<td>Farmer</td>
<td>Puppet</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Caring</td>
<td>Parent</td>
<td>Mother-father</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STUDENTS’ QUALIFICATIONS</th>
<th>Categories</th>
<th>Metaphors</th>
<th></th>
<th>Coach</th>
<th>Head commander in the war</th>
<th>Puppet</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Taking individual differences into consideration</td>
<td>Gardener</td>
<td>Actor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Misleading</td>
<td>Titanic</td>
<td>Shepherd</td>
<td>Guardian</td>
<td>Challenging parkours</td>
<td>Color blind</td>
</tr>
<tr>
<td>10</td>
<td>Increasing quality</td>
<td>Cake</td>
<td>Melon</td>
<td>Noah’s pudding</td>
<td>Seed</td>
<td>Computer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIERARCHICAL STRUCTURE</th>
<th>Categories</th>
<th>Metaphors</th>
<th></th>
<th>Coach</th>
<th>Head commander in the war</th>
<th>Puppet</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Following the orders</td>
<td>Vice president</td>
<td>Monster</td>
<td>A person who tries to follow orders</td>
<td>An old lady trying to look at my phone on bus</td>
<td>Puppet</td>
</tr>
</tbody>
</table>
affection for their students. The participant 43FP4, who likened teacher to a farmer, stated the following:

“Because she raises each student one by one with love just like a farmer does”

According to the findings, the third theme is about the fact that the quality of students is highly dependent on teacher’s quality. In other words, some teachers take individual differences of their students into consideration. The participant 39FP4 likened teacher to an actor: There are different student types and needs. Since she cannot be a remedy for students when she acts for general public, she uses different methods and techniques for each student”. However, some teachers might mislead students. The participant 7FP4, who likened teacher to Titanic, stated “they sink all the generation while trying to save the ship”. In short, some teachers act based on their students’ needs while others might mislead them. The last category under this theme is increases quality, which means that poor quality teachers raise poor quality students while high quality teachers educate high quality students. The participant 145FM2 used melon metaphor in order to explain the effect of teacher on students and the reason of this metaphor as flows:

When you have a good one (melon), it is amazing, it cools your body, relaxes you and you want to eat more as you eat. But if you have a bad one, it upsets the taste of your mouth as well as the taste of other foods.

According to the findings obtained from the metaphors suggested by the participants for teacher, the last theme is related to hierarchical structure. Accordingly, teachers have to follow the orders of their superiors in order to survive since Turkish education system has a hierarchical structure. The metaphors related to this category are as follows:

He does whatever MNE (Ministry of National Education) and the school principal say (puppet – 78FP2)

He might suffer from mobbing if he refuses to do what the principal and vice-principal says (a person who tries to follow the orders given – 96FP2)

Preservice Teachers’ metaphorical perceptions regarding student

According to the findings, 139 preservice teachers stated 110 different metaphors regarding “student”. A total of 14 categories were classified under 4 main themes; a person (i) who is developing himself, (ii) whose feelings are ignored (iii) who tries to survive, and (iv) who is a passive creature. The results are displayed in Table 6 below.
Table 6. Themes and metaphors regarding student

<table>
<thead>
<tr>
<th>Categories</th>
<th>Metaphors</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Environmental conditions</td>
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<tr>
<td></td>
<td>Seed</td>
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<tr>
<td></td>
<td>Plant</td>
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<td></td>
<td>Soil</td>
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<tr>
<td></td>
<td>Sapling</td>
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<tr>
<td></td>
<td>Sapling about to bloom</td>
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<td></td>
<td>Unripe fruit</td>
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<td></td>
<td>Sunflower</td>
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<tr>
<td></td>
<td>Liquid</td>
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<tr>
<td></td>
<td>Vegetable soup</td>
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<tr>
<td></td>
<td>Dough</td>
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<tr>
<td></td>
<td>Play dough</td>
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<tr>
<td></td>
<td>Structured person</td>
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<tr>
<td></td>
<td>Environment</td>
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<td></td>
<td>Iron</td>
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<td></td>
<td>Diamond</td>
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<tr>
<td></td>
<td>Mine</td>
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<td></td>
<td>Raw material</td>
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<tr>
<td></td>
<td>Wood</td>
</tr>
<tr>
<td></td>
<td>Newly poured cement</td>
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<td></td>
<td>An empty plate</td>
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<td></td>
<td>An empty page</td>
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<tr>
<td></td>
<td>An empty pen</td>
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<tr>
<td></td>
<td>Baby</td>
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<td></td>
<td>Chick</td>
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<td></td>
<td>Home</td>
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<tr>
<td>2</td>
<td>Process</td>
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<tr>
<td></td>
<td>Butterfly</td>
</tr>
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<td></td>
<td>Water droplets</td>
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<tr>
<td>3</td>
<td>Experiment subject</td>
</tr>
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<td></td>
<td>Worker</td>
</tr>
<tr>
<td></td>
<td>Slave</td>
</tr>
<tr>
<td></td>
<td>Guinea pig</td>
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<td></td>
<td>Robot</td>
</tr>
<tr>
<td>4</td>
<td>Full of unnecessary and redundant information</td>
</tr>
<tr>
<td></td>
<td>Fridge</td>
</tr>
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<td></td>
<td>Cellar</td>
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<td></td>
<td>Computer</td>
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<tr>
<td></td>
<td>Robot</td>
</tr>
<tr>
<td></td>
<td>Rotten egg</td>
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<tr>
<td></td>
<td>A person how cannot swim in a pool but dives in oceans</td>
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<tr>
<td></td>
<td>Balloon</td>
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<tr>
<td>5</td>
<td>Oppressed</td>
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<tr>
<td></td>
<td>Punching bag</td>
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<td></td>
<td>Boxing bag</td>
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<td></td>
<td>Little Emrah (a character in a Turkish film)</td>
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<tr>
<td></td>
<td>Drum</td>
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<td></td>
<td>Ball</td>
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<td></td>
<td>Football ball</td>
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<tr>
<td>6</td>
<td>Gets information</td>
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<td></td>
<td>A wolf hungry for information</td>
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<td></td>
<td>Buds who want to get information</td>
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<tr>
<td></td>
<td>Philosopher</td>
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<td></td>
<td>An empty bucket</td>
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<tr>
<td></td>
<td>A thirsty flower</td>
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<tr>
<td>7</td>
<td>Shows attempts continuously</td>
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<tr>
<td></td>
<td>Factory worker</td>
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<td></td>
<td>Robots without conscience</td>
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<tr>
<td></td>
<td>Footballer</td>
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<tr>
<td></td>
<td>Grasshopper</td>
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<tr>
<td></td>
<td>Ant</td>
</tr>
<tr>
<td>8</td>
<td>Struggles to survive in life</td>
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<tr>
<td></td>
<td>A thirsty flower in the desert</td>
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<td></td>
<td>Villager who has just moved to city</td>
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<td></td>
<td>Refugee</td>
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<tr>
<td>9</td>
<td>Burns out in time</td>
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<tr>
<td></td>
<td>Pen</td>
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<td></td>
<td>Ice-cream</td>
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<td></td>
<td>Battery</td>
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<td></td>
<td>Criminals</td>
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<tr>
<td></td>
<td>Workers</td>
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<tr>
<td></td>
<td>Experiment subject</td>
</tr>
<tr>
<td></td>
<td>Unfinising walk</td>
</tr>
<tr>
<td>10</td>
<td>Aimless</td>
</tr>
<tr>
<td></td>
<td>A person who does not know what to do</td>
</tr>
<tr>
<td></td>
<td>Cruise passenger</td>
</tr>
<tr>
<td></td>
<td>Space</td>
</tr>
<tr>
<td></td>
<td>Collapse of Ottoman Empire</td>
</tr>
<tr>
<td>11</td>
<td>does not question</td>
</tr>
<tr>
<td></td>
<td>Slave</td>
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<tr>
<td></td>
<td>Robot</td>
</tr>
<tr>
<td></td>
<td>Flowerpot</td>
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<tr>
<td></td>
<td>Prisoner</td>
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<td></td>
<td>Puppet</td>
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<td></td>
<td>Remote control car</td>
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</tbody>
</table>
The findings of the study showed that the participants mostly used metaphors related to environmental conditions. In addition, the participants believe that development of students is dependent on many factors such as teacher, family and environment. The following metaphors and extracts can be given as examples to this category:

How dough is leavened, kneaded, and cooked depends on the chef. If the dough is very soft or hard and does not rise, it is the chef’s fault. Child is child (Dough – 145FM2)

Development of students depends on environment; water, the sun, food, sound, communication, trust weather conditions. The seed cannot blossom if these are too much or too little (Seed – 27FP4)

The participants likened students to butterfly and water droplets in order to state that development of students takes time in addition to being dependent on environment.

The second theme is related to the belief that students’ feelings are ignored. According to the participants, students are a subject on whom various systems are tried. The metaphors and extracts related to this category are presented below:

They test many systems on us, and we are harmed (guinea pigs – 123FP2)

I see it as experiment material. Education system continuously changes and students are actually seen as guinea pig (guinea pig -82FP2)

When different systems are tried on students, they are given redundant and unnecessary knowledge required by each system. Therefore, preservice teachers think that students are always the oppressed ones. With this theme, the participants resemble students to ball, boxing bag and drum by reflecting the idea that “everybody hits”. 18MP4, who likened students to a football ball, supported other participants “they are the objects thrown by the administrators and educators from side to side for fun”

The third theme regarding student is about their trying to survive in life by studying. Accordingly, students are always hungry for information and constantly acquire knowledge. In addition, students are non-stop studying creatures. The metaphors and extracts related to this category are presented below:
He tries to learn something from his teacher. He constantly studies lesson as if he were trained all the time (footballer – 54FP4)

They try to adapt to life while learning new information every day, but they are required to do a test all the time (robots without conscience – 30FP4)

According to the participants, students are somehow trying to survive in life by studying. The following metaphors were used to define this category: a thirsty flower in the desert, a villager that has just moved to city and refugee. Finally, students who fail to endure during this long survival attempts burn out in time. The metaphors such as pen, ice-cream and battery clearly reflect this idea.

The final theme regarding student is about students’ being a passive creature. Accordingly, students are aimless and they do whatever they are told to do since they do not have any goals. The following metaphors and extracts can be given as examples to this theme.

He is not asked to express his opinions at school, he has to do what the school administration asks him to do (Flowerpot– 72FP2)

In today’s education system, students have an active role and they have to do what they are asked to do from them. They are constantly given instructions about what to do (robot – 159FM2)

When students do what they are told to do without questioning, their freedom is also restricted somehow. The participants used several metaphors for students with restricted freedom such as prisoner, slave with shackles, and slave.

Discussion, Conclusion and Recommendations

This study aims to identify point of views and perceptions of preservice teachers regarding school, school principal, Turkish education system, teacher and student. Their perceptions expressed through metaphors were examined and the meanings given to each of these metaphors were determined. Metaphors, which offer a wide range of thinking about educational organizations, are one of the most powerful tools that can be used in understanding and explaining a phenomenon (Yob, 2003) as a reflection of our system of thought and our way of perceiving the world (Morgan, 1998). In this respect, the metaphors obtained in the study were divided into different themes: 4 themes for school (i) learning place, (ii) a place that molds students to a certain shape, (iii) a place that cannot achieve its purpose, (iv), a place for socialization; 5 themes for school principal (i) responsible for administration, (ii) physical and personality characteristics, (iii) unnoticeable presence, (iv), non-educational works and (v) hierarchical structure; 4 themes for Turkish education system (i) a continuously changing system, (ii) not well-established, (iii) not functional and (iv) guiding.; 4 themes for teacher (i) shedding light into future, (ii) second parents, (iii) student characteristics and (iv)
hierarchical structure.; and 4 themes for student a person (i) who is improving himself , (ii) whose feelings are ignored (iii) who tries to survive in life and (iv) who is a passive creature.

The analysis of the metaphors expressed by students about school revealed a focus on the idea that schools are a learning place. Various metaphors were suggested to reflect this perception such as factory, book, information center, the sun, home, house, cocoon etc. Information is the first thing that comes to one’s mind when school is traditionally seen as an organization that produces services, and school is believed to be a place where information is provided (Şişman, 2011). It is interesting that the preservice teachers in this study also defined school as a place that where students are provided practical and theoretical information. This finding is also consistent with the “information provider” category in Nalçacı and Bekaṭ’s (2012) study and “school as a place to acquire information” category in Kara and Bozbayındır’s (2019) study.

One of the metaphors reflecting the preservice teachers’ perception about school is prison metaphor, which is the most frequently used metaphor. Preservice teachers believe that school is a place that restricts individuals’ freedom. The social and philosophical function of education is to liberate individuals and to equip them with human qualities. However, the current study revealed that future teachers perceive schools as a restriction and control centers and emphasize their uselessness. According to Faocault (2000), prisons have two different dimensions: discipline and control. These two characteristics are observed not only in prisons but also in other institutions and school is one of these institutions. Thus, it is possible to conclude that schools hinder individuals’ creativity and restrict their freedom through disciplinary actions and control mechanisms. Prison metaphor reported by the participants is consistent with the “prison of souls” metaphor suggested in Morgan’s (1998) study, which presents a different perspective by discussing organizations through different metaphors. Similarly, prison metaphor has often been reported in other studies dealing with metaphor use for schools (Doğan, 2014; Nalçacı & Bektaş, 2012, Örücü, 2014; Özdemir & Akkaya, 2013; Saban, 2008).

Another concept dealt with in this study is school principal. The examination of metaphorical perception of preservice teachers about school principal revealed an emphasis on certain metaphors such as referee, judge, minister of justice and head guardian, which reflect their decision-maker characteristic as the person responsible for administration. School is a hierarchical organization where bureaucratic processes take place at all phases. School principals are those who are responsible for the development and effectiveness of schools (Fullen, 2002). They are expected to have different management skills and lead in goal achievement processes at schools (Bursaloğlu, 1998). As a result, it is quite logical that they should give final decisions since they are considered school leaders. There are some similar metaphors reported under “being management-focused” category in Yalçın and

It is suggested that school principals should spend most of their times at school visiting classroom (Sergiovanni, 1984). They assume different responsibilities depending on changing conditions. However, it is striking that following metaphors were stated in the current study such as “apartment superintendent, prison director and trinket” which reflect the belief that school principals spend more time on non-education works. These findings of this study support the findings about the distribution of routine works as revealed by Belenkuyu et al. (2020), Akçay and Başer (2004) and Gümüşeli (2009). Belenkuyu et al. (2020) report that school principals deal with bureaucratic correspondences, paperwork and control of school garden rather than necessary routines to ensure effective teaching and learning. On the other hand, the metaphors such as “hatching chicken” and “harvest fly”, which imply that school principals do not work, reflect an opposite belief stated in the findings related to roles, tasks and routine works. Accordingly, these metaphors are not consistent with the metaphors (bee, search engine, ant and cow) reported by Dönmez (2008) and Aydoğdu (2008). While preservice teachers believe that school principals do not work, primary school students think that they work a lot. The reason lying behind this difference is believed to be different levels of education. In Aydoğdu’s (2008) study, primary school students described school principals as tireless workers; however, it is interesting that their teachers did not produce similar metaphors.

This study deals with Turkish education system as a whole through the perceptions of preservice teachers and focuses on other concepts - teacher, student, school principal and school as the components of this system. In this respect, the participants produced negative metaphors while expressing their perceptions about Turkish education system such as “changing, inconsistent and uselessness” etc. The use of negative metaphors regarding Turkish education system is consistent with the findings of similar studies (Gedikoğlu, 2005; Kasapoğlu, 2016; Keser-Özmantar & Yalçın-Arslan, 2019; Örücü, 2014; Öztürk-Çalıkoğlu & Başar, 2019). It is acknowledged that teachers play a key role in implementing education system in an effective way and educating qualified individuals. Therefore, it is thought-provoking that preservice teachers, as the teachers of near future, have negative perception about the system because it is suggested that preservice teachers’ perception, attitude and needs might be reflected on their professional development and personality (Beldağ & Yaylacı, 2014; Noyes, 2004).

When the metaphors reflecting preservice teachers’ perceptions on teacher are examined, it can be seen that metaphors regarding their shedding light on future (the sun, candle, lamp and star) and their guidance function (light, lighthouse, compass etc.) outweigh others. In this respect, it is possible to suggest that preservice teachers emphasize knowledge provider role of teachers, which is considered one of the traditional roles. This finding is consistent with those reported by Egüz and
Öntaş (2018), Kıral (2015), Saban (2004) and Yılmaz et al. (2013). The metasynthesis study focusing on studies dealing with metaphor use for teacher concept revealed that preservice teachers’ metaphor production in most of these studies were categorized under the following themes: knowledge provider (book, tree, the sun, candle), shaping / molding (sculptor, construction worker, painter, artist) and guiding (lighthouse, compass, light, the sun, guide). Therefore, it is possible to conclude that the findings of both studies support each other. Teacher is the most strategic variable responsible for combining the variables in the system to ensure an effective teaching and learning process (Aydın, 2017). Teachers assume many roles in this process, which were found to be knowledge provider and guiding role in the current study. Çakmak (2011), in her study, pointed out that preservice teachers emphasize the following roles of teachers in teaching and learning process: motivating for learning, providing knowledge, being a role model, self-development and guidance.

Finally, the most common theme in the metaphors stated by preservice teachers about student is development. Accordingly, development of students depends on several variables such as teacher, family and environment. The study conducted by Saban (2009) with preservice teachers showed that metaphors stated for student mainly focused on the following themes: student as a developing individual, student as raw material and student as an empty mind. Similarly, the findings of Sezgin et al.’s (2017) study highlighted “student as a developing individual” category. Thus, the findings of these two studies are consistent with each other. However, “neglecting emotions” was another theme highlighted in the current study. The participants described “student” as “guinea pig” or “oppressed”, which is an issue that needs to be examined in detail. In addition, there are few studies focusing on metaphor use for student concept (Saban, 2009; Sezgin et al., 2017). Therefore, conducting more studies focusing on student is quite likely to contribute to field of educational sciences where the dominant approach is student-centered approach suggesting that more permanent and effective learning might occur when students assume responsibility with a more active participation (Mayer, 2004).

This study aimed to adopt a holistic point of view regarding preservice teachers’ opinions about the education system through a focus on school, school principal, Turkish education system, teacher and student. Based on the findings, the metaphors used by preservice teachers can be considered as a situation determination. However, metaphors are also known to have the power to unveil different dimensions of a situation (Morgan, 1998). Thus, it is possible to conduct action research focusing on different variables related to teaching and learning process. Moreover, in-depth analyses of the education system can be done by including different dimensions. Just like other research, this study also has some limitations. The study was conducted with students attending the education faculty of a state university. The further studies can be conducted with different groups (such as students attending education faculty of private / foundation universities) so that it can be possible to make comparisons that might reveal some differences in perceptions. Finally, it is essential
to examine the reasons lying behind negative images about the education system in detail as stated by preservice teachers as individuals who will be a part of this system in near future. It should be kept in mind that preservice teachers’ mental images about educational organizations have considerable effects on the success of teacher training system. Therefore, taking into consideration the findings of studies conducted with preservice teachers and revealing their perceptions on education system while planning and analyzing educational practices and making decisions will considerably contribute to the success of the system.

References


Analysis of Manager and Teacher Opinions on the Management of School Risks in the Framework of the Internal Control Risk Management Model

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Abstract

In order for the educational processes in schools to be carried out as designed, all internal and external elements of the school should be in harmony and cooperation. In order to achieve this harmony, it is necessary to determine the situation of the school correctly and to manage the risks defined as uncertainty and opportunities for the future. The most important condition for making the right interventions are against risks are to develop measures by taking advantage of the experiences of people who are exposed to risks and who are most affected by these risks. In this way, the effectiveness and efficiency of the school can be increased. In this study conducted in this context, the opinions of school administrators and teachers on the measures that can be taken for risks that are considered to be of high importance in schools were examined. The study groups of the study consist of school administrators and teachers working in public high schools affiliated to the Ministry of National Education in Niğde city center. According to the results of the research carried out in qualitative design, regular inspections and risk analyzes of schools are among the measures that can be taken against risks with high scores, that the administrators appointed on the basis of merit are open to communication, fair, competent and impartial, and school staff create a corporate culture based on love, respect and mutual trust and the recommendations to respect disciplinary rules come to the fore.

Keywords: Risk, Risk Management, School Management, Internal Control, Strategic Plan

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Introduction

Every organization has a purpose of existence. The purpose of the companies in the private sector are to profit due to the general activities, while the general purpose of the public sector is to make the public benefit the maximum from the activities and services. There are many uncertainties regarding the future in both public and private sector in all areas such as individual, social, corporate, financial, political etc., and the nature of these uncertainties can be either positive or negative. According to Demirel & Taner (2009), these uncertainties about the future are inherently intended to catch up with the systems unprepared. Managers should think in detail about what can be done to prevent uncertainty and problems from turning into crises and to create solutions in problematic areas. At this point, the concept of risk, which intersects in many areas with the concept of uncertainty in the related literature, is even more inclusive than this concept emerges.

The word "risk" has been used in different fields and, in the historic process in different meanings, but it is generally accepted that the word "risk" is first used in the ancient Greek (Çipil, 2008). According to Tekşen (2014), Latin's words "resicum, risicum, riscus", Italian "risico, risco, rischio", Spanish "riesgo" and French "risque" originate from the same source as the word "risk". The word "risicare" has been used in the meaning of "venture, dare" in Italian (Bernstein, 2015) and in some Arabic sources, the word "risk" is comes from the "livelihood" concept given by God, from which the person earns profit (Arman, 1997). In this context, it can be said that the meaning attributed to the concept of risk fits the social and economic characteristics of the culture it was born.

According to Hardy (2010), the risk is the probability and impact of a situation that has the potential to occur in order to achieve the organization's goal. In some sources, two different meanings are attributed to risk. The first one is that risk is the variation of the probable consequences of an event due to accident. The second is related to the uncertainty of the damages that may occur. According to Griffiths (2005), “risk” that is a variable threat to certain events that will prevent the organization from achieving its objectives, according to Küçükşahin et al. (2009), it can be defined as any event that may affect the reason for the existence and the successful management of strategies by people, systems, institutions, and states.

The majority of these definitions relating to “risk” involve shared use of the concepts of uncertainty, loss, threat, danger and opportunity, and for businesses, any adverse situations or dangers that prevent the organization from carrying out its goals and objectives are defined as “risk”. In summary, no matter what work is done, the risk is inevitable and all risks cannot be eliminated. Organizations or businesses need to take risks achieving its objectives, succeed and survive (Six & Kowalski, 2005; Keskin, 2006). In this regard, organizations need to prepare for crises in order to cope with the crises arising from any reason. It is important to determine the risks that may arise from
each decision made in the institution to take precautions against these risks and determine whether the resulting return is adequate against the risk assumed (Tüzün, 2002).

For organizations, taking risks related to any future situation similar to the personal life, minimizing the size of the losses and maximizing the benefits; these events depend on early detection and preparation of the most appropriate actions (Derici et al., 2007). In this respect, Crouhy et al. (2000) argues that risk is a key to successful management. Therefore, it is necessary to make choices and make decisions in order to cope with the uncertainties that create profit and loss. In this regard, risk is not a destiny, but a choice. The actions we take with courage actually depend on how free we are in our choices. In other words, risk perception is a process with socio-psychological aspect (Bakkal, et al., 2016).

The source of the risks is future unknown events and uncertainties in the area of activity in which the organization operates. Therefore, organizations that focus on different risks according to their needs in their areas of operation need an effective risk management system to minimize the loss of uncertainties. Deciding which risks can be avoided, which ones prevented, and which risks can be undertaken is the most critical process in risk management. Necessary measures must be taken to avoid any potential future risks being negatively affected and these risks must be managed well and turned into opportunities. Otherwise, crises that occur as a result of risks will have many adverse effects. Risk management for organizations and businesses is seen as the most important way of eliminating the negative effects that are thought to hinder future strategies.

Bolgün & Akçay (2009) states that organizations are required to take initiatives that may have different consequences in order to maintain their competitive edge. The likelihood of these results being realized also determines the risks that may arise during the execution of the organization's activities. Determining and managing factors that may disrupt the operations and services of the institutions and undermine their credibility is essential for achieving their fundamental strategies. This approach and understanding have introduced the concept of "Risk Management" (Fıkirkoka, 2003; FERMA, 2014). Risk management involves the planning, management and control processes of the necessary measures to ensure that organizations continue to operate efficiently, maintain the organization's ability to earn by ensuring the assets and resources of the organization, and to undertake the necessary measures to overcome unexpected losses at the least cost (Emhan, 2009).

Establishing an effective risk management system in the organization is one of the most important factors for making the right decisions. In this context, risk management is defined as the process of taking advantage of opportunities that will increase the success of the organization by identifying and eliminating the risks that may prevent the organization from achieving its goal or reducing them to an acceptable level (Kızılboğa, 2012). In other words, risk management can be defined as the process of preparing the organization and mitigating the effects of the shocks that result

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from risks. Risk management will play an active role to make the organization resistant to negative shocks, increase and protect its functional capabilities (WDR., 2014).

Risk management is performed in all organizations, whether or not it is noticed. Risk management in some organizations is handled more seriously and systematically implemented. Instead of implementing risk management as a system, some organizations use a traditional perspective when making daily routine decisions. According to Arslan (2008), a good risk management is a systematic approach that involves identifying, assessing and managing all risks that may affect the organization and enhances confidence in achieving desired results, limits threats to an acceptable level, ensures decisions are made to take advantage of opportunities with the necessary information available, and helps increase stakeholders’ trust in corporate management. The most challenging issue for managers in risk management is to make decisions about the risk level to be undertaken in the process of achieving the objectives. In order to make the risk level decisions that can be taken properly, the organization must have a risk management system installed and its processes implemented systematically.

If the risk can be accurately defined and measured, it can be manageable. Administration can prevent these risks through the controls it develops, and avoid risks by abandoning its purpose in that direction, can transfer risks using methods such as insurance etc., or reduce the residual risks to an acceptable level as a result of the controls. The administration is responsible for which of these methods will be used. It is not possible to avoid all risks and control all risks, and it is clear that all risks cannot be managed with the same methods. The traditional risk management approach of businesses involves identifying risks and taking the necessary measures to avoid them. Therefore, businesses are trying to reduce their potential loss size by setting limits for activities that may reveal risks (Keskin, 2006).

There will be a cost when the risks are not intervened, and there will be a cost for interventions to manage these risks. What is important here is that the cost to control the risks remains below the losses that may occur when the risks are realized. Otherwise, an undesirable situation occurs by exceeding the harm, benefits of interventions on behalf of risk management (Güleç & Gökmen, 2009). Risk management aims to ensure the risks and the extent to which the process should be undertaken in order to achieve the desired service or benefit level. Risk management is a tool used to achieve the desired risk-benefit balance (TUSIAD, 2008).

Risk management was previously used as a purely risk mitigation, but later on consensus was that it should be regarded as a strategic effort that completes and supports the activities of the organization (Özer, 2008). Risk management is based on the best available information, creates and maintains value; eliminates uncertainty by explaining it and is an integral part of decision making and organization processes; dynamic, repetitive and change-sensitive, systematic and has good time
management; is designed specifically for the situation within the organization and ensures continuous
development; transparent and inclusive, considers human and cultural factors (Crawford, 2012).

In summary, risk management is an integral part of making decisions for good management
that enable informed decision making, and supports effective and efficient use of corporate resources
and since it is a managing issue, all management functions are also applicable to risk management
(Fıkirkoca, 2003). In light of these definitions, we can explain risk management as systematic
management policies and procedures established in the processes of identifying, analyzing, assessing,
struggling and monitoring risks.

All organizations may face risks such as inefficiency, deviation from objectives, waste, cheat
and abuse while carrying out their activities. The public sector may be more likely to face the
mentioned risks due to the fact that service areas in the public sector differ in structure with the
private sector. Public education institutions are among these sectors with different risks. Moreover,
the operating objectives of the educational sector are very large, irregular, ambiguous, blurred and
sometimes conflicting, leading to problems in which indicators and performance targets cannot be
measured directly (Fisher, 1993: 70). In order to address all of these problems arising from the
structure of public institutions and organizations, and to ensure effective, efficient and economic use
of assets, it was understood that the risk management practices implemented in the private sector must
be created in public institutions as well. Five independent professional organizations in the United
States came together to form COSO (Committee of Sponsoring Organization) in 1985. The internal
control model designed by COSO in 1992 was adopted as a risk management model in all public
institutions in our country by implementing the necessary legal regulations.

Today, COSO's internal control model, designed and developed worldwide, is used in a wide
range of industries as a professional management model that envisages the creation of an appropriate
organizational environment to fulfill the objectives of public institutions and private organizations,
identifying and assessing risks that prevent the organization from achieving its goals, deciding on how
to respond to the risks assessed, providing information and communication between the units related
to the control activities implemented, and continuous monitoring of control actions.

Internal control consisting of many interrelated elements is created by interacting with
employees at each level of the organization. Internal control is a chain of movements that has
penetrated the activities carried out in the organization, not a single activity, situation or event (Saltık,
2007: 5). It is integrated with planning, organization, directing and auditing (control) from the
functions of internal control management theories, a self-regulating system during the execution of
operations, and an interactive management tool created in line with the business workflows and used
by the management (Tuan, 2009).
The internal control model developed by COSO consists of the main components such as “control environment”, “risk assessment”, “control activities”, “information and communication”, and “monitoring”.

Control environment component composed of sub-components such as ethical values and integrity, mission, organizational structure, adequacy and performance of personnel and delegation of authority. The control environment is a component that defines the infrastructure, rules and culture requirements that need to be established for the organization to function properly.

Risk assessment component composed of sub-components such as planning, scheduling, risk identification and assessment. Risk assessment is a component that defines the conditions for determining and assessing the risks that may prevent the organization’s short- and long-term plans and the achievement of the objectives set in this plan.

Control activities component composed of sub-components such as control strategies and methods, establishing and documenting procedures, segregation of duties, hierarchical controls, continuity of operations and information systems controls. It is the component that defines the conditions for what measures should be taken against risks identified in the organization.

Information and communication component composed of sub-components such as information and communication, reporting, recording and filing system, and reporting of errors, irregularities and corruption. Information and communication is the component that defines the conditions for the form of internal and external communication, and how information and reporting generated in the organization, records and filing should be performed.

Monitoring component composed of sub-components such as assessment of internal control and internal audit. Monitoring is a component that aims to determine whether the procedures and controls are properly designed in the organization, whether there are errors or disruptions in the operation, and whether all elements work effectively and sufficiently to complement each other.

Internal control is a multi-dimensional model that aims to ensure that the activities undertaken by the organizations are effective, efficient and economic, to create reliable reports in the organization, and to carry out activities in line with the legislation in the environment in which the organization is located. Today, an internal control system based on the COSO model is adopted and implemented in many countries of the world, including the European Union.

Persons who implement and operate internal control are those who work in the organization. For this reason, the responsibility for the successful establishment and maintenance of internal control lies with the managers and employees at all levels. According to Gönülaçar (2007), internal control
should be regarded as an essential element of the system used in the regulation and direction of managerial activities rather than a separate system in the organization.

In recent years, the importance of risk management has been better understood so that businesses and public and educational institutions can best respond to the risks they face, even though their structures, sizes and sectors are different. Furthermore, organizations are becoming more aware of the risks they face, the rating and how they should manage them. These risks are not only limited to financial risks, but also involve all types of risks such as legal, ethical, educational, social and environmental risks (Erdoğan, 2009).

According to Root (1998), risk assessment is a systematic process that involves identifying the risks that may arise in order to achieve the objectives and targets of the organization, the probability of occurrence of these risks by taking into account and the analysis of the results that will be caused, and this assessment is the basis for managing the risks. Risk management is a process in which senior management, interim managers and all level employees play an active role in the organization. Managing the risks identified in the organization with the same approach is called “Corporate Risk Management”. Corporate risk management is the risk management processes that cover the entire organization and envisages and manages risks as a whole. Risk management consists of successive processes such as identifying the risks that may hinder the targets, assessing the identified risks, responding to the assessed risks, and monitoring and reviewing these responses, starting with the determination of the corporate objectives at the strategic planning stage.

Risks that may prevent the organization from achieving its objectives are identified in the risk management process. Management against these risks determines the organization’s risk acceptance level (risk appetite). Risks are assessed and analyzed in accordance with the level of acceptability, and precaution-control is performed against risks. Responses to risks may be accepting risk, controlling and mitigating risk, transferring risk or avoid risk in a manner that is proportional to the importance of risk. Accordingly, considering the risk assessment of the institution based on the risk acceptance level of the institution, the responses to the risks should be determined, the threats that may arise should be reduced and opportunities should be considered. Measures to be taken by performing a benefit cost analysis should not cost higher than the consequences of the risks and should be proportionate to the risk (Hubbard, 2003). The purpose of responding to risks is to reduce the likelihood of the risk to occur and its impact if it occurs and to achieve the planned goals faster.

Once the risks are identified and assessed, the stage of dealing with the risks should begin. Management should decide whether to accept risks identified in the organization, try to reduce control procedures and risks, transfer them out of the organization, or avoid them (Dinapoli, 2007). In this sense, risk avoidance, risk mitigation, risk taking and sharing are among the techniques used for risk management.
If the risks are accepted as they are, the activities of the institution regarding risky transactions are continued. No action is taken against risk. Transfer of risks means assigning the risks under the responsibility of the institution to other institutions or persons by means of insurance, tender etc. In the event of risk avoidance, the company does not perform operations in this direction by abandoning risky transactions. Each technique to be used depends on the situation. In order to determine which technique can be used at which risk, management must calculate loss probability, size of loss and how to compensate if loss occurs. No decision should be made without considering all possibilities for benefit and loss (Saka, 2006). Regarding the uncontrolled risks, managers must decide whether to accept or eliminate risks; reduce the level of corporate activities. Furthermore, decisions must be made in line with the answers to such questions as "Which risks have priority? What happens if I accept the risk? Can we reduce costs when I transfer the risk? Can we achieve our goals if we avoid risks or postpone activity? Is the size of the risk taken proportional to the size of the opportunity?" in regards to how risks should be answered.

COSO (2004) states that there is always some risk due to lack of resources and limitations in the internal control system. Likewise, it is important to make sure that responses to certain risks are not too much. The company will suffer from insufficient controls as well as excessive controls against risks. In addition to some adverse effects due to risks, different opportunities may be encountered in the organization. Predetermined strategies must be found to take advantage of these opportunities that will contribute to the organization’s goal. These strategies make the organization prepared for opportunities and take advantage of these opportunities while managing risks. Taking a certain amount of additional risk at a reasonable additional cost may be considered as a managerial choice where the benefit from the opportunities encountered is considered important.

According to the internal control, control activities are policies, procedures and measures that are established and implemented by the institution management in order to reduce the impact and probability of the risks that may affect the organization's ability to achieve its goals. Choosing well in control actions depends on performing the risk assessment processes correctly. Management activities must be carried out in accordance with risk management principles and must plan and discipline controls against risks to ensure reasonable assurance. Control activities are implemented for both sub-unit functions and management level of the organization. Each control action may have a different purpose, and these actions can be implemented at the entire organization level, as well as at a process, function or unit level (Reduce, 1999). It is important that control activities are consistent, comprehensible, applicable, reasonable and comprehensive for the purposes as planned. Since it is important that these controls are as easy to implement as they are designed, they must be established considering the institutional capacity (Koçak Şen, 2008).
Organizations may use a variety of control activities to cope with the risks that may hinder or slow down operations. Some of the controls designed against risks are to prevent the consequences of risks before they occur (preventive controls), some to guide them to achieve a certain result (directive controls), some to identify the consequences of the risks (identifying controls), some to correct the consequences of the risks (corrective controls) (Sawyer et al., 2003). While control activities are commonly classified under these four headings, they can also be identified under different headings, if deemed necessary based on the organization’s structure, area of activity and nature of risks. None of these control activities can provide solutions to all risks of the organization on its own. For some risks, a single control activity may be sufficient, while for some, the combination of various control activities may be required, and in some cases a control activity may be replaced with other control activity.

The COSO internal control model, which is the most widely adopted and used international risk management model, has also been adopted as a risk management model in Turkey with the law number 5018. Since 2003, the company has been striving to put in place the internal control system by adopting legislation in many areas so that all public institutions can effectively manage the risks they may be exposed to. In this context, the administrations, that need to carry out strategic plan preparation and implementation activities and risk management activities simultaneously, must consider the risk management cycle (identify – evaluate – answer – report – review) in all stages that begin with the determination of the objectives of the organization in the preparation stages for strategic planning and are concluded by ascertaining whether these objectives are met as foreseen (COSO, 2002; KİKR, 2014). Furthermore, analyzing various possibilities that may pose risks through risk management tools helps to keep corporate risks within the limits that can be managed substantially in strategic planning processes (Tunç, 2014).

In the literature review, although some researches were found on the risks and internal control that may occur in educational institutions, no studies have been conducted to determine the risks according to the internal control model and what measures can be taken against these risks. When studies on school risks are examined, it is observed that the majority of these studies were conducted in relation to the violent behavior and bad habits of students, while others examined the risk management processes of higher education institutions (Çalışkan Maya, 2008; Ersöz, 2012; Tekşen, 2014; Maya, 2019).

As mentioned in the previous sections, it is inevitable that if problems arising from schools, which are the implementation workshops of the education system, are not solved in time, it can grow even further and lead to many new issues related to it. In this study, based on the risk management approach, which argues that growing and chronic problems cannot be overcome by superficial measures, and that the most effective way of dealing with problems should be prevented before these
problems occur, the answer for the sentence of "What are the administrator’s and teachers’ opinions regarding the measures (control) that can be taken for the risks that are considered high in school?" was sought.

**Method**

In this study, an individual or situational approach was adopted and phenomenology design was used from qualitative research designs. Qualitative research aims to understand the causes of human behavior. In the phenomenology design, the researcher studies the world of the participant and identifies the reactions and perceptions of the participants (Fraenkel et al., 2012). In this way, it is aimed to reveal and interpret individual perceptions or perspectives regarding a particular phenomenon (Yıldırım & Şimşek, 2013). Furthermore, the analysis conducted in the phenomenological design aim to conceptualize data and to reveal themes that can define facts.

**Participants**

The universe of the study is composed of all school administrators and teachers who work in public high schools under the Ministry of National Education in the city center of Niğde in the 2017-2018 school years. The study group was determined by the maximum variation sampling, one of the purposive sampling methods, among the administrators and teachers working in these schools. The purposeful sampling allows the study of situations that are thought to be rich in information. In this regard, the sampling method is useful in many cases for explaining and exploring facts and events. The maximum variation sampling is to create a relatively small sample and to maximize the variety of individuals who can take part in the problems studied in this sample (Creswell, 2006; Yıldırım & Şimşek, 2013). The reason for taking a purposeful sampling is to get the opinions of administrators and teachers working in different school types on managing risks and to show how schools can be better managed.

For this purpose, variation is taken according to the task, seniority and school type. Within the scope of the study, a total of 22 voluntary participants; 3 school principals, 8 vice principals and 11 teachers working in 6 different school types (high school) were interviewed. 6 of the participants were in Anatolian High School (1 male principal, 2 male vice principals, 1 male - 2 female teacher), 2 of them in Science High School (1 male vice principal, 1 male teacher) and 5 of them in Anatolian Imam Hatip High School (1 male principal, 1 male vice principal, 1 male - 2 female teacher), 5 of them in Vocational Technical Anatolian High School (1 male principal, 1 female vice principal, 2 male - 1 female teacher), 2 of them from Fine Arts High School (1 female vice principal, 1 female teacher) and 2 of them from Sports High School (1 male vice principal, 1 female teacher). 9 of the participants in the working group are female and 13 are male. 2 female participants are vice principals and 7 are teachers. 3 of the male participants are school principals, 5 are vice principals and 5 are teachers.
Regarding the school administrators and teachers in the working group; 6 have 1-10 years, 9 have 11-20 years and 7 have more than 21 years of professional seniority.

**Data Collection Tools**

In order to collect data within the scope of the research, the high-score risks that arise from the implementation of the "School Internal Risks Assessment Scale", which was previously developed by the same researchers, independently from this research, were discussed. In this study, "Interview Form for Measures (Controls) to be Taken Against Internal Risks" was developed regarding the risks assessed as high risk at the scale mentioned above. Interviews were made with school administrators and teachers through this semi-structured interview form. This form contains 10 open-ended questions. These questions, which constitute the interview form, aim to determine the measures (controls) to be taken against the risks assessed by school administrators and teachers with high-scores in the school internal risks assessment scale.

There are 47 items consisting of five-point grading to determine school risks of school administrators and teachers in the school internal risks assessment scale developed by the same researchers (Ak & Şahin, 2021). As a result of the implementation of this scale, 10 of the 47 risks were assessed by the participants with a higher score than other risks. The Interview Form has been developed regarding the measures to be taken for these high-score risks, and it is aimed to determine what measures (controls) can be taken in schools against the risks assessed as high-score with the 10 interview questions in this form.

With the interview form prepared, a pre-trial application was made for 2 school administrators and 1 teacher, and no changes were made to this form according to their answers. Afterwards, separate and face-to-face interviews were conducted with 11 school administrators and 11 teachers working at the schools covered by the study and voluntarily participating in the study. During the interviews with the participants, permission was requested to record the audio and take notes during the interview, and the meetings of the participants who deemed appropriate were recorded. During the interviews, repeated inquiries were conducted to ensure the saturation of the collected data. Additional explanations were made in a way that the participants would understand when the interview questions were not understood.

**Data Analysis**

In this study, the descriptive analysis (Yıldırım & Şimşek, 2013) approach used for research in which the conceptual structure of the research was clearly stated in advance was adopted. The analysis and interpretations of qualitative data collected as part of the research are described below.

With the research problem, as a result of the application of the internal risk assessment scale developed by the same researchers before (Ak ve Şahin, 2019), it was tried to put forward the
opinions about what measures can be taken by the administrators and teachers against the risks with high risk scores and how these risks should be managed. In this context, the interview form prepared for the views of the participants included P1, P2, ... for principals, Vp1, Vp2, ... for vice principals and "T1, T2, ..." for the teachers. Afterwards, the transcripts of the interviews with the administrators and teachers were written and recorded on the computer. In order to prevent data losses that may occur during this transfer process, the records of the four interviews that the researcher has identified randomly were given to another specialist for review. During the review conducted by the specialist, it was reported that there was no difference between the records and transcripts. The data obtained from the interview form were thoroughly examined and coded with an inductive approach, adhering to the essence of the statements. Then the codes were combined to examine the similarity and differences, and common aspects of similar codes were found and categorized according to the following themes. The themes specified for the controls (measures) suggested by the participants against risks consist of the types of controls (measures) defined in the literature as identifying controls, preventive controls, directive controls and corrective controls. Some of the controls designed against risks are to prevent the consequences of risks before they occur (preventive controls), some to guide them to achieve a certain result (directive controls), some to identify the consequences of the risks (identifying controls), some to correct the consequences of the risks (corrective controls) (Sawyer et al., 2003). Although some controls (measures) fall within the scope of two or more control types, they are categorized under that control type, whichever is more dominant.

The audio recordings collected during the interviews were made into text by the researcher and analyzed. For the analysis performed, the data were first encoded and then the findings were interpreted by classifying them according to themes, categories and sub-categories. In order to obtain reliable results in qualitative research, the coding and thematization that different individuals have performed with the same data must be consistent. These encoding and thematization procedures by more than one person enable the assessment of the reliability of the research (Weber, 1990). In this context, the breakdown of the interviews collected as part of the research was made according to the themes determined by the coding key. Assistance was obtained from a specialist to ensure consistency between encoders. The transcripts of the 3 randomly determined interview forms, which correspond to 25 percent of all interview forms (Gay, 1987), were individually encoded by the researcher and the specialist. Miles and Huberman’s (1994) formula (reliability = agreement / consensus + disagreement) was applied and the coefficient percentage of reliability was calculated as 88.25 according to the calculations. According to this formula that ensures internal consistency, there must be at least 80% consensus among encoders (Gay, 1987; Miles & Huberman, 1994). Since reliability was achieved according to this result, the research continued.

In order to ensure credibility in qualitative studies, some of the participants were read the transcripts of the interviews in order to obtain participant approval, and the participants were asked to
state whether the records and what the participants wanted to say corresponded to each other. In addition, it has been observed that some of the participants expressed multiple views on the same question. Since it is possible to express qualitative data in numbers at a certain level, frequencies related to codes and themes were calculated. Participants' views were given in their original form, taking care to present the statements directly to the reader without adding the researcher's own views and comments, thus external validity was tried to be achieved. The results of the research were shared with 2 administrators and 2 teachers who were consulted with them as part of the research and the approval of the participants was obtained. Internal validity was tried to be increased by consulting specialists' views during both the approval of the participants and the preparation of the questions.

Findings

The views of school administrators and teachers gathered with semi-structured interview forms on how to check high-risk situations in schools and what measures to take against these risks were analyzed using qualitative research methods.

The analysis of the findings of the participants’ views on what the measures (controls) to be taken for the risks that are considered high in importance are given below.

1. The participants’ views on the measures to be taken against the risk of "Failure to apply disciplinary provisions for students who do not obey the rules" are presented in Table 1.

**Table 1.** The measures to be taken against the risk of "Applying disciplinary provisions for students who do not obey the rules"

<table>
<thead>
<tr>
<th>THEME</th>
<th>CATEGORY</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control Type</td>
<td>Administrator</td>
</tr>
<tr>
<td>Preventive</td>
<td>Controls (Measures)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The act of joint, determined and</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>fair attitudes of administrators</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increasing the sanction power and</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>deterrence of discipline penalties</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Applying disciplinary rules equally to every student without discriminating</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Not leaving students unattended</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ignoring some negative minor behaviors of students</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8</td>
</tr>
<tr>
<td>Directive</td>
<td>Controls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Announcement and good explanation</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>of school rules</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Directing students to projects,</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>social activities and community</td>
<td></td>
</tr>
<tr>
<td></td>
<td>service that will fill their free time</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Determining the school rules with</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>the students</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Providing effective information</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>and guidance to students and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>parents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5</td>
</tr>
<tr>
<td>Identifying</td>
<td>Controls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identifying and eliminating the</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>factors that motivate students to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>disciplinary offenses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1</td>
</tr>
<tr>
<td>Corrective</td>
<td>Controls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Punishment of all behaviors that</td>
<td></td>
</tr>
<tr>
<td></td>
<td>require disciplinary action</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Dismissal of students who constantly violate the rules from school</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>-</td>
</tr>
</tbody>
</table>
When Table 1 is examined, it is seen that the measures against the risk of "Applying disciplinary provisions for students who do not obey the rules" are grouped under four basic types of control: preventive, directive, identifying and corrective controls, but preventive and directive controls are predominant. Views of some participants regarding this risk are as follows:

“School and discipline rules should be posted on boards, and should be well explained to students by teachers and administrators.” (P2)

“…Teachers and administrators should show a common attitude towards students who break discipline and discipline should not be compromised.” (Vp2)

“If one teacher or administrator turns a blind eye what the other one cares and encourages it to discipline, contradictory practices occur, and brazen students use this situation…” (T6)

“…the deterrence of applicable disciplinary penalties and the power of sanction should be increased…” (Vp4),

“…students who constantly violate the rules should also be dismissed from the school and directed to the open education system. Because these kids set bad example for other students at school and lead them to indiscipline.” (T9),

In summary, participants argue that this risk can be solved through communication, effective guidance and a common determined attitude. Some participants suggest that every adverse behavior should not be sentenced disciplinary punishment and minor undisciplined actions may be ignored, while some participants argue that legal provisions should be applied without compromise, otherwise the risk will increase.

2. The participants’ views on the measures to be taken against the risk of "Disruption of audit tasks by administrators" are given in Table 2.

Table 2. The measures to be taken against the risk of "Disruption of audit tasks by administrators"

<table>
<thead>
<tr>
<th>THEME</th>
<th>CATEGORY</th>
<th>Administrator</th>
<th>Teacher</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventive Controls</td>
<td>Assigning people to be appointed as administrators based on merit</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Administrators acting fairly, equally and consistently by communicating with staff</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Explaining the tasks and transactions of the administrators in a transparent manner</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Not working at the same school for long periods by the administrators</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Not turning the audit task to an element of oppression</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Making clear and accurate job descriptions of the staff and notifying them</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8</td>
<td>13</td>
<td>21</td>
</tr>
</tbody>
</table>
When Table 2 is examined, it is seen that the participant views are grouped under the types of preventive, directive and identifying controls, and preventive and directive controls are predominant among the control types. Views of some participants regarding this risk are as follows:

“If the administrators are trained on the management and audit tasks they will perform based on merit, the risk of disrupting the audit assignment is eliminated....” (T11)

“In order to avoid disruptions in school, school administrators should be better trained in relations with people and legislation than other staff…” (Vp5)

“The work done by the administrators and whether the class audits are done correctly should be checked by inspectors. …” (T3)

“…in addition, audit tasks should be performed in an appropriate and understanding manner without being turned into a repressive element. Saying the right rule with the wrong style can reduce the acceptance level of that rule....” (T2)

In summary, participants of this risk claim that this risk can be controlled by the fair, equal and consistent behavior of the school administrators appointed on a merit basis and by the awareness-raising education programs offered at the school. Some participants also suggested that periodic auditing of administrators would reduce this risk.

3. The participants’ views on the measures to be taken against the risk of “Not taking measures to be taken by determining risks that prevent the institution from achieving its objectives” are given in Table 3.
Table 3. The measures to be taken against the risk of “Not taking measures to be taken by determining risks that prevent the institution from achieving its objectives”

<table>
<thead>
<tr>
<th>THEME</th>
<th>CATEGORY</th>
<th>Controls (Measures)</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Administrator</td>
<td>Teacher</td>
</tr>
<tr>
<td></td>
<td>Preventive Controls</td>
<td>Selection of administrators from active, disciplined, open to improvement and visionary individuals based on merit</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acting with the sense of responsibility and common mind of administrators and staff</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conducting the assignments on a voluntary basis</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adopting the principle that the education of students is more important than anything in school</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attention to equal opportunities in education</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Directive Controls</td>
<td>Providing constant information and reminders and training to the staff</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adequate public disclosure of company objectives and risks</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establishing an effective communication network between school staff</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Empowering the communication and cooperation between teacher-student-parent-administration</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Raising awareness of parents and students</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Identifying Controls</td>
<td>Planning with staff on what the risks are and what can be done against them</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establishing school risk maps by setting up working teams</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Auditing schools periodically</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Corrective Controls</td>
<td>Reviewing the risks that may arise for the objectives that cannot be achieved and taking new measures</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td>2</td>
</tr>
</tbody>
</table>

When Table 3 is examined, it is seen that participant views are collected under four basic control types and preventive controls are predominant among them. In this regard, the views of the participants are as follows:

“… in order to create an effective corporate culture and work in a solution-oriented approach, administrators should be selected from among people with a vision and discipline according to merit…” (T10),

"… all school staff and even students should be given continuous training on how they can solve the problems more easily." (Vp2)

"A planning should be made by getting together with the staff about the risks that may occur in the institution and what can be done against them ..." (Vp4)
Briefly, the participants argue that if administrators who are active, disciplined, open to development and visionary are appointed to educational institutions on the basis of merit, they can handle this risk; they can identify risks together with staff and take the necessary measures.

4. The participants’ views on the measures to be taken against the risk of “Failure to determine and implement principles that will prevent ideological, political and the union groupings among staff” are given in Table 4.

**Table 4.** The measures to be taken against the risk of “Failure to determine and implement principles that will prevent ideological, political and the union groupings among staff”

<table>
<thead>
<tr>
<th>THEME</th>
<th>CATEGORY</th>
<th>Controls (Measures)</th>
<th>F</th>
<th>Administrator</th>
<th>Teacher</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventive Controls</td>
<td>Regardless of their political and ideological point of view, avoiding discriminating attitudes and discourses by the staff</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Approaching the staff and events unbiased, impartial and fair by the administrators</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assigning school administrators on merit basis</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Being open to criticism and not excluding anyone by administrators</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not authorizing for political and union activities at school</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Providing opportunity to all unions to express their opinions equally</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Being within the scope of the struggle for rights in the union activities</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Preventive Controls</td>
<td></td>
<td></td>
<td>8</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>Directive Controls</td>
<td>Creating a tolerant corporate culture by establishing effective communication</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizing social events that involve all staff in the school to increase the sense of belonging and strengthen communication</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Receiving the views of the staff in administrative matters and assignments</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To take the principle decisions to avoid political and discriminatory rhetoric during school meetings</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rewarding those who devote more and contribute to achieving the school’s objectives</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Directive Controls</td>
<td></td>
<td></td>
<td>8</td>
<td>10</td>
<td>18</td>
</tr>
</tbody>
</table>

When Table 4 is examined, it is seen that the views of administrators and teachers are collected under preventive and directive control types. Some of the views on this risk are as follows:

"...conflicts and groupings do not occur if all staff, regardless of their political views and ideological perspectives, refrains from expressing their views in educational institutions. Otherwise, these groupings will be reflected on the students and reduce the quality of education..." (P3)

"...those who do politics at school must not be allowed and punished..." (T4)
"...in order to prevent such groupings at school, especially the administrators must be impartial and fair, the staff and events must be prejudiced, and the assignments must be transparent." (T8)

"All education unions should be given equal opportunities to express their views, be open to criticism and no one should be excluded..." (Vp3)

"...we should not use discriminatory attitudes and expressions especially in the presence of students." (T7)

In summary, most participants stated that this risk can be controlled if all staff in educational institutions avoids discriminatory attitudes and statements, regardless of their political views and ideological point of view, and emphasized that the administrators must approach staff and events without prejudice, impartiality and fairness. A few participants argue that political and union activities should not be allowed in school.

5. The participants’ views on the measures to be taken against the risk of “The risk that the quality of the undergraduate and formation education teachers receive is not sufficient for the course-subject they will teach” are given in Table 5.

Table 5. The measures to be taken against the risk of “The quality of the undergraduate and formation education teachers receive is not sufficient for the course-subject they will teach”

<table>
<thead>
<tr>
<th>THEME</th>
<th>CATEGORY</th>
<th>Controls (Measures)</th>
<th>F</th>
<th>Administrator</th>
<th>Teacher</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventive Controls</td>
<td></td>
<td>Making no assignments by the Ministry from different branches</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Making changes to the education system with long-term rather than immediate planning</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Completing all the courses by teachers of their own branch</td>
<td>3</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To pay attention to pedagogical formation in universities and to increase the duration of applied education</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>7</td>
<td>10</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Directive Controls</td>
<td></td>
<td>Conducting in-service training activities in central, local and remote areas</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establishing a mentoring system among colleagues to help them develop each other and themselves</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rewarding hard-working teachers and administrators who are successful in their fields</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing teachers with training and opportunities to improve themselves in different fields</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Effective execution of seminar studies at the end of the year</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Keeping the training of prospective teachers tight</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>6</td>
<td>10</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Identifying Controls</td>
<td></td>
<td>Measuring the performance of teachers at specific intervals and identifying those who need training</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identifying ineligible teachers through course audits</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Auditing whether prepared courses are entered through annual and daily schedule tracking or not</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>5</td>
<td>2</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
Corrective Controls

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewing and updating the education provided by universities in collaboration with the Ministry of Education and Council of Higher Education</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Assignment of teachers who fail to qualify despite the trainings provided in administrative paperwork</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

When Table 5 is examined, it is seen that participant views are collected under four basic control types and preventive controls and directive controls are predominant among them. In this regard, the views of the participants are as follows:

“The Ministry should not appoint from different branches.” (T5)

“Great importance should be given to the pedagogical formation courses of prospective teachers at universities. Because it is much more different to know a subject and to explain it in a way that others can understand. This is where the art of teaching comes into play…” (P3)

“…although some teachers disagree, I think teacher performance should be measured periodically and those who need education should be determined.” (T11)

“…course audits should be conducted to identify inadequate teachers. These teachers should be provided with in-service training activities by the Ministry…” (Vp6)

“…changes to the education system should be planned for a long time period and should not be done suddenly.” (T4)

“It is very difficult to intervene against this risk in the Ministry of National Education. This is because even if it is insufficient, the course is distributed among the branch teachers. Students do not receive the necessary training because some of the courses that are left vacant are filled with paid teachers who do not own a branch…” (P1)

Most participants argue that in order to struggle with the risk that the quality of the undergraduate and formation education received by the teachers is not sufficient for the course and subject they will teach, reviewing and updating the training provided by universities and that should not be appointed by the Ministry from different branches. Some participants stated that teachers who fail to qualify despite the training programs should be assigned to the administrative paperwork.

6. The participants’ views on the measures to be taken against the risk of “Reflecting the problems experienced by teachers with personal-psychological problems to the classroom” are given in Table 6.
When Table 6 is examined, it is seen that participant views are collected under four basic control types and preventive controls and directive controls are predominant among them. In this regard, the views of the participants are as follows;

“…a warm and social environment should be created for incoming teachers by administrators and teachers and a support should be provided to struggle with stress and personal problems.” (T1)

“…it is important to keep in mind that teachers are social modals for students and personal rights that are adequate to meet their social needs must be provided…” (T10)

“…it is against the philosophy of education to turn your back on people’s problems by saying “I do not care about other people”. (T2)

“There is always this risk in schools and I do not think it can be completely avoided. It can only be reduced…” (Vp4)

“The main reason teachers are getting depressed today is because of economic reasons. A single-paid teacher cannot go out to a restaurant with his family. He cannot participate in movies, concerts and other social activities. For these reasons, he can feel depressed…” (P3)
“…Teachers who have problems that depend on different reasons should be given the opportunity to solve their problems being granted leaving of absence and getting the support of a specialist. If the problem still cannot be solved, the teacher should be prevented from attending a course and change duties or retired….” (T5)

Most participants in relation to the risk of “Reflecting the problems experienced by teachers with personal-psychological problems to the classroom” have stated that it is necessary to direct the teacher with problems to an specialist to get professional help and that organizing hot and interactive social, athletic and cultural programs for teachers at school that can struggle stress and personal problems has an impact on preventing this risk. Some participants stated that teachers who have serious problems should be prevented from entering the course and their duties should be changed or discharged.

7. The participants’ views on the measures to be taken against the risk of "Teacher’s inability to develop a respectable relationship with the students" are given in Table 7.

**Table 7. The measures to be taken against the risk of "Teacher’s inability to develop a respectable relationship with the students"**

<table>
<thead>
<tr>
<th>THEME</th>
<th>CATEGORY</th>
<th>F</th>
<th>Administrator</th>
<th>Teacher</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Type</td>
<td>Controls (Measures)</td>
<td>Preventive Controls</td>
<td>Directive Controls</td>
<td>Identifying Controls</td>
<td></td>
</tr>
<tr>
<td>Preventive Controls</td>
<td>Establishing the principles regarding how school teacher-student relationships should be and applying it without compromising discipline</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Building a corporate culture based on love, respect and understanding</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not being discriminated in classroom by the teacher, abstaining from behaviors and words that will humiliate students</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowing the rights and limits of the parties well</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not reflecting the teacher’s personal life and problems on the students</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attention to teacher-student relationships in private courses and classrooms</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directive Controls</td>
<td>Organizing training in communication and classroom management and offering various activities in courses</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teachers keeping their relationships with students in line with legislation and practices</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reminding the established principles of teacher-student relations by being raised during meetings</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Redirecting students to book reading activities to improve their culture and communication levels</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>One-on-one care of the students with domestic relations and their parents</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifying Controls</td>
<td>Conducting audits by administrators as an informed observer of the attitudes and behaviors of all teachers and students</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Getting feedback from students, teachers and parents by administrators</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9</td>
<td>9</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

228
Corrective Controls | Increasing the teacher’s reputation among society and students | 1 | 1 | 2 |
| Imposing disciplinary sanctions on students who act against them | 1 | 1 |
| **Total** | 1 | 2 | 3 |

When Table 7 is examined, it is seen that participant views are collected under four basic control types and preventive controls and directive controls are predominant among them. In this regard, the views of the participants are as follows:

“…teacher student relationships should be raised on a regular basis in all meetings and courses should be accompanied with activities to prevent this problem…” (T7)

“…because some trainings are based on family, the administrators must provide feedback from students, teachers and parents, and make an effort to solve problems by taking care of the students who have problems with domestic relationship…” (P3)

“Students may not be able to adjust the distance in relationships with teachers at age. However, teachers should manage the teacher-student relationship and make sure that the relationships are in line with the legislation and practices.” (T10)

“…the administrators should be an informed observer of the attitudes and behaviors of all teachers and students. When a relationship that is contrary to the principles is observed or reported, the necessary steps should be taken to resolve this situation with an appropriate approach…” (Vp3)

Many of the participants in this risk claim that this risk can be resolved by establishing principles about how teacher-student relations should be at school, in order to achieve it without compromising discipline, and they also suggest that training programs on communication and classroom management should be organized at school and various activities in the classroom should be conducted. Some participants have suggested that disciplinary sanctions could be imposed on students who act contrary.

**8.** The participants’ views on the measures to be taken against the risk of “Existence of broken windows and doors, balconies and ladders without guardrails, open lift space, phosseptic pit and similar dangers both in and around the school” are given in Table 8.
Table 8. The measures to be taken against the risk of “Existence of broken windows and doors, balconies and ladders without guardrails, open lift space, phosseptic pit and similar dangers both in and around the school”

<table>
<thead>
<tr>
<th>THEME</th>
<th>CATEGORY</th>
<th>Controls (Measures)</th>
<th>Administrator</th>
<th>Teacher</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Preventive Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Complying with policy and standards regarding occupational health and safety</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Keeping a careful and effective watch for teachers</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giving separate budgets to schools dealing with these risks</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Directive Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Taking precautions to report the danger by using adequate signs</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Providing training for students on the protection and use of school property</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establishing an early warning system by providing training to all staff and students and preparing posters</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>6</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identifying Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Early detection of problems by creating school security teams and conducting continuous audits and checks</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Collaborating with different institutions to identify and solve problems</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corrective Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Getting paid for by those who intentionally abuse and broke school properties and implementing disciplinary actions</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

When Table 8 is examined, it is seen that participant views are collected under four basic control types and preventive controls and directive controls are predominant among them. In this regard, the views of the participants are as follows;

“Nothing is more important than human life. Therefore, you should not be lax about security issues…” (T8)

“…lists of places to check at school should be prepared and these places should be checked constantly…” (Vp1)

“…teachers must be careful on watches and maintain an effective watch.” (Vp6)

“Some students are intentionally damaging items at school. In this way, if anyone abuses or breaks the items, the cost must be taken from them and disciplinary actions must be taken. Otherwise, no one pays attention to their use…” (T4)

“…as such problems can cause significant harm, action must be taken immediately and, if necessary, cooperate with different institutions and solutions must be searched.” (Vp8)
Most participants on how to cope with the security risks that may occur in schools stated that occupational health and safety principles and standards should be complied with and students should be given training on the protection and use of school property. Some participants also argue that it is necessary to collect the cost and disciplinary actions from those who deliberately abuse and break school items; otherwise the risk would likely arise.

9. The participants’ views on the measures to be taken against the risk of “Failure to enforce adequate precautions to prevent abuse of students at school and at student lodgings” are given in Table 9.

**Table 9.** The measures to be taken against the risk of “Failure to enforce adequate precautions to prevent abuse of students at school and student lodgings”

<table>
<thead>
<tr>
<th>THEME</th>
<th>CATEGORY</th>
<th>Controls (Measures)</th>
<th>Administrator</th>
<th>Teacher</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventive Controls</td>
<td>Elimination of environments and places that can pose risks</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increasing the deterrent effect of abuses, and imposing the most severe penalties on abusers</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Full implementation of instructions</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not being assigned to tasks with potential exploitation those who has suspicious behavior and who have previously been processed</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assigning female teachers for girls and male teachers for boys at the student lodging</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At least four same-level students staying together in the dormitory</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reducing the capacity of the lodging</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>9</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Directive Controls</td>
<td>Providing awareness training on abuse to all teachers and students</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Informing students and teachers on watch</td>
<td>3</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emphasizing the issue of abuse in courses regarding the subject</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous communication with students</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Guiding students on moral and ethical values</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conducting questionnaires by guidance teachers on how students can express themselves freely, identify the student and acquaintance the school</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>11</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Identifying Controls</td>
<td>Establishing a camera system into buildings and monitoring security</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Corrective Controls</td>
<td>Rehabilitation of abused persons</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

When Table 9 is examined, it is seen that participant views are collected under four basic control types and preventive controls and directive controls are predominant among them. In this regard, the views of the participants are as follows;
“…awareness-raising training for all teachers and students should be provided by specialists on how to handle abuse types and abuses.” (T6)

“…the lodging instructions should be fully implemented and audited, the teachers on watch and students must be informed, and the environments and places that may pose a risk must be removed…” (Vp3)

“The camera system must be installed and kept in record without leaving no blind spots in school and lodging buildings.” (P2)

“…security camera records should be monitored continuously by different administrators…” (T7)

“These types of situations are very serious. As long as the abused person does not say it, it is very difficult to detect it. Therefore, the school should take precautions by constantly communicating with students and their parents.” (Vp7)

“The staff with suspicious behavior should not be relied on a task that is likely to be abused. Furthermore, persons who have previously complained about these issues and who have been investigated should not be assigned…” (P1)

Most participants on how to cope with this risk that may occur in schools and lodgings argue that the risk should be provided to all teachers and students with awareness training on abuse, and also that the buildings should be equipped with a camera system to remove environments and places that may pose a risk in schools and lodgings. Some participants stated that abuses should be imposed in the most severe way to abusers by increasing the deterrent effect of abuses.

10. The participants’ views on the measures to be taken against the risk of “Lack of controls on student meals given at school” are given in Table 10.

Table 10. The measures to be taken against the risk of “Lack of controls on student meals given at school”

<table>
<thead>
<tr>
<th>THEME</th>
<th>CATEGORY</th>
<th>Controls (Measures)</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventive</td>
<td>Controls</td>
<td>Receiving food supplies from reliable locations with a team</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assigning administrators for this job only</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preparing beloved dishes instead of disliked ones</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Directive</td>
<td>Controls</td>
<td>Providing training to staff on human health, food controls and hygiene</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular training for cooks to make healthy, clean and delicious meals</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Training and certification of specialized staff in schools for food controls</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>
When Table 10 is examined, it is seen that participant views are collected regarding four basic control types. In this regard, the views of the participants are as follows;

“The caterers should monitor daily meal samples to be stored according to the time specified in the legislation, whether the meals are prepared in a healthy environment, whether or not the food presentations have been performed properly and whether such items have occurred.” (Vp2)

“…Staff should be trained in human health, food controls and hygiene in order to avoid the use of spoiled foods, pay attention to cleanliness, and other aspects…” (Vp3)

“…students throw away most of the food when they do not like it. In this respect, it is also possible to check the discarded meals, to see if they will be pleased with that dish. In addition, student requests can be obtained regarding the foods that are best liked to avoid waste." (T9)

“…a staff should definitely stand by his side during the delivery of food and check for adequate and equal distribution of food portions.” (Vp5)

Most participants stress that this risk can be controlled by purchasing supplies from reliable places with a team and providing training to the staff in the areas of human health, food controls and hygiene. They also stated that the food must be kept regarding their expiry dates and storage conditions, and daily food samples must be taken and kept according to the duration specified in the legislation. Some participants say that if the caterers fail to meet standards, the sanctions mentioned in the contract must be activated immediately.

**Discussion and Conclusion**

In discussions with school administrators and teachers on what precautions (controls) should be taken against risks that are highly rated in terms of impact and probability as a result of the assessments made on internal risks identified in schools, in response to the risk of "Disruption of audit tasks by administrators", the risk of “Not taking measures to be taken by determining risks that prevent the institution from achieving its objectives” and the risk of “Failure to determine and
implement principles that will prevent ideological, political and the union groupings among staff” with high risk scores for administrators, participants emphasized that active, disciplined, open to development, and visionary administrators should be appointed to educational institutions on the basis of merit, that these appointed administrators should be open, fair, consistent and determined to communicate and that the administrators should approach the staff and incidents without prejudice, impartial and fair. In addition, many participants have stated that all staff in educational institutions should avoid discriminating attitudes and discourse, regardless of their political and ideological perspective.

Effective risk management, according to Coccia (2005), should be carried out to prevent risks with an integrated view. Accordingly, a risk management plan should be used for the identification, analysis, classification and risk assessment processes of risks. People directly responsible for managing the risks are the school administrators expected to be education leaders (Maya, 2019). According to Çelik (1999), school administrators, find all the necessary resources to help them achieve school objectives; carry out the necessary studies to enable students to get better education; make everyone understand the vision of the school; help them effectively use teaching strategies and teaching materials in constant communication with teachers; chat with teachers and students in classrooms, halls, gardens, department meetings and making them feel the leadership throughout the school; provide confidence through their behavior and continually reinforces the values that the school has; as school administrators which are education leaders have four main roles: funding school, communication, training and representing school as a visible person. According to Erdoğan (2003) the administrator must ensure his /her power in performing these roles not only from existing procedures related to his responsibilities but from his personal potential. In this way, the administrators must effectively utilize; the technical power they possess in matters such as planning, leadership theories, organizational structures and time management, the human power through healthy communication with school staff and stakeholders, the training power in education and in relation to the functioning of the school, the symbolic power of the systems that try to explain the functioning of the school, the cultural power of the informal setting, which is made up of the principles and values of the school's past. According to Açıklın (1995), school administrators should be able to modify and improve themselves according to changing conditions by reading, writing, discussing, listening, thinking and inquiring, sightseeing.

According to the internal control, the administrator is responsible for establishing the internal control system as the leader of the institution and ensuring that the system functions for its purposes. Different leadership definitions establish relationships between risks and characteristics of leaders. For example, according to Kouzes & Posner (2012), leadership is the ability to act values, to realize vision, to innovate barriers, to have solidarity and to turn risks into opportunities. In this regard, the leader benefits from opportunities by establishing appropriate climates within the organization to
succeed in his organization. In internal control, the administrator’s support for the controls as a leader and the clarity of their attitude and behavior increases the efficiency of the organization (Kulak, 2009). Therefore, the administrator should clearly show the value and positive attitude he/she gives to the internal control system and the controls.

In some studies conducted by participants on issues similar to those with high risk scores; it is stated that the behavior of "reflection of ideological opinion in class by teachers" is on the list of unethical behaviors and rarely seen in teachers (Gözütok, 1999). The research conducted by Cemaloğlu (2007) revealed that the participants stated that the role of school administrators as a training leader by establishing a healthy communication would be effective in solving problems, but the current school administrators performed their leadership roles at a low level. Similarly, according to Bakioğlu and Tokmak (2009), one of the main objectives of educational institutions is to exchange the cultural values that sustain society. In this respect, the administrative approach adopted by school administrators has a particular significance. School administrators are the ones who can understand the problems arising from the conflicts in educational institutions and eliminate these problems through appropriate methods. In this context, the role and tasks of school administrators that will harmonize the differences of the values in school are very important.

Participants stated that the administrators and teachers should demonstrate common, decisive and fair attitudes regarding the risks of "Applying disciplinary provisions for students who do not obey the rules" and that the disciplinary rules should be applied equally to all without discrimination. In terms of disciplinary rules at school, most participants argue that the fact that the different disciplinary understanding of administrators and teachers is affects students negatively. Some teachers state that the difference in disciplinary understanding has adversely affected students’ personality development, while others state that students’ behavior is inconsistent and that they are trying to abuse it.

The research conducted by Pehlivan & Demirtaş (2019) shows that school administrators gather their views on the method used in disciplinary issues in three main themes: preventive, supportive and corrective disciplinary approaches. In the research, it was determined that the views on the "preventive disciplinary approach" are predominant, and that administrators use the most approach to collaborate with teachers to solve problems in order to achieve discipline and to inform parents about negative behaviors. In this context, the disciplinary problems in schools are related to the quality of life of the school, and the opportunities offered to the students have an impact on the way students perceive schools and the quality of life affect student behaviors. In this regard, administrators and teachers should strive to improve the school and increase their students’ loyalty to the school.

Against the risk of "Teacher’s inability to develop a respectable relationship with the students", which is considered high-risk at school, participants stated that the principles on how teacher-student relationships should be established at school and that these principles should be
applied without compromising discipline. They also state that training programs on communication and classroom management should be organized at school and various activities should be held in the courses. In the event of the risk that “The quality of the undergraduate and formation education teachers receive is not sufficient for the course-subject they will teach”, the participants state that the training given to prospective teachers at universities should be reviewed and updated and that the Ministry of National Education should not appoint students from different branches for the current courses.

Teachers who are role models for their students will benefit their students as long as they adopt behavioral principles related to their professions and provide their educational competencies. According to Gedikoğlu (2005) in many universities which have all the necessary qualifications and have initiated infrastructure with the standards, unqualified education is conducted in mass form, and the quality of education is not given any importance. Furthermore, there are very serious problems in the field of teacher training in our country and the living standards and professional development opportunities that teachers deserve are not ensured. Honigsfeld & Schiering (2004) stated that it would be useful for the lecturers to be more effective in learning-teaching processes through various information and seminar activities.

According to Burnside (1996; cited in Gözütok, 1999), suggests that the vast majority of teachers, who are noble-minded and reputable, work long-term in difficult conditions to ensure that their students are successful. However, there are also teachers who cannot depend on a little bit of basic ethics. By neglecting their duties, these people push themselves to disgraceful misbehavior. Thus, they hurt vulnerable and innocent students, embarrass their colleagues and become a source of disgrace for their institutions.

Ethical values and integrity are the first standard of the control environment, which is the primary component of internal control and serves as the ground for providing other components. In other words, the absence of ethical values in an organization or the fact that the staff do not abide by those values, indicates that the organization is not functioning healthy and the ground is intact. As a matter of fact, these ethical values need to be internalized by staff rather than just on paper, and it needs to be sustained in practice, in order to make the organizational culture.

Many of the participants stated that teachers with personal-psychological problems should be directed to a specialist to get professional help in order to avoid the risk of “Reflecting the problems experienced by teachers with personal-psychological problems to the classroom”. They also emphasize the view that it is necessary to organize warm and interactive social, athletic and cultural programs for teachers that can deal with stress and personal problems.
Because the most fundamental element of education is human, the most important of risks are human resources related. Other risks such as money, time, data, energy, reputation, morale and loss of products can be more easily compensated against human resource risks. Therefore, human life is more valuable than anything (Boone, 2004). As stated by the participants, schools should be active institutions with a positive corporate culture that are open to innovation and development, and that have a wide range of social, sportive, cultural and artistic activities than other institutions. In order to create this environment, the training staff must be active, disciplined, consistent and hard-working individuals who constantly develop themselves in a multifaceted way, have mutual tolerance, and set an example for their students and their surroundings through their words and behavior. The most important thing for these features to be achieved is the habit of reading books, but studies have found that teachers are not in sufficient reading habits. For example, Yılmaz (2004) stated that 68.5 percent of the teachers who participated in a study conducted on teachers have poor reading habits or have no reading habits. In other studies conducted in the same way, it was concluded that there was not a sufficient reading habit (Yalınkılıç, 2007; Kurulgan & Çekerol, 2008; Mavi & Çetin, 2009; Aslantürk & Saracaşoğlu, 2010; cited in Kaya et al., 2014). The more books people read, the wider their horizon become. A person with a wider horizon also makes sense of life easier, better evaluates the events that come out and is less affected by adverse situations (Arı & Demir, 2013). This could lead to a more meaningful life.

Sarı & Şahin (2013) state that the teachers with high hopes and strong psychology believe that they are more qualified to make plans and achieve strategies by providing the necessary motivation in the process of reaching the objective. In this respect, it can be said that teachers with these qualifications can be effective in planning by making accurate assessments for themselves and their professions and also determine the correct strategies in the professional elections.

Participants stated that school staff should be given training on human health, food audits and hygiene, and the principles and standards regarding occupational health and safety should be applied against the high-risk physical safety risks in the school.

According to Güven & Dönmez (2002), achieving the desired level of education and achieving educational objectives in schools depends on ensuring a safe education environment where students, teachers and school staff can feel free. The concept of safe school is expressed in the form of an environment in which education is freely provided without the concern of all school stakeholders to suffer physical and psychological harm (California Department of Education, 1989; as cited in Dönmez & Özer, 2009).

Similar to the opinions and suggestions of the participants, the study by Akyol (2015) requires that schools become more secure by cooperating between school administrators, teachers, families, students and other relevant institutions, establishing written school security policies and determining
duties and responsibilities, establishing security plans in schools, checking the entrance and exit of visitors in schools, and taking physical security measures in schools. It can also be said to ensure students, parents, teachers, and school administrators are connected constantly in order to protect against the security risks that can occur in the school, to be taught awareness-raising training by specialists at specific intervals about security risks, and to share the examples of good practices.

"Monitoring", one of the main components of internal control, is a process that involves auditing in accordance with the standards that specify whether the internal control system contributes to the organization's objectives and determining the weaknesses. In other words, the monitoring process aims to determine and evaluate such as, whether the activities carried out to achieve the targets specified by the company management are carried out in line with the objectives, whether the necessary controls are determined according to the risk management, whether the designated controls are implemented, and whether the communication methods performed within and outside the institution are adequate. The task of inspection among the standards of the monitoring component and performed by different actors is one of the factors that will directly affect the proper functioning of the institution’s activities. Participants state that all teachers and students should be provided with awareness training on abuse and also the buildings should be equipped with a camera system to remove environments and places that may pose a risk in schools and lodgings, in order to prevent the students from being abused.

According to Koçtürk (2018), children who are suffering from child abuse and neglect are affected throughout their lives, and medical, psychological and behavioral disorders such as mental problems, depression, stress, drug addiction, suicide attempt and self-injury can occur. Considering that children who continue their education spend most of their time at school, great responsibilities are being assigned to the school staff to prevent the abuse and neglect of children. School environments can be protective in terms of children being subjected to abuse and neglect, but sometimes they can also be risk factors. Protecting the children’s healthy life rights protects them from being victims and also prevents them from becoming criminals in the future (Kır, 2013). School administrators, teachers and psychological counselors are critical in both preventing and determining the child abuse and intervening in this problem. In this respect, it is very important to provide compulsory prevention training for children and parents at all levels of education with the support of the Ministry of National Education (Koçtürk, 2018). Furthermore, school administrators, teachers and psychological counselors should be constantly available when students encounter any security problems at school (violence, abuse, bullying, etc.). In order to ensure this environment, students are advised to be informed in a sincere and natural manner, and to provide training to administrators, teachers and students for extraordinary situations in schools (Akyol, 2015).
In order for schools to achieve success both in terms of management and in terms of education, certain standards for school activities must be achieved and these standards must be developed and made sustainable. An effective organizational culture should be established to ensure sustainability. According to Barutçugil (2011) culture is a combination of different disciplines such as history, technology, ideology and ecology. It is the result of the use of similar symbols by people from the same date, speaking the same language, and living in certain geography. Organizational culture is a system of beliefs, premises, values, meanings and symbols (Schein, 2004) created over time by the organization’s staff and especially its founder, manager or leader, and adopted by the members of the group. Staff or members embrace their values, attitudes and assumptions, integrate with the objectives of the organization, and socialize and reshape the organizational culture (Tüm & Reyhanoğlu, 2015).

It is understood from the definitions that the culture that is created or created in society and organizations is not a single-layered, single-dimensional structure, and that the very different elements associated with each other interact in different dimensions. Accordingly, a corporate culture must be established to develop a risk-based perspective for all activities to be undertaken in the corporate culture that will be established in order to identify, assess and manage risks in schools, and to manage risks in a way that will lead to the best results.

Internal control was designed as five main components to create a risk management-based corporate culture by taking into account the relationships of all elements in different dimensions. The control environment in particular serves as the infrastructure for the creation of this culture. In the COSO model, the control environment is based on principles such as the adoption of honesty and ethical values, the execution of the management’s independent supervision function, the identification of powers and responsibilities in the organization structure, the human resources policies adopted by qualified staff, and the responsibility of the staff in the controls. The main factors that influence the establishment of a control environment are its culture, history and management philosophy. An effective internal control system can be achieved through the organizational culture that will be created by internalizing ethical behaviors such as honesty, transparency, justice, communication and accountability among the staff. A proper functioning of the internal control system cannot be mentioned unless the staff of the institution complies with the ethical rules.

Any rules and regulations in social areas shall not be applied to dry exchange rates as written on paper. The culture of the organization, which consists of the social fabric of the organization to which these amendments will be implemented, interpersonal relations, past practices and similar issues, is the greatest factor in the success or failure of these new regulations. Even the most ideal changes may not succeed because of the negative attitudes of the organization’s staff. Accordingly, the staff adopt ethical rules, act according to transparency and accountability in the business and services performed, set objective performance criteria in the organization and determine performance
assessments based on these criteria, determine assignments and transfer of powers based on merit and expertise, and utilize internal and external communication effectively, share resource allocation and expenditures according to the priorities in strategic objectives, and manage risk-oriented the internal control management model, which incorporates risk-based control, can be said to have many benefits for schools.

**Suggestions**

- Educational institutions must systematically determine the risks regarding their purposes and objectives each year, classify these according to their level of importance, review them from time to time and make an action plan for the measures that can be taken against the risks.
- Administrators should pay attention to the management of social relations in the institution, establish principles that hinder ideological, political and union groupings among school staff, and motivate staff in a continuous integration direction.
- Administrators should adopt modern audit principles and conduct guidance-based audits so that teachers and staff can improve themselves.
- School staff must be consulted before school decisions are made, and all duties shared at school must be treated with impartiality and fairness.
- School disciplinary rules must be appropriate and applicable, and disclosed to students and their parents by identifying persistent averse student behaviors, and all managers and teachers must act in line with the disciplinary rules.
- Teachers should not only be regarded as individuals who convey the best information, but also be exemplified by their behavior and life, as the profession must balance theory and practice.
- Teachers with personal-psychological problems should be directed to the doctor to prevent them from reflecting these problems on the classroom and the students.
- Written school safety procedures and policies with duties and responsibilities must be established and implemented in order to ensure school safety.
- In order for physical and psychological risks such as safety, violence, and abuse to be reported in schools to be immediately communicated, the communication environment must be ensured that the school staff can be reached by the students, and awareness must be raised by organizing training sessions on abuse, mistreatment and neglect.
- Academic studies may be conducted on the causes of the risks that may occur in schools and the social, physical and psychological aspects of these risks.
- Quantitative and qualitative research may be conducted on measures that may be taken against risks that may occur in educational institutions and the study group may be diversified and expanded according to the opinions of different level education managers, teachers, parents, and students.


An Intercultural Study on the Characteristics of Mother Tongue Education Course Books’ Content

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Abstract

The purpose of this research is to set the characteristics of the contents of the course books that are prepared for the lessons of mother tongue education in secondary schools in different countries. Within the frame of the purpose, the content of the course books in Germany, Austria, Finland, Northern Macedonia, Hungary and Turkey were analyzed in three aspects. The first of all is about which sections are included in the general content, the second is about how the classification of the content was made and finally the third one includes how the language skills and the fields of learning are placed in the content. Figured in a quantitative way and the document of the research in which the content analyzed is composed by the 23 course books used in the countries that are mentioned above. In the analysis of the data 3 arguments and a checklist that enables to make a systematic evaluation consists of 28 items is used. As a result of the research, it is confirmed that the content of mother language course books in countries differ from each other due to the general properties of content; while classifying the course books generally multiplied structure dominated by thematic, functional and grammatical segmentation, it has been determined that all language skills, vocabulary teaching and grammar, both theoretical and practical, are included in the books. At the end of the study, it is recommended to take the course books in Germany and Hungary as an example while preparing the Turkish course books.

Keywords: Mother Tongue Education, Course Books, Content, The Checklist Method.

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Introduction

The child who starts his experience of education with an awareness of basic components of the mother tongue in the first few years of his life, begins to learn the phonological, grammatical, and semantic properties via the mother tongue lessons at school (Gosy, 2005). Mother tongue education, which aims to enable students to acquire language and mental skills related to listening/monitoring, speaking, reading and writing that can be used throughout their lives, to develop themselves individually and socially and to communicate effectively (MEB, 2019), is actually not a part of education but a process that affects the individual's identity, personality, perception and level of the world, shortly, the life of the individual with what he promises or aims. Speaking and listening skills that the child starts to accumulate through acquisition is developed in the school, reading and writing skills are added to them and thus the components of the competence in mother tongue education are completed. With the teaching expressed as deliberate acculturation, it is aimed to gain the highest level of competence in language components.

The process in the mother tongue education goes forward similarly with the contribution of the school as well without concerning the structure of the language and the other properties. However, differences can be seen in the factors like language policies of the countries, language education programs and the materials used for the education. Ministry of National Education in Turkish Republic which takes place in the scope of this research has the responsibility to carry out all the educational activities conducted from the centre. The levels of education is composed of preschool, primary school, secondary school and higher education. Compulsory education in Turkey has been increased up to 12 years since 2012-13 academic year and divided into three stages. The stages are organized as; 4 years of primary school (1, 2, 3, and 4. grades), 4 years of secondary school (5, 6, 7, and 8. grades) and 4 years of high school (9, 10, 11, and 12. grades). Besides for the individuals who are in need of special education, preschool education is also compulsory besides the other educations as primary school education, secondary and high school educations (SGM, 2017). The main purpose of the Turkish Language Curriculum (MEB, 2019) is the basic level of verbal, numerical and scientific reasoning that students who have completed primary school, within the framework of moral integrity and self-awareness in accordance with their individuality, self-confidence and self-discipline to ensure that they become healthy life-oriented individuals who have gained social skills and aesthetic sensitivity by using them effectively; students who completed secondary school develop competencies gained in primary schools have adopted the national and spiritual values through, fulfilling the uses and responsibilities of their rights related to “Turkey Qualifications Framework” and also ensure to become basic skills and competencies gained individuals as expressed in areas specific to the discipline. The time allocated for Turkish lessons according to the classes in the weekly course hour schedule in primary education (primary, secondary) schools is as follows: 1st and 2nd
grade 10 hours, 3rd and 4th grade 8 hours, 5th and 6th grade 6 hours, 7th and 8th grade 5 hours (TEGM, 2019).

In Germany as being a country, which has the philosophy of providing everybody with equal education opportunity, hands in materials free and ensures everybody to have the high-level education for national and international areas. Federal Ministry of Education and Research is the central constitution of education services and generates general rules only for education.

For this reason, the system of education shows differences between the states. Education is compulsory between the ages 6 and 15. The German education programme in primary schools has three duties: 1- to empower the personality, 2- the talent of adaptation and lifelong learning, 3- deciding together and the ability of involving. In Germany in the province of Berlin when looking at the time allocated to education it can be seen that allocated time to Germany in the first grade is not known exactly because of the reason that unified approach is applied while it is allocated as 6 hours for the second grade, 7 hours in third and fourth grade, 5 hours in fifth and sixth grades.

In Austria that has binary hierarchical system involves not only the central area but also the country in means of educational administration, federal government is in charge in the first place (Memduhoğlu, 2015). Education starts at the age of 6 and involves a 9 year period. The last four years of this process is a well-established and wide-ranging teaching step named as new secondary school (Neue Mittelschule). Australian education curriculum depends on designing of individual learning ways, diversity, equal opportunity and attendance principles. As long as there is no change in the autonomous school curriculums the time determined for the German classes is four hours. German lessons have the aim of providing the students to develop their cognitive skills, to use the creative possibilities and enlarge them, to enable the constructive usage of media. The German classes are designed in order to analyze, judge and criticize the values ethically with a rightful point of view, decide and be able to move. The lingual and cultural diversity in the lessons, should be experienced as community enriching fact (RIS, 2018).

In Finland the basic education is for 9 years. The first six years of this education is sustained with one teacher, next three years by in-field teachers. The basic goals of mother tongue teaching in Finland are lay the foundation of reading and writing skills of the students, improving the learning and interaction skills, developing their self-expressing abilities related to their individual circumstances, encourage lingual diversity and the skills of listening, speaking, reading and writing. Especially since 2015, Finnish education and mother tongue education have been based on cultural diversity and respect. Considering the time allocated to mother tongue education in the teaching process, in the grades 1 and 2 14 hours, between the grades 3-6 18 hours and 7-9 grades 10 hours are reserved for teaching the mother tongue. When the second language education is added to this
planning for the reason that the country has a multilingual conformation, it can be seen that more than half of the 38 hours of weekly course time is allocated for language education (Finlex, 2018).

Education system in Hungary has a central structure. However, responsibilities in the management of schools generally belong to the municipalities. Compulsory education period involves the ages between 5-16. The structure of basic education is generally divided into two as lower level (grades 1-4) and upper level (grades 5-8) in the same school. In the upper level of basic education, which means in the grades from 5 to 8 mother tongue education in the classroom has more than one task and goal. These are briefly as follows;

To enable the students:

• to understand the relationship between nation, small-scale society and individual,

• to learn their culture, thoughts, moral content and aesthetic values, and thus to be mentally and emotionally connected to them,

• to be able to interpret their past, current environment and themselves according to their age and thus be ready to understand and shape this cultural tradition,

• to learn creative thinking,

• to have a strong comprehension of a text at this stage of education,

• to develop their creativity so that they can form short texts in the text types they work on and to apply the Hungarian language and spelling rules consciously,

• to express themselves correctly, verbally and in writing according to different communication situations.

In Hungary, it is offered to the teachers to use 80% of the curriculum inside the classroom and 20% outside the classroom (visiting museums, seeing theater performances, inviting famous people for an interview, etc.) for the purpose of deeper, more diverse teaching, repetition, practice or knowledge acquisition, competence development and project work. The curriculum, which has been carried out since 2012, replaced by a new one in the beginning of the new school year 2020. According to these programs, 7 hours in 1st and 2nd grade (7 hours in 2012), 5 hours in 3rd and 4th classes (6 hours in 2012), 4 hours in 5th and 6th years (same in 2012) and in the 7th and 8th grade, 3 hours (the same in 2012) are reserved for Hungarian lessons (Petrócz, 2020).

The education system of the Republic of North Macedonia is organized as preschool, primary school, secondary school and university education. In the country where nine-year primary education and three / four-year high school education are compulsory, eight-year primary education has been
increased to nine years since 2006. The first year includes 6-year-olds and is accepted as a preparatory year. Since the 2007/2008 school year, high school education has also become compulsory and thus children between the ages of 6 and 18 have been involved in compulsory education (Arif, 2008). Although having different ethnic elements, the statement; "Educational studies at primary schools are carried out with Macedonian and Cyrillic alphabet." takes place in the 10th article of the Primary Education Law published in the Official Gazette of North Macedonia with the headline "The Use of Languages in Education". In addition, the provision stating that the students of the members of the community are able to have an education in another language, is included as well. (Службен весник, 2019).

The goal of education in North Macedonia is to raise individuals who respect gender, ethnicity, religion, language, social status, intellectual and physical diversity and who have acquired a democracy culture (Службен весник, 2019). The language lessons and their hours of a primary school in North Macedonia in the 2019-2020 academic year are as follows: 6 hours Macedonian in 1st grade, 5 hours Macedonian and 2 hours Albanian in 2nd grade; In the 3rd grade, 6 hours in Macedonian, 3 hours in Albanian; In the 4th grade, 3 hours in Macedonian, 4 hours in Albanian; 5th grade 5 hours in Macedonian, 2 hours in Albanian; In the 6th grade, 4 hours in Macedonian, 4 hours in Albanian; In the 7th grade, 5 hours Macedonian, 4 hours Albanian; In the 8th grade, 4 hours in Macedonian, 4 hours in Albanian; In the 9th grade, 4 hours in Macedonian, 3 hours in Albanian (Кирил Пејчиновиќ, 2018).

Course Books

Textbooks are accepted as the most basic means of education and training process. Considering and evaluating the textbooks as only a resource containing knowledge or skills of a course is just like stating that an iceberg as just what it is seen. In that case, answering the question - "What is a text book?"- not only as a course book but also from the different point of view will be enough to prove why the text book is a basic tool.

When we have a look at the diachronic definitions of what a textbook is, according to Brammer's (1967) definition, the textbook is a basic tool in which generally accepted principles on a subject are demonstrated, primarily designed for classroom or student-book-teacher interaction (as cited in Laspina, 2009: 28). Textbooks are based on the educators’ designs to teach what they believe the students should have. In other words, textbooks tell children what their elders want them to know (Fitzgerald 1979: 47). According to Oğuzkan (1993), the textbook is a book that is recommended as a basic resource for teachers and students for a certain school, class and course after it has been examined according to certain criteria. Graves (2000: 175) states that the textbook is an important and standard source of information for any subject in the context of formal education and an effective tool for the learning-teaching process. According to Häkkinen (2002: 11), textbooks are a non-fictional
type of literature that aims to provide students with basic information about a particular field of study. Garinger (2002) defines textbooks as a basic resource for teachers, a source of inspiration for classroom activities, a source of supportive material, and even the curriculum itself. According to Kalmus (2004), who evaluates textbooks sociologically, textbooks are socialization tools used to convey knowledge and values to the young generation and to ensure the continuity, production or transformation of the social order.

On the other hand Kılıç and Seven (2006) defined the textbook as a suitable tool to apply the strategies, methods and techniques required by the goals and behaviors of the program. Ülper and Yalınkılıç (2010) stated that textbooks are extremely necessary and important educational tools in order to actualize teaching activities in teaching environments. According to Tertemiz, Ercan and Kayabaşı (2011) who states that textbooks are a resource that affects significantly what students will learn in the teaching learning process, especially in deliberate education practices. Erbaş, Alacacı, and Bulut (2012), who approach textbooks functionally, state that textbooks are important tools for teachers to understand the subjects and concepts in their curriculum and to put designed curriculum into practice. In the Ministry of National Education's Regulation on Textbooks and Education Tools (MEB, 2016), the textbook refers to the book approved by the Board (Board of Education and Discipline) to be taught in formal and non-formal education and training institutions.

As it is understood from the definitions, the textbook is the most basic lesson tool that is prepared according to a certain curriculum, provides the correct and necessary exchange of knowledge, skills and / or values between teacher-content-student (Caner & Kurt, 2020). The textbook is a unique tool for the courses for being related to the educational programmes, meeting the expectations of the parties in every sense, being for the general and specific objectives of the course, as well as being prepared in accordance with the national education policies of the country and thus for an effective learning and teaching process to take place.

In addition to these definitions, it is possible to list what the textbook is for the stakeholders who are interested in the textbook as follows:

1. For the state, the textbook is the most basic resource in which the characteristics of the individuals desired to be raised are coded, the framework of competence is drawn, norms and behavioral patterns are presented (Pingel, 2010). The answers to the questions of what, how much and when an individual or society should know, what values should have, reveal the state's view of the textbook.

2. For the Ministry of Education, the textbook is the most basic resource that provides equal opportunities for each individual participating in the education and training process, both in terms of
acquisition, quality and quantity, in accordance with national education policies and general and specific objectives of education.

3. Curriculums are general structures which restrict the currently unlimited knowledge and related applications within the framework of educational activities; Reveals why, when, how much and how valid and necessary information should be transferred to the target audience, and what the expected behavioral changes are. For the curriculum, the textbook is the most basic source where all kinds of rules, rules, goals, methods and strategies within itself become visible and turn into practice. Even Sheldon (1988: 237) considers the textbook to be the visible heart of its program.

4. For the teacher the course book is the basic source book which not only both guides to the in class practises but also is a supplementary of the programme that is foreseen to be followed.

5. For the students the course book is the most basic source that gives information about the teaching process and provides focusing on the lesson and the teacher.

6. For the parents the course book is the most basic source that their children get the knowledge about inputs and outputs in a day at school.

It is possible to extend the list from the viewpoint of different stakeholders. However, it will be an unchanging judgment that the textbook is the most basic resource even in the definitions that are going to be added.

**General Content Features of Textbooks**

Content features of the textbooks differ according to the aims, subjects and learning areas of the course. In this sense, it is expected that the content planning, division and other content features of a textbook prepared for a mathematics or social studies course will have a different content structure from the mother tongue textbook. Language education, which has a multi-component structure, should have a textbook that contains these components; It is very important in terms of the quality of education and the achievement of the language lessons.

It is possible to examine the content features of mother tongue textbooks under 2 main headings.

**1. General Content Units**

Which units are involved in the content of textbooks is the subject of the general content classification. Some of these features are valid for all textbooks, while others are only for language lessons. The following units are included in the content classification of the textbooks prepared for language education:
Generic Section: This section is the one where the book is introduced. Important information such as the name of the editor, author and other officials, publisher, edition year and number, information of confirmation from official institutions, foreword, acknowledgment, table of contents, list of figures and graphics, usage information of the book are placed in here. In addition, there are national elements in the generic section of the textbooks in our country, which should be in the generic section according to the Textbooks and Education Tools Regulation (MEB, 2016) prepared by the Ministry of National Education and published in the Official Gazette dated 12.09.2012 and numbered 28409. The Turkish Flag, the National Anthem, Atatürk's Address to the Youth and the portrait painting of Mustafa Kemal Atatürk are among the national elements that must be included in the textbooks and their existence is guaranteed by the relevant regulation.

Usage of the book and Instruction of Guidance: This unit can be a part of the generic section or it can also be considered independently. One of the factors for which the information is given in the section is called the organizational chart. Here, the meaning of the elements all which have a special meaning in the use of the book such as; writing, color, shape, picture, infographic are explained.

Information of Learning Objectives or Outcomes: It is the section in which the learning objectives or learning outcomes are given as items in the unit, theme or chapter entries in the textbooks. This section allows the student to get preliminary information about what behaviours they will gain at the end of the relevant section.

Dictionary, Index, Resources Section: In these categories, the dictionary section; containing the meaning of words, phrases and terms in the back pages of the textbooks, the index section; enables to find terms and names of people easily, the resources section; showing where the theoretical information, text, pictures and similar elements in the book are taken from, are included.

Additional Resources Section: This section includes topics that cannot be explained in the book or in lecture or that require more information and examples.

Author-Poet Bibliography: Basic information such as biographical information, understanding of art and works of the text writers who have productions in the book is usually given at the end of the book. According to the Turkish Language Curriculum (MEB, 2019), it is one of the necessary features of the textbook to include the biographies of the authors or the poets.

Solutions Section: It is the place where the solutions of all the questions and activities in the book are found. Having these parts in the book will provide opportunity to the students to learn by themselves or by using their self-management abilities. While the solution part does not take place in
the mother tongue course books that much, it is generally one of the basic parts and the most needed in the books of foreign language teaching.

2. Structural Content Segmentation

Eight division structures can be mentioned in the textbooks prepared for language teaching: thematic, generic, skill-based, functional/functional, grammatical, chronological, textual and artist-based. These can form the basic structure of the textbook merely or they can be used as multiple or each other's sub-structures, too. For example, the basic structure of a book can be both thematic and functional/operational, or its basic structure can be thematic, and its infrastructure can be skill-based. Among the classifications only textual classification does not show the feature of being a substructure.

**Thematic Segmentation:** Theme is defined as "a curriculum, a teaching unit, an idea or subject that is adopted and repeated as a basis for an educational activity" (TDK, 1974). In thematically prepared textbooks, the main subject and the sub-topics supporting it are organized by forming a unity.

**Textual Segmentation:** It is a segmentation feature created by ordering the reading texts without depending any theme, unit or topic. Pre- and post-text questions, genre features, grammar features and writing studies are listed as sub-sections of textual classification.

**Generic Segmentation:** Literary genres form the criteria in the division of the textbook. The fact that the features and examples of epics, legends, tales, novels and other literary genres shape the mother tongue book shows that a generic classification is made. Text questions, vocabulary studies, genre features and genre-related writing exercises form the sub-sections of the textbooks created in this way. It is possible to encounter this structure mostly in literature books.

**Skill-Based Segmentation:** Textbooks prepared in line with the skill areas of language education consisting of reading, writing, listening and speaking are skill-based. Language skills constitute the main title in the books prepared in this style. This structure is more likely to be seen in textbooks on foreign language or second language teaching.

**Functional / Functional Segmentation:** It is a content structure formed by the penetration of task-based teaching method, which is one of the effective language teaching methods, into the textbook, in today's world where language teaching methods have become diversified. This kind of compartmentalization, which aims at the application and production on a subject with a general explanation, background comprehension or perception, is mostly seen in the books prepared for foreign language or second language teaching. For example, after the words, concepts, phrases and grammar rules related to place-direction names are grasped, the pages that enable students to do the
scenario that they will write for the promotion of a different place and then a place in their own country, are of operational / functional structure. Another example can be given from German textbooks in Germany. Each chapter of the textbook is planned under the heading "Learn in three steps (Lernen in drei Schritte)". The first subtitle is called "Basic Part" and aims to make students review their knowledge and develop a core competency area. The second subtitle is called "Integration and Differentiation" and it is aimed to ensure integration with another competency area. The heading “Prepare a possible classroom or project” constitutes the third part and aims to ensure harmony between the knowledge and the student (Wagener, 2014).

**Grammatical Segmentation:** It is a type of segmentation where grammar subjects constitute the main title. A certain order is followed in this type of segmentation. Explanation of a grammar rule with examples, revealing its similar and different aspects with other rules and exercises form the main structure of grammatical division. It is seen that the use of this structure is common in foreign language teaching books and books in which only grammar rules are conveyed.

**Chronological Division:** In this classification type, works are sorted according to the date of writing. Word studies, text questions, language and literature features of the period and important developments are included based on the work. Features of types are not important.

**Author / Poet Based Segmentation:** It is a type of segmentation in which the texts are sorted by bringing the literary characteristics and basic works of the author or poets to the fore. It is similar to chronological classification but basically there is artist, not history.

**Research on Textbooks**

Mother tongue textbooks have become one of the important topics of language education research and have been evaluated in many studies (Açık Önkaş & Günay, 2015; Ari, 2011; Cömert Bayraktar, 2017; Coşkun & Çiftçi, 2019; Çakır, 2013; Deniz, Tarakcı & Karagöl, 2019a; Deniz, Tarakcı & Karagöl, 2019b; Epcaçan & Okçu, 2010; Gün, 2013; İşeri, 2007; Kadızade & Önder, 2016; Karagöl & Tarakcı, 2018; Lüle Mert, 2011; Solak & Yaylı, 2009; Somuncu, 2008; Tarakcı & Karagöl, 2019a; Tarakcı & Karagöl, 2019b; Türkben, 2019a; Türkben, 2019b; Yazıcı Okuyan, 2012; Yıldız, Altun, Ceran, Dağ & Özugül, 2019) from different perspectives, such as language skills, achievements, curriculum, competence and use.

The review of available literature on textbooks revealed that there are several studies that examined language textbooks published in different countries comparatively concerning some variables, such as covering daily issues (Karababa, 2005); communicative competence elements (Çelik and Caner, 2020); general physical features (Durmuşçelebi, 2007); value transmission (Şentürk and Aktaş, 2015); content coverages (Kurt, 2018); and technology use in textbooks (Kurt & Demir, 2019).
Karababa (2005) examined Turkish and English textbooks in terms their priority in giving place to daily issues and found that English textbooks include more texts dealing with current issues. In another study Çelik and Caner (2020) examined the English and Turkish language teaching textbooks concerning their use of communicative competence elements. Their comparative evaluation of the textbooks revealed that although the pragmatic competence component is covered pleasingly, the discourse competence component is covered more effectually in the textbook used in teaching English as a foreign language. Additionally, they found that neither of the textbooks is particularly weak in covering the strategic competence aspects in the speaking activities. As for the physical features of the textbooks, Durmuşçelebi (2007) compared textbooks used in Turkey and Germany and found that while textbooks in Turkey did not give importance on the physical features, the textbooks in Germany were mostly more useful and in better quality in terms of the pictures, paintings, and unity of the textbooks. In another study Şentürk and Aktaş (2015) examined 8th grade language textbooks used in Romania and Turkey concerning their coverages in transmitting national values. They found that the textbooks used in Romania were lacking in national value transmission. Similarly, Kurt (2018) examined textbooks used in Turkey and in Hungary concerning various variables and found that the textbooks used in Hungary were richer in terms of their contents and subject coverages. Another study conducted by Kurt and Demir (2019) examined the textbooks used in Turkey, Austria and Hungary concerning their subjects on giving place to technology use. They found that language textbooks used in Austria and Hungary integrated more technology into their issues whereas, the textbooks in Turkey did not give emphasis on integrating technology to their issues.

**Purpose of The Research**

This research was conducted to reveal the content characteristics of the textbooks used by different countries in mother tongue education and to make comparisons. In order to achieve this aim, the research is founded on the question: “What are the content features of the textbooks used in mother tongue education of different countries?” The sub-problems of working within the framework of this basic problem are the following:

What is the general content view of mother tongue textbooks?

How is the content division of mother tongue textbooks made?

How are language skills and learning fields included in the content of mother tongue textbooks?
Method

Research Model

In this qualitative study, the data were analyzed by content analysis method, which also includes document and descriptive analysis. Document review covers the analysis of written materials containing information about the facts and cases that are aimed to be investigated (Yıldırım & Şimşek, 2018: 189). The main purpose in content analysis is to reach the concepts and relations that can explain the collected data. The data summarized and interpreted in descriptive analysis are submitted to a deeper process in content analysis, and concepts and themes that cannot be recognized with a descriptive approach can be discovered as at the end of this analysis. The process here is to gather similar data within the framework of certain concepts and themes and to interpret them in a way that the reader can understand (Yıldırım & Şimşek, 2018: 242).

Data Collecting Tool

In the research, firstly, the literature on how to make an evaluation in line with the purpose and scope of the research was scanned and the textbook evaluation approaches were determined. As a result of the findings, it was concluded that the most appropriate method is the checklist method. The checklist method is a systematic and preferable method because it has listed criteria, these criteria are in order, the steps to be followed by the evaluators are clear and can be done without wasting much time (Caner & Kurt, 2020). By this approach, the data obtained from the evaluation of a book can also be used for comparison with other reviewed books. According to Demir and Ertaş (2014), the checklist is a convenient and practical approach that can be used for practitioners to decide whether a book is effective or not. According to Mukundan, Hajimohammadi and Nimechisalem (2011), the checklist approach is a miscellaneous and effective approach since more generalizable evaluations will be obtained.

At this stage, the textbook evaluation checklist developed by Kurt (2020) was used depend on the literature review and a preliminary examination of the textbooks used in the mother tongue courses of different countries. The complete checklist consists of 9 themes and 62 items. For the purpose and scope of this research, an analysis was conducted within the framework of 3 themes and 28 items.

In Table 1, the themes and items in the textbook checklist and the CGO (Scope Validity Ratios) expressing the content validity of these items and the CGI (Content Validity Index) values of the themes that are given (Kurt, 2020).
As it seen in Table 1, the checklist includes 28 items totally in 3 themes. The CGO values of the items are between .60 and 1.0; The Scale Content Validity Index (S-CVI) of the themes is between 0.92 and 1. If the Scope Validity Index of the scale is .80 or above, it is expressed as an acceptable value (Polit & Beck, 2006). Accordingly, the item CVIs in the textbook evaluation checklist are at an acceptable level.

**Study Object**

In determining the countries where the data will be collected, the success cases in the PISA report announced in 2015 were taken as the basis. Through purposeful sampling, European countries are divided into three categories as first, middle and last, according to the achievement scores in the field of "Reading Skills" of the report. Turkey as being in the last group, has been included to the field research directly where the choice is made randomly from the rest of the countries in the list. The aim here is not to establish a relationship between PISA reports and textbooks, but to choose the country in line with a certain standard. Accordingly, the countries that their coursebooks will be analyzed

<table>
<thead>
<tr>
<th>Theme</th>
<th>Item</th>
<th>Statement</th>
<th>CGO</th>
<th>CGI</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Content Features</td>
<td>1.</td>
<td>Are there on the generics like; national anthem, flag, oath, state founder, eldest or national hero's official etc.?</td>
<td>1</td>
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<td></td>
<td>2.</td>
<td>Does the book have usage information or organizational chart?</td>
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<td>Are the directions provided with infographics?</td>
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<td>4.</td>
<td>Is there information about the learning objectives?</td>
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<td>5.</td>
<td>Is there a dictionary section?</td>
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<td>6.</td>
<td>Is there a directory partition?</td>
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<td>7.</td>
<td>Is there a resources section?</td>
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<td>8.</td>
<td>Are there any additional resources, information, reminders section available?</td>
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<td>9.</td>
<td>Are there any bibliographies of writers and poets?</td>
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<td>10.</td>
<td>Is there a solutions section?</td>
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<td>Classification Feature of Content</td>
<td>11.</td>
<td>Is it thematic?</td>
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<td>12.</td>
<td>Is it generic?</td>
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<td>Is it skill based?</td>
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<td>Is it functional or functional?</td>
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<td>Is it grammatical?</td>
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<td>16.</td>
<td>Is it chronological?</td>
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<td>17.</td>
<td>Is it textual?</td>
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<td>18.</td>
<td>Is the writer poet-based?</td>
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<td>Features of Language Skills and Learning Areas</td>
<td>19.</td>
<td>Are there different types of reading texts?</td>
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<td>20.</td>
<td>Is there pre-reading or preparatory work?</td>
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<td>21.</td>
<td>Are there any reading aids?</td>
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<td>22.</td>
<td>Are there different types of listening texts?</td>
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<td>23.</td>
<td>Are there different types of speaking exercises?</td>
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<td>24.</td>
<td>Are there different types of writing exercises?</td>
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<td>25.</td>
<td>Is there information on spelling and punctuation rules?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26.</td>
<td>Are there any activities related to teaching vocabulary?</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>27.</td>
<td>Is there a theoretical explanation of grammar rules?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28.</td>
<td>Are there grammar activities?</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
have been identified as are; at the forefront Finland and Germany, in the middle Austria and Hungary, at the end Turkey and northern Macedonia.

In the next stage of the research, the textbooks used in the mentioned countries were determined. Due to the difficulty and cost of accessing mother tongue textbooks at all grade levels of secondary school and its equivalent, only mother tongue textbooks used for 6th grade and equivalent classes were taken as a sample. The websites of the countries’ ministries of education or equivalent institutions and official education institutions were scanned and information was provided on the textbooks used. In determination studies it is seen that in Finland, Austria, Hungary, Turkey and Northern Macedonia the textbook selection is done centrally while there have been different applications according to the states in Germany. For this reason, the textbooks used in schools in the state where the capital Berlin is located in Germany were taken into consideration. In addition, after the books were acquired, it was learned that the books used in the state of Berlin are also valid for many regions.

Another situation identified in country reviews is that some countries use more than one official or mother tongue. The official languages in Finland are Finnish and Swedish. Swedish children are taught Finnish and the Finnish children are taught Swedish as a second mother tongue. There are also more than one language accepted as an official language in North Macedonia. These languages are Macedonian, Albanian, Turkish and Serbian. The choice of books in these countries is made according to the language mostly used. Therefore, the Finnish coursebook for Finland and Macedonian coursebook for North Macedonia became the document of the research.

In order to increase visibility in the interpretation of the findings in the study, a code was assigned to each textbook determined. The books that countries use in their mother tongue lessons and their codes in the research are given in Table 2.

Table 2. Textbooks and Codes Examined Within the Scope of the Research

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>English</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>Välkky 6 Äidinkielen ja Kirjallisuus</td>
<td>Välkky 6 Mother Tongue and Literature</td>
<td>F1</td>
</tr>
<tr>
<td></td>
<td>Välkky 6 Äidinkielen ja Kirjallisuus Harjoituskirja</td>
<td>Välkky 6 Mother Tongue Language and Literature Exercise Book</td>
<td>F2</td>
</tr>
<tr>
<td></td>
<td>Välkky 6 Harjoituskirja Ratkaisut</td>
<td>Välkky 6 Mother Tongue and Literature Exercise Book Solutions</td>
<td>F3</td>
</tr>
<tr>
<td></td>
<td>Välkky 6 Äidinkielen ja Kirjallisuus Kirjoitusvihko</td>
<td>Välkky 6 Mother Tongue and Literature Writing Handbook</td>
<td>F4</td>
</tr>
<tr>
<td></td>
<td>Välkky 6 S2 Äidinkielen ja Kirjallisuus</td>
<td>Välkky 6 Mother Tongue and Literature Second Language Finnish</td>
<td>F5</td>
</tr>
<tr>
<td></td>
<td>Kirjoitusvihko</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kirjallisuus Suomi toisena kielenä</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>Deutschbuch 6 Scharc- und Lesebuch</td>
<td>German Book 6th Language and Reading Book</td>
<td>A1</td>
</tr>
<tr>
<td></td>
<td>Deutschbuch 6 Arbeitsheft</td>
<td>German Book 6th Workbook</td>
<td>A2</td>
</tr>
<tr>
<td>Austria</td>
<td>Treffpunkt Deutsch 2 Sprachbuch</td>
<td>Meeting Point German 2 Textbook</td>
<td>Av1</td>
</tr>
<tr>
<td></td>
<td>Treffpunkt Deutsch 2 Arbeitsheft</td>
<td>Meeting Point German 2 Workbook</td>
<td>Av2</td>
</tr>
<tr>
<td></td>
<td>Starke Seiten Deutsch 2 Schulbuch</td>
<td>Strong Pages German 2 Textbook</td>
<td>Av3</td>
</tr>
<tr>
<td></td>
<td>Starke Seiten Deutsch 2 Arbeitsheft</td>
<td>Strong Pages German 2 Workbook</td>
<td>Av4</td>
</tr>
</tbody>
</table>
As shown in Table 2 in the study from Finland 5, Germany 2, 5 from Austria, Hungary 9, a total of 23 books were examined, including one from Turkey and Northern Macedonia.

**Data Analysis**

The evaluation of the textbooks according to the checklist was made by the researcher and three field experts, who are competent language users in the languages of the textbooks. The reliability of the evaluations made independently was analyzed according to the reliability formula proposed by Miles and Huberman (1994) based on the principle of consensus and dissent, and the reliability of the evaluations was calculated as 87%. The fact that Miles-Huberman’s reliability formula application result exceeds 70% means that the research is reliable. The items with disagreement were discussed by the evaluators and consensus was achieved as presented in the findings section.

**Results**

**General Content View**

The general view of the content features of the mother tongue textbooks of the countries is given in Table 3.
The first content feature given in Table 3 is the status of the data on national elements in the generic part of the textbooks. According to this, it is seen that national elements such as the national anthem, flag, oath, the state founder, the elder or the national hero are not included in any books except Turkish textbook.

According to the second column, which reveals whether there is a section on the organization chart or usage information of mother tongue textbooks, it was determined that none of the mother language textbooks in Finland did not include an organizational chart. There is a comprehensive organizational chart supported by infographics in the introduction part of the textbooks in Germany and Austria. Among the mother tongue textbooks of Hungary, only a little information is provided about the use of the literature book, while there is no usage information or organization chart in other books. Another book that has an organizational chart is the Turkish textbook in Turkey. The organization chart or usage information is not included in the book of the mother tongue of North Macedonia.

Looking at the third row of Table 3, which shows the use of infographic for orientation in the textbooks, it is seen that among the mother tongue textbooks in Finland, infographics are included in Välkky 6 Äidinkielen ja Kirjallisuus [Välkky 6 Mother Tongue and Literature], while the exercise book (Välkky 6 Äidinkielen ja Kirjallisuus Harjoituskirja [ Välkky 6 Mother Language and Literature Exercise Book]) and the same second language Finnish book (Välkky 6 S2 Äidinkielen ja Kirjallisuus Suomi Toisena Kielenä [Välkky 6 Mother Language and Literature Second Language Finnish]) a few instruction visuals are included but these elements are not used in other books. It is seen that instructional infographics are used in German books in Germany and Austria. Infographics for instruction are not included in most of the mother tongue textbooks in Hungary. The only book in which the mother tongue and infographics that have a small place in the literature book were used fully was the grammar, spelling and composition textbook. Except the activity number on a standard
figure, it is confirmed that instruction infographics are not included in mother tongue textbooks in Turkey and Northern Macedonia.

In the fourth row of Table 3, the answers to the question of whether the learning objectives are included in the chapter, theme or unit entries of the textbooks are shown. Accordingly, this data was not found in any book within the scope of the research.

Looking at the line of the table reveals if there is the part of glossary in the textbook or not, in the textbooks in Finland, Germany, Austria and Turkey it is seen that there is no such partitioning. While mother tongue books in Hungary have a dictionary section in textbooks but there is no dictionary in study or activity books. Whereas there is a dictionary section in North Macedonian books.

As shown in the sixth row of Table 3 In the mother tongue textbooks in Finland, Hungary and Turkey, directory section is not included. However, in two books in Germany and Austria and in the textbook in North Macedonia index section is included.

According to the seventh line of Table 3, which reveals the existence of the resources section in the textbooks, the resources section is not included in the textbooks in Finland, Germany, Austria, Turkey and Northern Macedonia textbooks resources section while only literary books among the main language books in Hungary (Sokszínű Irodalom 6 Tanköny [Multi Color / Miscellaneous Literature 6. Textbook]) sources indicated.

Another section in the textbooks is the supplementary section that includes elements such as information, reminder, evaluation, and example. According to the eighth row of Table 3 additional sections illustrating the use of textbooks in the countries Finland, Turkey and Northern Macedonia this section does not exist. There are additional information sections in German and Austrian textbooks and in Hungary's literature book.

As it can be seen in the ninth line of Table 3, which reveals the existence of information about the authors and poets of the works included only in the Hungarian literature textbook and the bibliography information included towards the last pages of the textbook in North Macedonia.

Another information shown in Table 3 is about the existence of the solution section that includes the solutions of the activities in the books. Accordingly, solutions are included in all of the German and Austrian books. Among the books in Finland is the solutions section of Välkky 6 Äidinkielen ja Kirjallisuus Kirjoitusvihko [Välkky 6 Mother Tongue and Literature Writing Booklet]. Also, one of the five books in Finland is a book of solutions in itself (Välkky 6 Harjoituskirja Ratkaisut [Välkky 6 Mother Tongue and Literature Exercise Book Solutions]). It was observed that the solutions of the activities in the themes were not included in the Turkish coursebook. In the books
in Hungary and North Macedonia, there is no section regarding the activities and solving the questions in the book.

Content Segmentation

Another issue that is examined about the content in the textbooks is how the compartments are made. The view regarding this is given in Table 4.

Table 4. Compartmentalization of Textbooks

<table>
<thead>
<tr>
<th>Type of segmentation</th>
<th>Condition</th>
<th>Book</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic</td>
<td>Yes</td>
<td>F1, A1, Av1, Av3 M1, M2, T1, KM1</td>
<td>8</td>
<td>34.7</td>
</tr>
<tr>
<td></td>
<td>Partially</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Textual</td>
<td>Yes</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Partially</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Skill Based</td>
<td>Yes</td>
<td>F2, F5</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td>Partially</td>
<td>F1, A1, A2</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Functional/Operational</td>
<td>Yes</td>
<td>F1, A1, A2, Av3, Av4, M5, M4, M7, M8, M9</td>
<td>11</td>
<td>47.8</td>
</tr>
<tr>
<td>Grammatical</td>
<td>Yes</td>
<td>Av2</td>
<td>1</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>Partially</td>
<td>Av1, Av3, Av4, M1, M2, M3, M4, M7, M8, M9</td>
<td>12</td>
<td>52</td>
</tr>
<tr>
<td>Chronological</td>
<td>Yes</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Partially</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Varietal</td>
<td>Yes</td>
<td>F3, M5, M6</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Partially</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Author-Poet based</td>
<td>Yes</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Partially</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

According to Table 4, partitioning of textbooks is done in different ways. In the basic structures of the books, thematic (f=8) division feature was preferred most. Textual, chronological and author-poet-based segmentation structure has not been used in any book. There are 3 books that are generic in basic structure, 2 books that are skill-based and 1 book is grammatical. Functional / functional (f=11) and grammatical (f=12) segmentation features are preferred as infrastructure.

When the segmentation features are analyzed in terms of countries, it is seen that different methods are used in the content segmentation of the mother tongue textbooks in Finland. It is possible to divide the mother tongue and literature book (Välkky 6 Äidinkielen ja Kirjallisuus [Välkky 6 Mother Tongue and Literature]) into two parts. The first part is completely thematic. The second part is skill-based and functional. There is compartmentalization integrity in other books in Finland. Two books (Välkky 6 Äidinkielen ja Kirjallisuus Harjoituskirja [Välkky 6 Mother Tongue and Literature Practice Book], Välkky 6 S2 Äidinkielen ja Kirjallisuus Suomi Toisena Kielenä [Välkky 6 Mother Language and Literature Second Language Finny]) ja Kirjallisuus Kirjoitusvihko [Välkky 6 Mother Tongue and Literature Writing Booklet]) is also created with generic division. A grammatical division is not found in Finnish books.

There are also different partitioning features in the textbooks in Germany. The general chapters of the textbook (Deutschbuch 6 Sparch- und Lesebuch [German Book 6. Language and
Reading Book]) are thematic. However, the departments are divided into sub-sections and these sections are formed according to language skills or functional / functional.

The partitioning features of the German workbook in Germany (Deutschbuch 6 Arbeitsheft [German Book 6 Workbook]) also shows differences. The main structure of the book is arranged according to language skills and function. However, grammatical structures in the chapters also draw attention.

There are also different partitioning features in mother tongue textbooks in Austria (Treffpunkt Deutsch 2 Sprachbuch [Meeting Point German 2 Textbook], Starke Seiten Deutsch 2 Schulbuch [Strong Pages German 2 Textbook]). The first of the textbooks is thematic in general. However, it has a grammatical structure, albeit partially. Subtitling is based on language skills. The other textbook, Starke Seiten Deutsch 2 Schulbuch [Strong Pages German 2 Textbook] is functional in general, as can be seen from the organizational chart before, but it shows partially thematic and grammatical division features. The content segmentation of the workbooks is grammatically and functionally designed.

Mother tongue textbooks in Hungary also have different segmentation features. Hungarian language textbooks and workbooks (Sokszínű Magyar Nyelv 6 Tankönyv [Multicolored/Various Hungarian Language 6 Textbooks], Sokszínű Magyar Nyelv 6. Munkafüzet [Multicolored/Miscellaneous Hungarian Language 6 Workbook]) are thematically formed while literature textbooks and workbooks (Sokszínű Irodalom 6. Tanköny [Multicolored/Various Literature 6. Textbook], Sokszínű Írodalom 6 Munkafüzet [Multicolored/Various Literature 6 Workbook]) are generic. There is a functional and grammatical compartmentalization structure in mother tongue course and workbooks, as well as in essay and spelling books.

Content segmentation is made in Turkey and Northern Macedonia thematically. The themes in the Turkish textbook are nature and the universe, national struggle and Atatürk, the world of children, virtues, our national culture, science and technology, art and citizenship. The theme names used in content segmentation in North Macedonia are; language, literature, learning types, education and training, media culture, information technologies.

Language Skills and Learning Areas in Textbooks

The situations where countries include language skills and learning fields in their mother tongue textbooks are shown in Table 5.
According to Table 5, it is seen that reading texts, which are the basic material of mother tongue education, are included in all textbooks of Finland except for two textbooks. When the presence of pre-reading and preparation studies investigated Finland, Germany, Austria, Turkey and part of the preparation in reading books with text in northern Macedonia are also in evidence. It has been observed that while reading text is available in most of the books in Hungary, the preparation section is not included.

According to the third column of Table 5, which reveals whether auxiliary elements are used in reading texts, line or verse numbers are indicated in all of the reading texts in the textbooks of Germany and Austria (Figure 1). Numbering is also used in the Hungarian literature book, in addition,
the meanings of the words in the texts are explained on the margins (Figure 2). Similar items are not included in the textbooks of other countries.

Figure 1. Sentence Numbering as an Auxiliary to Reading Texts in the German Textbook in Austria

Figure 2. Use of Page Borders as an ancillary for Reading Texts in Textbooks in Hungary

Considering the presence of listening texts in the mother tongue textbooks of the countries, it is seen that at least one book of other countries, except for the textbook in North Macedonia, includes listening texts.

One of the information given in Table 5 is about whether there are studies on writing skills in the textbooks or not. Accordingly, writing activities were included even in one of the textbooks in the countries covered by the research. While writing studies are included in all of the books in Germany and Austria, different books have been designed for this skill of mother tongue education in Finland and Hungary.
According to the seventh column of Table 5, which expresses the existence of spelling and punctuation rules in the textbooks at the level of knowledge, it is seen that the rule information is also included in parallel with the existence of writing practice.

According to the eighth column in Table 5, which shows the status of vocabulary teaching, which is an important part of language education and considered as an integrated skill, in the textbooks, there are activities related to word teaching in all of the textbooks. Vocabulary teaching is not included only in the solution book and writing book in Finland and in the grammar writing and composition set in Hungary.

Do not include theoretical knowledge and practice about the grammar rules of textbooks showing the situation as shown in Table 5 in the last two columns, there are few data on knowledge of the language in textbooks in Finland and Turkey. Apart from these, grammar rules and examples are important units in the textbooks in Germany, Austria, Hungary and North Macedonia.

**Discussion, Conclusion and Recommendations**

Before presenting the results based on the findings of the research, it is necessary to mention the "textbook diversity" that is determined during the data and source selection process and affects the findings significantly. The six countries covered by the research use textbooks in different numbers and contents in mother tongue education. The country with the highest variety of textbooks is Hungary with 9 different textbooks, 5 in Finland and Austria, 2 in Germany, in Turkey and Northern Macedonia there is just one book for each. Textbooks are the heart of the curriculum (Sheldon, 1988) or the visible face of the curriculum in the educational setting. Accordingly, it provides information about the number and variety of mother tongue textbooks, the content and density of the countries' mother tongue curriculum. Data and resource selection based on these findings, shows that the diversity of the textbooks used in Turkish courses in Turkey is less and the curriculum is narrow. The most important difference in the variety of textbooks in Hungary and partially Finland has been the literature textbooks, which are named as literature and created on the basis of text type. This situation shows that the literature lesson or its subjects are in the curriculum of secondary schools and that students have started to be equipped with the knowledge and taste of literature in the middle school. Considering that this is an initial degree, the idea that these countries' literature subjects in secondary education will be more detailed than in other countries arises. In particular, systematic presentation of genres such as fairy tales, epics, legends and poems that are fed by national elements will contribute to students' identity development and will enable them to grow up with national consciousness and self-values. Based on this result, starting from secondary schools, the Turkish course should be transformed into Turkish language and literature course, and the curriculum and textbook should be prepared accordingly. The mother tongue education curriculum and textbooks in Hungary serve as an example.
The first conclusion based on the findings of the research is that the textbooks examined have significant differences in terms of content features. In no country other than Turkey in the generic part of the main language textbooks, anthem, flag are not placed as a significant value. The Turkish textbook includes the Turkish flag, the Turkish National Anthem, Mustafa Kemal Atatürk's official and his address to the youth. In this respect, Turkish textbooks set an example for the textbooks of other countries.

One of the content elements of the textbooks is the organizational chart. This part of the book is the user manual, are found in Germany, Austria and Turkey textbooks. It is included in a few textbooks in Finland and Hungary. Especially in Germany and Austria, the organizational chart in the mother tongue books is seen as very successful and effective in terms of guiding teachers and students. Which skills the activity supports, the difficulty levels of the tasks and tasks, what the symbols mean are clearly explained here. Just creating this structure is proof of how much the publisher has focused on the textbook. There is an impression that students will need to look at this section until they get used to the infographics defined in the organizational chart. There is an organization chart in the Turkish textbook, but unlike the books in Germany and Austria, it is not in a structure that will be felt inadequate even if it is not looked at by students. In addition, organizational chart is a need for books supported by infographics. There is almost no infographic in the Turkish textbook. This situation also reduces the need for organization chart.

In all German textbooks in Germany and Austria, guidance was provided with infographics. There is almost no non-infographic activity, text, work. The students' decision of what a study is about is not left to chance. Some of the mother tongue textbooks in Finland and Hungary have infographic for orientation purposes. These elements are not included in Turkish and Macedonian textbooks. According to Mizerska (2015), visuality is a requirement of modern education. People are designed for visual perception and 70% of their buyers are about seeing (Mizerska, 2015: 212). The absence of visual infographics in the textbooks is not suitable for both the nature of today's children and the modern understanding of education.

There is no information about learning outcomes before the chapter, unit or text in any book within the scope of the study. However, the goals determined according to Locke provide higher performance regardless of the higher the difficulty levels (as cited in Yavuz, 2006). In this sense, students should be made aware of the purpose of the unit, theme or topic, and the acquisitions should be presented to the students in an appropriate language.

Glossary given in textbooks to Hungary and Macedonia in northern Turkey, Finland, Germany and Austria are not included in the books. The absence of a dictionary section in the Turkish coursebook can be explained by the Turkish course curricula published in 2006 and 2019. With the Turkish Lesson Curriculum of 2006, the method of using dictionary has changed. With this new
program prepared with a constructivist education approach, learning the meanings of some words that were not known from the text as in the past from the dictionary behind the book was ended (Erbil & Yıldız, 2013). In the last program (MEB, 2019), "Predicts the meaning of words and word groups he does not know by using the context." "Visuals, dictionary, proverbs and idioms dictionary etc. to learn the words and word groups that students guess." they are allowed to use the tools. " Explanation explains the reason why the dictionary, which is a material in itself, is not given at the end of the textbook in order to ensure its use by students.

The existence of the index section, which is a unit similar to dictionary, in the textbooks also differs. This section is included in textbooks other than books in Germany and North Macedonia and books of activity or study type in Austria. Finland, the main language in Turkey and Hungary is such section in the textbooks.

The list of sources used in the creation of textbooks in Germany, Austria, Turkey and Northern Macedonia, and only seen in literature textbooks in Hungary while there was no data in the books in Finland.

One of the units included in the content of textbooks is usually the supplementary section where more information or examples are presented. Among the textbooks examined, this section was included only in the textbooks in Germany and Austria. In these books, it is stated with infographics that there is additional information on the subject in the pages and students are directed to the appendix.

There are only a few textbooks in which biographies are available for authors and poets. Biographies are included in the last parts of the literature textbook in Hungary and the Macedonian textbook in North Macedonia. In other countries and especially in Turkey there is no biography in the textbooks. However, it was stated that the biographies of writers and poets should be included in the 14-item list explaining how Turkish textbooks should be in the Turkish Course Curriculum (MEB, 2019).

The solutions section, where students can check their answers to the activities, is available in all mother tongue textbooks in Germany and Austria and two books in Finland. However, one of the books in Finland is the solutions book in itself. In Hungary, Turkey and Northern Macedonia the solution of the events and questions are not included in the textbooks. This situation increases the dependency of the course and textbooks to the teacher and does not allow students to control their own learning.

Another feature that is controlled in the textbooks in terms of content features is how the books are divided. Accordingly, most of the mother tongue textbooks are prepared in multiple
structures. The most preferred structure in basic content segmentation is the thematic structure. This is followed by generic and skill-based segmentation features. Under these basic segmentation structures, it is seen that functional / operational and grammatical segmentation features dominate the content of the textbooks. Three structures should be emphasized here in particular: thematic, functional / operational and grammatical structure. Thematic structure has become important in learning with the constructivist approach. According to Yaylı (2020), with the thematic structure, activating the preliminary information, associating with the next information, processing and structuring the information becomes easier. Thus, students are provided with the opportunity to expand, organize, construct in their minds and transfer their acquired knowledge and skills to daily life (Güneş, 2008). The thematic division of mother tongue textbooks in different countries shows that they adopt a constructivist approach. Functional / operational structure is the reflection of task-based language teaching method on textbooks. In this structure, the presentation-practice-production cycle constitutes the basic framework of teaching (Willis as cited in 1996 by Yaylı, 2006). Functional / operational structure, with this feature, enables the thematic structure to be completed and to enter a functional and communicative process. The functional / operational structure, which is preferred as subdivision in mother tongue books of Germany, Austria, Finland and Hungary, provides the basis for students to learn by doing and living systematically.

One of the preferred types of compartmentalisation in textbooks is grammatical segmentation. In this structure, which is used as both basic and subdivision in the textbooks of Austria and as subdivision in the textbooks of Germany and Hungary, grammar rules are studied theoretically and practically. Grammar teaching is the process of creating language awareness by transforming students' implicit knowledge of language into explicit knowledge and the ability to use language consciously (Çelikpazu, 2015). Despite this importance, the place of grammar teaching in Turkish teaching is discussed. Today, the emphasis is on understanding and explaining in Turkish lessons, grammar has taken its place as an auxiliary field of study and has ceased to be an aim in Turkish teaching (Karagöz & Öryaşım, 2014). The use of grammatical segmentation that includes rules and activities in the textbooks of Germany, Austria and Hungary shows that these countries attach importance to grammar teaching in mother tongue education. The grammatical structure in the books of these countries can be taken as an example in the preparation of Turkish textbooks.

When textbooks partitioned status to countries with a special look at one book of textbooks in Turkey and Northern Macedonia it is seen only as thematic segmentation. There is no certain standard in the partitioning features of the textbooks in Finland and they differ according to the type of book. While the textbooks in Germany and Austria have different segmentation features, the books have been subjected to a grammatical classification in one aspect. In Hungary, which is the country with the highest book diversity, a standard segmentation structure has not been used, but generally functional and linguistic classification has been adopted.
When textbooks are evaluated within the framework of language skills and learning areas, it is seen that reading texts are included in almost all books. There are no reading texts only in the solutions book and writing booklet in Finland. Inclusion of pre-reading and preparatory work is also a feature encountered in most of the books. It is seen that only in the reading texts in the Hungarian books, the pre-study or preparation part is less included. Two situations were encountered in textbooks as a reading aid. These are the numbering of lines or strings and the numbering of the unknown word and placing it in the margin closest to its place in the text. The first is found in textbooks in Germany and Austria, and the second in the Hungarian literature book.

Listening texts are included in at least one book of all countries except North Macedonia. Speaking studies are included in at least one book of all countries.

Another feature that all countries have partnered with has been in writing activities. In all countries and in most of the textbooks, both writing exercises and knowledge of spelling and punctuation rules are included.

Part of mother tongue education is vocabulary teaching. In this respect, it is seen that the textbooks are prepared accordingly and most of them include activities related to vocabulary teaching.

One of the topics discussed in language teaching has been on grammar. As mentioned above, questions such as should it be taught or how it should be taught are frequently discussed in our country. It is seen that this is reflected in Turkish textbooks. Explanations and examples of grammar rules are partially included in Turkish books. However, grammar rules and activities are included in almost all the books of other countries.

Six countries were examined in this study, which systematically reveals the content characteristics of mother tongue textbooks in different countries. The textbooks of important countries such as France, England, Spain, Italy and Russia should also be examined systematically, the most ideal content features should be revealed and Turkish textbooks should be prepared in this manner.

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Investigation of Project-Based Learning Method in Teaching Programming in terms of Academic Achievement, Cognitive Load and Behavior Change

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Abstract
This study aims to reveal how project-based teaching method affects students' achievement, cognitive load and behaviors in programming teaching. In the study, the pretest-posttest, unequaled control group quasi-experimental model, which is one of the experimental models, was used. The participants of the study were sixth grade students who take the elementary school Information Technologies and Software lesson (N = 55). Achievement test, cognitive load scale and behavior management tool ClassDojo were used as data collection tools in the study. In the experimental group, the subjects were taught with project-based teaching method (student-centered and with teacher guidance). Besides, subjects in the control group were taught with traditional teaching method (teacher-centered). The implementation process took six weeks. Two-Factor ANOVA for Mixed Measures was used to examine the difference between the achievement of the groups. At the end of each lesson, the cognitive load scale was applied to the groups and the data obtained was analyzed by using the Cramer V Coefficient. During the study, the students got positive and negative scores according to their behaviors in the classroom, and the significance of the difference between the two percentages was tested according to their positive behavior percentages. As a result of the study, it was found that the academic achievement and in-class behavior scores of students who learned programming with project-based teaching method differed significantly from those who learned with the traditional method. In addition, it was concluded that project-based teaching method used in programming education did not make a significant difference on students' cognitive load.

Keywords: Academic Achievement, ClassDojo, Behavior Management, Programming Education, Project-Based Learning.


1 This article is derived from Fatma UCA ÖZTÜRK's Master's thesis which was conducted under the supervision of Muzaffer ÖZDEMİR and Durmuş ÖZBAŞI.

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Introduction

Programming education has a great importance in making individuals acquire problem solving and algorithmic thinking, which are among 21st century skills (Çatlak, Tekdal, & Baz, 2015). It can be said that students who receive effective programming education can improve their problem solving, algorithmic and computational thinking skills at a good level. In addition, programming contributes to the development of students’ skills such as logical and critical thinking. Kert and Uğraş (2009) argue that programming education should start at an early age, considering its contribution to individual development. Visual coding tools are useful in terms of facilitating learning for programming education that begins at an early age. Researchers have listed some of these benefits as follows (Akpınar & Altun, 2014; Demirer & Sak, 2016; Karabak & Güneş, 2013):

- Students can improve their computer literacy by using coding tools,
- It can increase their desire towards school and classes,
- It improves their problem solving and analytical thinking skills,
- It improves spatial thinking skills,
- They can design a product as a project and learn how to play a role in solving challenging problems,
- It improves cooperative working skills,
- It develops learning habits by doing and experiencing.

Programming education beginning at primary school age begins with block-based programming environments. The aim here is not for the student to write a program using syntaxes, but to build the algorithmic structure of the program using visual programming elements (Kaucic & Asic, 2011; Shu, 1999). Today, the most well-known visual programming environments are Scratch, Alice and Blockly (Powers et al., 2006). The fact that the interface of Scratch is user-friendly and that it appeals to the 8-16 age group and the beginners of programming, as well as its ability to embody abstract programming concepts enable students to learn programming by having fun (Yiğit, 2016). For this reason, Scratch, which is suitable for students over 7 years old, was chosen for programming teaching in the study.

The Challenges of Learning Programming

Incorrect practices in programming teaching methods that should be given to students from an early age also bring some difficulties (Çatlak, Tekdal, & Baz, 2015; İmal & Eser, 2009). One of these prominent difficulties is the lack of algorithmic thinking skills of students (Futschek, 2006). Since students who have not developed algorithmic thinking skills have difficulty in understanding
algorithms (Futschek & Moschitz, 2010), it is very important to develop these skills before beginning to learn programming language (Ala-Mutka, 2004).

The reasons for the difficulties students experience in learning programming can be listed as: (a) the necessity of having more than one knowledge and skill (knowledge of foreign languages and algorithms, logical and mathematical thinking) during programming (Mannila, Peltomaki, & Salakoski, 2006); (b) the lack of motivation (Gomes & Mendes, 2007); (c) the low self-efficacy beliefs of students towards programming learning (Korkmaz, 2013); (d) students’ negative attitudes towards programming (Anastasiadou & Karakos, 2011; Farkas & Murthy, 2005; Korkmaz & Altun, 2013; Özyurt & Özyurt, 2015); and (e) ineffectiveness of traditional teaching methods for teaching/learning programming (Askar & Davenport, 2009; Byrne & Lyons, 2001; Cevahir & Özdemir, 2017; Futschek, 2006).

Project-based Learning Method in Programming Education

Programming taught with traditional teaching methods is usually teacher-centered and students cannot be active while learning with these methods.

However, one of the constructivist methods, project-based teaching, is student-centered and can lead students to higher levels of thinking. Besides, it directs students to research and help them find solutions to important problems by working collaboratively.

Many studies have reached a consensus on the fact that project-based learning improves the knowledge and skills of students in problem solving (Albanese & Mitchell, 1993; Dabbagh & Denisar, 2005; Strobel & Van Barneveld, 2009). In this context, it is significant to examine the effect of project-based learning method on programming education.

Cognitive Load and Programming Education

Cognitive load theory emphasizes that we have a short-term memory with a limited capacity to cope with information, encountered for the first time and which is not in long-term memory (Paas, Renkl, & Sweller, 2004). It is known that the data that short-term memory can store is limited (Zhang & Wang, 2009), and the individual’s learning action ends in case of excessive cognitive load (Pass et al., 2004). Some researchers have suggested that it is difficult to reduce cognitive load in the programming learning process (Mead et al., 2006; Renkl & Atkinson, 2003; Stachel et al., 2013). Mason, Cooper, and Wilks (2015) reported that some programming environments are complex and increase cognitive load. Therefore, the teaching process should be organized in a way to reduce the burden on working memory. It is thought that project-based learning can speed up information processing of students and can be beneficial in terms of not being overloaded cognitively. Thus, in this context, achievement and cognitive load of students are important variables in determining the efficiency of project-based learning method (Clark, Nguyen, & Sweller, 2011).
Behavior Management in Project-Based Learning

Leading a classroom effectively determines the level of a teacher’s performance. If teachers do not have good classroom management, their classroom can be full of confusion and chaos, and learning can be difficult for students. There is the possibility of chaos and confusion in a classroom which is managed ineffectively and this may cause difficulty for students.

According to Barbetta, Norona, and Bicard (2005), “As teachers, one of our main responsibilities is to help our students learn. Learning is difficult in chaotic environments.” Ward (2015) states that effective classroom management plays an influential role in the behavior of all students while performing a task. Accordingly, it can be said that learning will be easier and negative behaviors may decrease when students work on a task in a classroom in which a project-based learning method is applied.

**Purpose of the Study**

The aim of this study is to investigate the effect of programming teaching performed with project-based learning on students' achievement, cognitive load and their behaviors. Accordingly, answers to the following questions are investigated in the current study;

In programming teaching:

1. Do students’ academic achievement differ significantly when they are exposed to project-based learning or traditional teaching?
2. Do students’ cognitive load differ significantly when they are exposed to project-based learning or traditional teaching?
3. Do students’ in-class behaviors differ significantly when they are exposed to project-based learning or traditional teaching?

**Method**

**Participants of Study**

The participants of the study (N=55) consist of sixth grade elementary school students who took the “Information Technologies and Software” course in the second semester of the 2017-2018 academic year. It was randomly decided which class would be the experimental (N=29) and which would be the control group (N=26).

**Table 1. Demographic Characteristics of Participants**

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>26</td>
</tr>
</tbody>
</table>
Research Design

In the study, a quasi-experimental model with pre-test and post-test unequaled control groups (Karasar, 2017) was used. The research design of the study and the tools for data collection are presented in Table 2. An academic achievement test was applied to both groups as a pre-test. Project-based learning was used in the experimental group while traditional teaching method was used in the control group. During the implementation process, a scale measuring cognitive load was applied to both groups and the behaviors of the students were observed. Finally, the academic achievement test was reapplied to both groups as a post-test.

Data Collection Tools

In this study, The Scratch Academic Achievement Test prepared by Yüksel (2017) was used. There are 28 multiple choice questions in the achievement test. KR-20 reliability coefficient of the achievement test is 0.8, the average difficulty is 0.70 and the average discrimination power is 0.33.

Cognitive load scale developed by Paas and Van Merrienber (1993) which was adapted to Turkish by Kılıç and Karadeniz (2004) was used to measure the cognitive effort of students (to measure the level of cognitive difficulty). The Cronbach Alpha internal consistency coefficient of the scale is 0.78 and the Spearman Brown split half-test correlation is 0.79. The likert scale is a 9-point scale. The scale, which consists of a single item, measures how much effort the learners make while performing a task or work. The cognitive load scale was applied to the students at the end of each lesson during the implementation process.

How project-based learning method would cause a change in the positive and negative behaviors of students was measured with ClassDojo. Which positive and negative behaviors should be observed in the classroom and how many points should be given in each behavior were decided by examining the studies in the literature (Maclean-Blevins & Muilenburg, 2013; Saeger, 2017; Turan, Avinc, Kara, & Goktas, 2016; Ward, 2015). Through the implementation, learners got positive points for their positive behaviors and negative points for their negative behaviors. Immediate feedback was given to the behaviors of the students during the lesson on the interactive board via ClassDojo. The behavioral developments of the students were recorded with ClassDojo during the implementation process in both groups.
Table 2. Research Design and Data Collection Tools

<table>
<thead>
<tr>
<th>Group</th>
<th>Before the Implementation</th>
<th>During the Implementation</th>
<th>After the Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experimental Group</strong> (Project-Based Learning)</td>
<td>*Academic Achievement Test (Pre-test)</td>
<td>*Observation of Students’ Behavior (ClassDojo)</td>
<td>*Academic Achievement Test (Post-Test)</td>
</tr>
<tr>
<td><strong>Control Group</strong> (Traditional Teaching Method)</td>
<td>*Academic Achievement Test (Pre-test)</td>
<td>*Observation of Students’ Behaviors (ClassDojo)</td>
<td>*Academic Achievement Test (Post-Test)</td>
</tr>
</tbody>
</table>

**Data Analysis**

SPSS 20.0 (Statistic Package for Social Sciences) program was used to analyze the data of the study. For the first study question, Two-Factor Anova for Mixed Measures was used. This analysis includes two factors; the first factor shows different implementation process conditions (e.g., experimental, control groups), while the second factor is repeated measurements used to describe a change with time (e.g., pretest-posttest) during an implementation (Büyüköztürk, 2016). The first factor of the study includes the experimental group in which project-based learning method was applied to determine the academic achievement of the students and the control group was exposed to the traditional teaching method. On the other hand, the second factor includes pre-test and post-test measurements applied to both study groups.

The data collected with the cognitive load scale is at the classification level. Thus, a nonparametric analysis method was used in the analysis of cognitive load data as suggested by Büyüköztürk (2016). The cognitive burden while students are learning programming with different teaching methods is expressed in nine different dimensions. In cases where two categorical variables have more than two categories, Cramer V coefficient is used to show the change together (Özbaş, 2009; Özdamar, 2004). Cramer V is an effect size measure for the Chi-Square test of independence. It measures how strongly the two categorical domains are related (IBM, 2019). Therefore, Cramer V coefficient was calculated for the second research question of the study.

Regarding the third research question of the study, the behavior scores obtained through ClassDojo were analyzed.

The significance of the difference between the two percentages was used to test the significance of the difference between positive behavior percentages. Testing the significance of the difference between two percentages is achieved as z value by dividing the difference between the two percentages by the standard error of this difference. The z value can be interpreted as the unit standard
deviation in the normal distribution curve. For .05 level of significance, the z value should be equal to or greater than 1.96 (Akhun, 1982).

Results

Findings on the Academic Achievement Test

The average and standard deviation values for the first research question (Do students’ academic achievement differ significantly when they are exposed to project-based learning or traditional teaching?) are given in Table 3, and the results of Two-Factor ANOVA for Mixed Measures are given in Table 4.

Table 3. Descriptive Statistics for the Programming Achievements of the Experimental and Control Group Students

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>PRE-TEST</th>
<th>S</th>
<th>POST-TEST</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>29</td>
<td>12.68</td>
<td>4.17</td>
<td>24.89</td>
<td>3.82</td>
</tr>
<tr>
<td>(project-based learning)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>26</td>
<td>13.30</td>
<td>5.51</td>
<td>20.76</td>
<td>3.72</td>
</tr>
<tr>
<td>(traditional education)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 3, the academic achievement test average score of the students in the experimental group increased from pre-test 12.68 to post-test 24.89. For the students in the control group, this value increased from 13.30 to 20.76. According to these results, an increase in academic achievement was observed in both groups. However, the difference between the pre-test and post-test scores of the students in the experimental group (12.21 points) was higher than that of the students in the control group (7.46 points).

Table 4. The Result of Two-Factor ANOVA Test for Mixed Measures

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>Sd</th>
<th>Average of Squares</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-subjects</td>
<td>981,854</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group (Experimental/Control)</td>
<td>84,414</td>
<td>1</td>
<td>84,414</td>
<td>4,985</td>
<td>.030</td>
</tr>
<tr>
<td>Error</td>
<td>897,440</td>
<td>53</td>
<td>16,933</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intra-subjects</td>
<td>3915.627</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurement (Pretest-Posttest)</td>
<td>2651.663</td>
<td>1</td>
<td>2651.663</td>
<td>126,655</td>
<td>.000</td>
</tr>
<tr>
<td>Group*Measurement</td>
<td>154,354</td>
<td>1</td>
<td>154,354</td>
<td>7,373</td>
<td>.009</td>
</tr>
<tr>
<td>Error</td>
<td>1109.610</td>
<td>53</td>
<td>20,936</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4897.481</td>
<td>109</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Table 4, it was determined that the academic achievements of two groups (experimental and control) taught with two different teaching methods differed from pre-application to post-application. In other words, the common effects of different treatment groups and repeated measurement factors on academic achievement were significant \([F (1,53) = 7.373, p<.05]\). Thus, it can be said that the project-based teaching method is more effective than the traditional teaching method in increasing the success of students in programming teaching.
In this study, the effectiveness of only two different teaching methods in increasing academic success in teaching programming was tested. Therefore, the common effect test of group and measurement factors was emphasized. The analysis also includes basic impact tests of the group and measurement. According to the findings obtained from the two basic impact tests, a significant difference was found between the pre-test and post-test scores of the participants who learned with project-based and traditional teaching methods \[F(1, 53) = 4.985, p<.05\]. This test does not consider the change of groups from pre-test to post-test. In addition, regarding the main effect of the measurement, a significant difference was seen between the academic achievement score averages of the participants before and after the application, without group distinction \[F(1, 36) = 126.655, p<.05\]. This finding shows that programming achievements change depending on the teaching methods applied when there is no group discrimination.

**Finding on Cognitive Load Measurement**

The results of the Cramer V Test regarding the second study question (Do students’ cognitive load differ significantly when they are exposed to project-based learning or traditional teaching?) are given in Table 5.

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>(How much effort did you make while learning the concept of linear logic structure?)</td>
<td>.323</td>
<td>.454</td>
</tr>
<tr>
<td>Item 2</td>
<td>(How much effort did you make while learning the concept of motion panel?)</td>
<td>.451</td>
<td>.083</td>
</tr>
<tr>
<td>Item 3</td>
<td>(How much effort did you make while learning the concept of events panel?)</td>
<td>.221</td>
<td>.846</td>
</tr>
<tr>
<td>Item 4</td>
<td>(How much effort did you make while learning the concept of sound panel?)</td>
<td>.418</td>
<td>.143</td>
</tr>
<tr>
<td>Item 5</td>
<td>(How much effort did you make while learning the concept of pen panel?)</td>
<td>.466</td>
<td>.102</td>
</tr>
<tr>
<td>Item 6</td>
<td>(How much effort did you make while learning the concept of loop structure?)</td>
<td>.372</td>
<td>.269</td>
</tr>
<tr>
<td>Item 7</td>
<td>(How much effort did you make while learning the concept of looks panel?)</td>
<td>.320</td>
<td>.464</td>
</tr>
<tr>
<td>Item 8</td>
<td>(How much effort did you make while learning the concept of sensing panel?)</td>
<td>.356</td>
<td>.325</td>
</tr>
<tr>
<td>Item 9</td>
<td>(How much effort did you make while learning the concept of data panel?)</td>
<td>.337</td>
<td>.397</td>
</tr>
<tr>
<td>Item 10</td>
<td>(How much effort did you make while learning the concept of decision structure?)</td>
<td>.527</td>
<td>.018</td>
</tr>
<tr>
<td>Item 11</td>
<td>(How much effort did you make while learning the concept of operators panel?)</td>
<td>.449</td>
<td>.135</td>
</tr>
</tbody>
</table>

\[p<0.05\]

When the Table 5 is examined, it is seen that the Cramer V value is low and it is not statistically significant. However, Cramer V value for the question (How much effort did you make while learning the concept of decision structure?) asked to the students with item 10 was significant (p < .05). In other words, a significant difference was found between the experimental and control group students in terms of cognitive load for this item. In other words, while the students in the experimental group learned the concept of "decision structures", which is one of the programming subjects, they were less cognitively loaded than the control group.
Finding on the Behavior Change

In search of answers to the third research question (Do students’ in-class behaviors differ significantly when they are exposed to project-based learning or traditional teaching?), students' behavioral scores were obtained through ClassDojo and these scores were analyzed. On ClassDojo, participants' behavior scores were added to their profile information as positive scores when they showed positive behavior and negative scores when they showed negative behavior. In addition, the students’ "behavior that needs improvement" scores were calculated for both groups through ClassDojo. The four-week behavior scores of the groups before the experimental procedure are given in Chart 1.

![Chart 1. The Four-week Behavior Scores of the Groups Before the Experimental Procedure](chart)

When Chart 1 is examined, it is seen that 2022 of the total 2261 behaviors in the experimental group are positive, and 2256 of the total 2573 behaviors in the control group are positive. Since the total behavior scores followed in both groups are different from each other, the difference between the positive behavior percentages of the groups can be examined. The percentages of four-week behavior scores of the groups before experimental procedure are given in Chart 2.
When Chart 2 is examined, it is seen that the “positive behavior” percentage of the experimental group is 89.42% and the control group is 87.67%. The statistical significance of the difference between the percentages of “positive behavior” of the two groups was tested and the $z$-value was calculated as 1.90. This critical ratio value calculated was less than 1.96 which is required for the significance of .05 level. Therefore, the difference between the two percentages is not significant at the .05 level. Thus, it can be accepted that there is no difference between the percentages of the two universes before the experimental procedure.

The behavior scores obtained for both groups for six-weeks during the experimental procedure are given in Chart 3.
When Chart 3 is examined, it is seen that 1283 of the total 1346 behaviors in the experimental group are positive, and 1383 of the total 1577 behaviors in the control group are positive. Since the total behavior scores followed in both groups were different from each other, it was observed that the difference between the positive behavior percentages of the groups could be examined. Chart 4 shows the six-week behavior percentages of the groups during the experimental procedure.

![Chart 4](image)

**Chart 4.** The Six-week Behavior Percentages of the Groups During the Experimental Procedure

When Chart 4 is examined, it is seen that the percentages of “positive behavior” are 95.31% in the experimental group and 87.67% in the control group. The statistical significance of the difference between the percentages of “positive behavior” of the two groups was tested and found to be $z = 7.25$. This critical ratio value calculated is higher than 1.96 which is required for the significance of .05. Thus, it can be accepted that there is a difference between two percentages during the experimental procedure. It can be said that the experimental group students were more successful than the control group students in terms of “positive behavior” percentage.

The extent to which the "positive behavior" percentages of students increased when they worked on a task and to what extent the percentages of “behavior that needs improvement" decreased were examined. The percentages of the experimental group's "positive behavior" and "behavior that needs improvement" scores before and during the experimental procedure are given in Chart 5.
Chart 5. The Percentages of the Experimental Group's "Positive Behavior" and "Behavior That Needs Improvement" Scores

When Chart 5 is examined, it is seen that the percentage of "positive behavior" of the experimental group before the experimental procedure was 89.42%, and 95.31% during the experimental procedure. In addition, the percentage of "behavior that needs improvement" by the students in the experimental group was 10.57% before the experimental procedure and 4.68% during the experimental procedure. Considering the behavior percentages recorded in both processes in general, it is seen that the difference of 6% is in favor of the experimental application process. Based on this, it can be said that the use of project-based teaching method in programming education increases in-class positive behaviors and decreases negative behaviors.

Discussion and Conclusion

How project-based learning affects the achievement, cognitive load and behaviors of students in programming teaching was investigated in the current study. The participants of the study were taught with the method, project-based learning for 6 weeks in the experimental group in a student-centered mode while the participants in the control group were taught with the traditional teaching in a teacher-centered mode.

The dependent variables of the study are composed of the achievement, cognitive load and behavior change, whereas the independent variables are project-based learning and traditional teaching.

The Effect of Project-based and Traditional Teaching Methods on Academic Achievement of Students

The academic achievement level of students learning programming with project-based learning method was found to be significantly higher than the achievement level of students learning...
programming with the traditional learning method. This finding is consistent with the results of the studies conducted in the field (Atıcı & Polat, 2010; Dede, 2008; Peng, Wang, & Sampson, 2017). In addition, the result of the study complies with the results of the studies in different fields where the effectiveness of project-based learning method is examined (Acaray, 2014; Akgül, 2011; Alioğlu, 2014; Altun, 2008; Fırat, 2008; Gündüz, 2014; Övez, 2007; Özbek, 2010; Redmond, 2014).

On the other hand, Kızkapan and Bektaş (2017), who reached the conclusion that project-based learning method does not increase the success of students, reported the reasons for this in their study. To the researchers, one of the reasons may be the fact that students cannot adapt project-based learning method since they are used to traditional teaching; the second, the group members in the project-based learning group may not understand each other, the third, the students in this group may have a fear of the method and finally that the subject may not have attracted the attention of the students. This is supported by the findings of Başaran (2005) as he states that fear of failure in a task can negatively affect learning and academic achievement.

To recap, the students’ achievement scores in the current study increased in project-based learning group. This may be due to the fact that the students who learned programming by doing and experiencing in a meaningful way probably increased their scores.

The Effect of Project-based and Traditional Teaching Methods on Cognitive Load of Students

In the study, cognitive load levels of the students were also investigated. The cognitive load levels of the students while teaching programming with project-based learning method was analysed. The reason why the problem-based learning method was chosen was that this method enables students to concretize abstract issues that they have difficulty for. The results indicated that there is not a significant difference in cognitive levels of students in both methods students are exposed to while learning programming.

Although project-based learning method increases the success of students, it does not seem to have an effect on the cognitive levels of students. The reasons for these findings may be that students have probably encountered the programming course for the first time in their lives and that they are not used to project-based learning method. Many students with no experience may have a cognitive difficulty at the beginning of learning programming (Smith, Cypher, & Tesler, 2000).

Şışman and Küçük (2018) found in their study that the cognitive load levels of pre-service teachers were generally high in the robotic programming lesson. They reported in their study that pre-service teachers had high cognitive load as they had just started programming but as teachers gained experience, their cognitive load levels decreased. The reason of this might be the fact that programming requires combined use of skills such as mathematics, analytical thinking skills, problem
solving and technology use which is difficult to learn and which takes time since it requires experience (Lahtinen, Ala-Mutka, & Jarvinen, 2005; Wang & Chen, 2010).

The Effect of Project-based and Traditional Teaching Methods on In-class Behaviors of Students

It was observed that there was no significant difference between the behaviors of both groups of students, that is, the students in both groups were found to be equal to each other before the implementation. During the implementation, there was a statistically significant difference was found between the groups in favor of the experimental group students. The positive behavior percentages of the experimental group students were found to be higher than the control group students.

Based on all these results, it can be said that the use of project-based teaching method in programming teaching increases the percentage of positive in-class behaviors of students and decreases their negative behaviors. This result is consistent with the study of Redmond (2014) who studied how the use of project-based teaching method will affect behavior management in the classroom. The researcher (2014) stated that there are positive developments in students individually (in the aspects of being on the task, participating, directing, completing a study, working hard). In addition, there are many studies demonstrating the positive effects of ClassDojo on behaviors (Chiarelli, Szabo, & Williams, 2015; Garcia & Hoang, 2015; MacLean-Blevins, 2013; Maclean-Blevins & Muilenburg, 2013; Saeger, 2017; Wachendorf, 2017).

However, in another study, it was indicated that ClassDojo did not have a positive effect on student behavior (Elliott, 2017; Ward, 2015; Wilson, 2017). The reasons why ClassDojo did not have a positive effect were indicated as; it did not arouse attention of the students, and the determined behaviors sounded abstract and were not suitable for them.

What is aimed with the behavioral management tool, ClassDojo, was to improve students’ self-regulated learning by increasing their positive behaviors and decreasing their negative behaviors since it is important for any student to develop his self-regulation skill to be successful (Zimmerman, 1996). As a result, it could be said that project-based learning method in teaching programming ensures a positive development in the behaviors of students.

Project-based learning method in programming teaching was examined in terms of academic achievement, cognitive load and behavior change and the following results have been reached:

In programming teaching;

- project-based learning method is more effective in increasing academic achievement compared to the traditional learning method,
• project-based learning method did not make a significant difference on cognitive load of students,
• project-based learning method increases the positive behaviors of students and decreases the behaviors that need to be improved.

According to the observations carried out in the study, students in the project-based learning method group made more effort to complete their projects and this made them successful. In addition, the positive behaviors of the students working on the projects increased due to their active participation. The fact that students learn programming newly, and their fear of failure had a negative effect on decreasing cognitive load.

References


The Effects of COVID-19 Process on Time Management of Foreign Language Teacher Candidates

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Abstract
In this study which was conducted to determine the effects of the COVID-19 process on time management of foreign language teacher candidates, qualitative design was used. The study group was formed by criterion sampling, which is one of the purposeful sampling methods. The criteria determined were for the participants to work, to have pedagogical formation training online, and to have previously had face-to-face training. Accordingly, 35 foreign language teacher candidates participated in the study. A semi-structured interview form consisting of five questions was used to collect the data. Content analysis technique was used in the analysis of the data and themes were reached from the codes. From the data obtained, it was concluded that the plans made about education in the COVID-19 process could not be followed due to the inability to perceive time, the process negatively affected time management as it created psychological pressure and wasted time, this changed the perception of time by making the time to pass quickly, that there were motivation problems arising from the focus and lack of explanations about the lessons and family factors and that time traps related to excessive computer use, watching movies-series, and excessive communication were encountered. At the same time, it was determined that the COVID-19 process has positive effects on preventing wasting time due to the traffic problem, creating a chance for individuals to spend more time for themselves and providing a more flexible studying environment. Regarding the negative effects of the COVID-19 process on time management, it is recommended that teacher candidates, who assume a great responsibility especially in the field of education, receive training on stress coping, distance education and time management in order to avoid or be affected less by the negative effects such as pandemics without field limitation.

Keywords: Teacher Candidates, Time Management, COVID-19, Motivation, Time Traps, Time Perception.

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Introduction

Many thinkers have tried to emphasize the importance of time management with their words; "If you love life, don’t waste time, for time is what life is made up of. Benjamin Franklin’’, "Happiness depends on success, success depends on valuing time. Seneca". In order to comprehend that importance, many definitions are encountered when the explanations of the concept of time management in the literature are examined. For example; Aeon and Aguinis (2017) define time management as a form of decision-making that individuals use to structure, preserve and adapt their time to changing conditions. Claessens et al. (2007) express this concept as a combination of goal setting, planning, monitoring and time valuing activities. Koch and Kleinmann (2002) on the other hand, define it as self-controlled attempt of the individual to subjectively use time efficiently to achieve results. Efıl (2003) expressed time management as using a certain period in the most efficient way and keeping time under control. When all these definitions are examined, it can be said that time management is a concept that is planned, implemented, controlled and valued in line with the goals of individuals, and the important thing here is to distinguish priority and importance. Even it is important to pay our expired bill during the day, taking care of our sick child can be our priority. Therefore, people who know their priorities in an effective time management and can make and apply the necessary planning can use their time effectively and efficiently.

The concept of time has two aspects for the individual, namely objective and subjective, while objective time can be measured with the help of some natural events or tools; subjective time is the time we feel depending on the situation we are in (Dağlı, 2000). However, considering that time management is more of a personal process, it is known that individuals need to plan their time effectively, implement it and evaluate its results. For this reason, it’s important to determine the time traps an individual fall. Time traps can be caused by the person, environment and technology. It is also stated by Ören (2016) that especially technological devices and micro-electronic devices consume a lot of time due to both virtual games and social media. In a study conducted by Ökdem (2019), it was determined that the participants mostly fell into time traps related to the excessive use of TV series, internet, phone and social media.

Considering that planning is the most important factor in order not to fall into time traps, the importance of planning in time management is too much to ignore as in every field. In order to the use time efficiently and productively, it is necessary to put the things to be done in the order of importance and priority, to eliminate the distractions, to use the right tools and equipment, to evaluate the process and the result and to reflect them on future plans. The fact that time has particularly invisible, not to be saved, rapidly passing and irreversible features add a different value to this concept. For this reason, it is very important to manage and spend time well. The main idea here is the
need to develop time management skills in order to increase academic achievement, job performance and overall satisfaction with life (Richițeanu-Năstase, Stăiculescu, & Lăcătuș, 2018).

Besides planning, which is directly related to effective time management, some situations that we cannot control and that arise also affect the efficient use of time. Especially with the COVID-19 epidemic that emerged in 2020 in the world and in Turkey, huge losses occurred, and our freedom was captured under the control of the pandemic. This captivity affected the field of education as well as every other field, and as a result, the transition to distance education became obligatory. With this transition, perceptions regarding the concept of time have changed and time management principles such as personal planning, planning priority goals, reviewing the goals clearly, determining what the time is spent on, taking necessary precautions by comparing what happened and what is supposed to be happen have come into prominence (Özdemir, 2006). In this context, enabling individuals to develop ideas about time-consuming activities, how to prioritize tasks, how to make daily planning and how to deal with unexpected situations have become important elements (Claessens et al. 2007). However, when the studies on the subject are examined, no qualitative study was found that examines the effects of the pandemic process on the time management of teacher candidates who are the educators of future generations. Therefore, it can be expressed that the results obtained from this study will contribute to the field of teacher education on time management during the pandemic process. Also, it is thought that the research is important in terms of the precautions to be taken in similar processes in the future by determining the existing situation.

The main purpose of the study is to determine the effects of the COVID-19 process on the time management of foreign language teacher candidates. Within the framework of this main purpose, the following questions were sought:

1. What are your thoughts about the plans you made during your stay at home during the COVID-19 process?
2. How do you think the COVID-19 process affects your time management?
3. How do you think the COVID-19 process affects your perception of time?
4. What kind of problems did you have about motivation during the COVID-19 process?
5. Which time trap(s) do you think you fall into during the COVID-19 process?

Method

Research Model

Qualitative research design was used in the study. Qualitative studies are holistic and contextual research focusing on definition, analysis, and interpretative perspective (Rossman & Rallis, 2011). In these studies, methods such as observation and interview are used; perceptions and events
are presented in a realistic and holistic manner in the natural environment. (Yıldırım & Şimşek, 2008).

In this study, interviews with teacher candidates were conducted accordingly. For this aim, teacher candidates that have taken online courses are interviewed to determine the effects of COVID-19 on time management.

**Study Group**

The study group was formed by criterion sampling, one of the purposeful sampling methods. The basic mentality in criteria sampling is to study situations that meet a predetermined set of criteria and that the criterion or criteria mentioned here to be formed by the researcher (Yıldırım and Şimşek, 2008: 112). In this study, the criteria determined were for the participants to work, to have pedagogical formation training online, and to have previously had face-to-face training. While determining these criteria, attention was paid to factors for them to be factors as affecting time management, time perception and motivation. Based on these criteria, the working group consists of 35 foreign language teacher candidates who received pedagogical formation training in a state university in the fall semester of the 2019-2020 academic years. 30 (85.71%) of the teacher candidates participating in the study are female while 5 (14.29%) of them are male. When the age distributions were examined, it was determined that 57.2% of the participants were 20-29 years old, 31.4% were 30-39 years old, and 11.4% were 40 years old and over.

**Data Collection Tool**

Semi-structured interview form was used to collect data. Theoretical and applied studies have been looked into before preparing the form. And then the form was created, 5 people who received pedagogical formation in the field of foreign languages were interviewed about how the COVID-19 process affected their time management and the questions were formed as a result of the interview. There were seven questions in the first draft form created. The seven-question form was applied again to a different group of 5 people, and at the end of the application, it was determined that the answers given to two questions were also given for the other questions, so the number of questions was reduced to five. Then the form checked by the professionals of language, educational administration supervision and planning, measurement-evaluation returned without any corrections. The five-question form consists of two parts. In the first part, the identity information of the participants regarding gender and age was asked. In the second part, five open-ended questions were asked to the candidates to determine how the COVID-19 process affects their plans, time management, time perception, motivation and whether they fell into time traps.

**Data Collection Process**

Interviews were conducted online on a voluntary basis. The data were collected 3 days a week, taking into consideration the pre-service teachers' curriculum. The data were collected 3 days in a week, taking into consideration the pre-service teachers’ curriculum. 5 teacher candidates were
interviewed every day. All data were collected in 21 days by the researcher. Each online interview lasted approximately 20 minutes.

Data Analysis, Validity and Reliability

Content analysis was performed to the data obtained from the semi-structured interview form. Content analysis is defined as a systematic, repeatable technique for converting words in many texts to less number of texts (Stemler, 2001). The aim is to reach the concepts and relationships that will enable the collected data to be explained, and in line with this purpose, first the data is encoded, the themes are accessed from the coding, and by organizing the codes and the themes the findings are defined and interpreted (Yıldırım & Şimşek, 2008). While analyzing the content in this study, in the recorded interviews, each teacher was given numbers as T1, T2, and T3 in the order of the interview, and the audio recordings were written by the researcher in the Word processor program. After the transfer of all data to writing was completed, the data were read again and matching control with the voice recordings was made. Then, according to the terms gathered from the data acquired coding was done. All the codes created were then gathered and by examining the commonalities the themes were decided. Finally, the data obtained were interpreted.

In order to determine the external reliability of the obtained data, the data were re-examined by a different researcher and they were coded and themed. In calculating the reliability, the consensus formula suggested by Miles and Huberman (1994) was used and the reliability of the research was determined as 0.79 as a result of the calculation. It is considered reliable for the research that the percentage of consensus among evaluators is above 70 in reliability calculations (Şencan, 2005). Therefore, the result obtained was considered reliable for the research. For the consistency of the data, that is, internal reliability, it was tried to prevent data loss by recording a voice and in the findings section, the opinions of the participants were conveyed with direct quotations without comment.

In order to ensure the validity of the results, the data analysis process was explained in detail, direct quotations related to the findings obtained from the interview forms were included, and the interpretations were made based on the quotations (Cengizhan, 2019).

Results

Under the heading of the findings of the study, the data obtained as a result of interviews with 35 teacher candidates were presented as comments and direct quotations.

1. Views on the Plans Made During the COVID-19 Process

Thoughts about the plans made regarding the education during the stay at home in the COVID-19 process emerged two themes: following to the plan and not following to the plan. Four codes were created on the theme of following the plans made for education in the COVID-19 process. In these codes, 11 of the teacher candidates stated that they followed all the plans they made about
education, 10 of them stated that they were able to attend the lessons in this plan, 9 of them stated that they were able to do their homework on time, and 2 of them stated that they were able to follow their plans because they did not have traffic problems. Some of the opinions of the teacher candidates who stated that they were able to follow their plans are presented below.

“I attended classes regularly and did homework on time. There was plenty of time for this, but it took a lot of time for all exams to be in the form of homework. Despite everything, I was able to overcome it on time (T1).”

“As a person who uses time well, I was able to attend classes and do homework. I attended the lessons I had to teach and I gave lessons. I determined a program for myself and was able to complete my very busy schedule by following this program regularly (T12).”

“During my distance education formation process, I did all my homework on the dates within the plan program. I did not have any problem; I did not leave it to the last moment. I attended the lessons on time. Considering the efforts we made in face-to-face education even just to get to the school, I had no difficulty in planning the time (T16).”

“Yes, I stuck to the plan, and since I could run my business at home, the 3 hours that are normally lost every day in Istanbul traffic before the pandemic were all mine. Therefore, I was able to manage time planning better for both work and school (T3).”

Under the theme of not following the plan, 5 codes were created: not being used to online education (4), not attending classes (5), forgetting the course hours (3), problems with internet connection (2) and not perceiving time (6). In these codes, the opinion that the plans were not be able to follow due to the inability to perceive the time is stated the most. Some of the teacher candidates’ views on these codes are given below.

“I studied except on days with curfew. I went to the office. Studying was harder than the time when there was no pandemic, I could not get used to online classes for a long time. There was plenty of time, but it was aimless, the unknown and uncertainty have always bothered me (T2).”

“There were situations where I could not get used to the in the distance education process. One doesn't want to attend the class without school desks and without active social friends. So there were times that I couldn't actively attend classes. Previously, you had a school and you would go out and go to school, but when you are at home, there is always something to do and there are disruptions at those moments (T27).”

“I can say the following about attending the class on time and doing the assigned assignments; It is not difficult to attend classes as I am always at home; However, because I cannot
perceive time and I have to do many tasks at home at the same time, sometimes I can be late for class or confuse the days of homework (T21).”

"My plans turned upside down due to the internet problems (T18).”

“Since I lost my perception of time during the pandemic process, I could not achieve stability in my study plans because it was a process that I was affected physiologically and psychologically. But by doing the given assignments, I learned more or less about the subject and I can say that I learned (T28).”

2. Views on Time Management Implications in the COVID-19 Process

Two themes emerged on the positive and negative effects of the COVID-19 process on time management. Three codes were created on the theme of positive effect of the COVID-19 process on time management. According to 13 of the participants, the process affected time management positively because they could spare time for themselves, and according to 8 of them, it was because of they did not waste time in traffic. On the other hand, 4 participants stated that they did not experience any problems regarding time management. Some of the opinions regarding the specified codes are presented below.

“I think it affected in positive way. I can do my work comfortably during my stay at home. Especially local transportation is a great waste of time in Istanbul. I am one of those who turn the pandemic process into an advantage. I tried not to lose the concept of time and to use my time well (T1).”

“It had positive effects. Since we stayed at our homes during this period, it was very productive in terms of the time we had to spare for ourselves and the time for our work. We did not have a situation to go to school since we were home and we could spare that lost time for ourselves or our work (T12).”

“Before the pandemic, I thought my working time was longer than necessary. So while working from home, I was able to take care of all my work and take time for myself personally. I think it is positive in this respect (T15).”

“It affected me positively because I made my time planning myself. I got up at the same time every morning, had my breakfast, and then took care of my work and homework. I took a break for lunch. After lunch I continued my work or class. I did my sport in the afternoon. After I had dinner, I took time for myself. I continued this order almost every day (T17).”
“Positive. Since I didn't work, most of my time was spent at home, so at this time I spread out the things I wanted to do in a large amount of time and did them in detail. I was able to spare time for myself. I did not have to plan the time. I was able to do whatever I want at random times (T32).”

Six codes were created regarding the theme of COVID-19 process having a negative effect on time management. These are wasting time (8), feeling psychological pressure (6), losing the meaning of the concept of time (3), home being crowded (2), laziness, boredom (2) and disturbed sleep (2) respectively. Some of the opinions of the teacher candidates regarding these codes are given below.

“Negative. Not being able to leave the house did not create as much time as thought. It caused laziness and boredom. It affected people psychologically and this led to wasting time and being away from productivity (T4).”

“The negativities occurred at the beginning of the pandemic process when we actually never started the things we needed to do because of our thoughts such as "how will it be, what will be, will we be able to do it?". We were psychologically affected, which led to the situation of doing nothing (T12).”

“Living under pressure, being isolated, inability to go out, fear of getting sick, put pressure and anxiety on me (T20).”

“The pandemic process affected my concept of time a lot. During this period when we stayed at home, we were 5 people at home and I did not have the opportunity to spend time alone since there was constant activity during the day. So I was trying to do something after everyone else went to sleep. This made me sleep late and wake up late in the morning. When I woke up late the evening was coming quickly. Since we were spending time together at the family house in the evening, I had to squeeze what I would do during the day or delay to the next day (T23).”

“It negatively affected my time management. Because I think time management can be easier in active life. Many things can be postponed, especially since we stay at home for a long time (T14).”

“I felt stress and anxiety from the process; I felt psychological pressure, which at times negatively affected my motivation and attention in lessons. It was also difficult for me to give up social life (T31).”


Regarding the Covid-19 process changing the perception of time, two themes have emerged: the process changes the perception of time and does not change it. There were 3 codes indicating that the COVID-19 process changed the perception of time, and 2 codes that it did not change the perception of time. 14 of the teacher candidates who stated that the perception of time changed stated
that time passed fast, 10 of them stated that the time slowed down, 3 of them stated that time passed slowly at the beginning of the pandemic and then fast. Some of the opinions of the teacher candidates regarding the theme of changing time perception are presented below.

“Maybe even though I was at home, because I was busy, it passed fast to me. It went like the wind (T1).”

“I had no perception of day left, which day we were in which month, there was a perception that time was passing rapidly (T15).”

“Time passed a little slower at first, because it was an unfamiliar period and a process we didn't know how to manage. Then we set ourselves goals. With big or small things, we motivated ourselves. Time started to flow faster. Not being able to do everything we want started to upset us and we started to find alternative ways. As such, we saw that it was evening (T29).”

“As it was free time, it never passed. I used to have a productive time (T7).”

“At first, the time felt too long. The days did not pass, but at the same time it seemed like I had no time to do anything. Then I managed to get organized. This time, time started to pass so fast (T9).”

4 of the participants who stated that the perception of time did not change, stated that time also passed fast before, and 4 of them stated that time passed neither fast nor slowly. Some of the opinions of the teacher candidates who stated that time perception did not change are presented below.

“The pandemic did not change my perception of time; it just became annoying to be at home all the time. Since I studied intensively at two universities, the days passed quickly to me (T3).”

“I didn't feel any difference in how time passed compared to the previous period. It was passing fast before, and it passed fast in this process, too (T24).”

“To me, it passed neither fast nor slowly. I can say it was in the middle when I evaluate in general. This is a little bit about your work and if you have a child, time passes. If you live alone, I think time passed more difficult (T20).”


Two themes emerged in the Covid-19 process: experiencing and not experiencing the motivation problem. 8 codes about experiencing motivation problem in the COVID-19 process, and 3 codes about not experiencing motivation problems emerged. Among the teacher candidates participating in the study, those who have motivation problems explained their reasons as follows: for
7 of them it was inability to focus, for 7 of them it was about family factors, for 6 of them it was lack of the necessary explanations about the courses, for five of them it was unsuitability of the studying environment, for 2 of them it was the limitation of freedom, for 2 of them it was being overwhelmed by details, for 2 of them it was unwillingness due to losing purpose and for 2 of them it was lack of planning. Some opinions regarding the reasons stated are presented below.

“Inability to focus, not wanting to do it even though there is time, to be lost the purpose (T2).”

“Since the lessons are given online, time problems, connection problems, problems reaching the teacher when you don't understand, or distraction caused by other responsibilities at home are experienced from time to time (T21).”

“I had to pay attention to so many things. I was having trouble focusing because of the food bought for the house, family members going out and coming back, and their health constantly occupied my mind. And I was thinking that this was a deep trouble. The constant presence of people in the house created an element of noise. I took the situation under control by wearing headphones. Since I did not have a studying environment, I was studying in the hall and it was everyone's common space. I think I could not focus enough in some lessons in distance education. When the subject wasn't interesting for me, I was easily distracted (T22).”

“I went through a lot. Study environment, lack of necessary explanations in the course (T11).”

“I had some problems due to the class hours, and also had question due to the uncertainty of the process. There was no explanation about the courses. I had questions like "Will the exams be online or homework, whether the second term will continue like this... (T23).”

Stating that they did not have motivation problems during the COVID-19 process, 5 of the teacher candidates stated that they did not encounter any problems, 5 of them stated that they were able to create a more comfortable studying environment, and 2 of them stated that they did not have any problems because they could use time better in this process. Some of the opinions of the teacher candidates who stated that problems weren't experienced are given below.

“I didn't experience any. In the distance education, the teachers gave the lesson very well. Everything went well, except for technical disconnections. Since I am already a planned and organized person on, I have always done my homework, weekly repetitions, and note editing on time. I bought my new notebooks and textbooks. I continued learning with my book, notebook and computer, taking my notes as in face-to-face education (T16).”
“I haven't had any motivation problems. I live in Ankara and I would come to Istanbul by plane or train every week and return to classes. My children would also be without me for 3 days in Ankara. The distance education process has been good for me. I already have a goal and I'm locked on that goal. The only thing that would reduce my motivation would be a health problem, I did not experience that. I wish nobody did and I would have come and gone ... (T27).”

“Although this process caused demoralization and anxiety, I certainly did not hinder the work to be done. On the contrary, I used time very well and turned it into an opportunity. There was no lack of motivation at all (T12).”

“Online education motivated me more. Since I had the time I spent on the road at home, it became a more comfortable studying environment for me (T19).”

5. Views on the Time Traps Fallen During the COVID-19 Process

In the Covid-19 Process, 2 themes emerged: falling into time traps and not falling. 9 codes about falling into time traps in the COVID-19 process, and 1 code about not falling into time traps emerged. While for 8 participants who stated that they could not manage their time effectively the reason was computer use for long hours, for 8 of them it was movies or TV series, for 7 of them it was excessive communication, for 6 of them it was excessive social media use, for 5 of them it was unnecessary work, for 5 of them it was excessive mobile phone use, for 4 of them it was unsuitable studying environment, for 3 of them it was excessive hygiene and for 3 of them it was spending long time on online shopping sites. Some opinions regarding the reasons stated for falling into time traps are given below.

“The unsuitable study environment is one of the main reasons why I cannot make use of my time. While studying in the living room, when the news was on, I was inevitably disconnecting from the lesson and focusing on the TV. During this period, I spent a lot of time on social media. As I used computers and phones a lot, I had eye-dryness and I had to rest for a while. When I realized that my homework would not be completed and that I could not finish the book I was reading for 1 month, I suspended my social media accounts and spent very productive time for 2 weeks. I completed my homework, finished my book and started a new book (T23).”

“Excessive computer use is a prominent factor for me. In the past, when I came home from work, I used to spare a lot of time for myself because I did not take my computer with me, but in this process we became dependent on computers for both work and lessons. I think it is a disturbing situation (T24).”

“During this period, phone and computer use started to be at the maximum level, it started to be an irregular life by confusing day and night hours (T31).”
“Excessive time that I spend on hygiene measures (T2).”

“Tired with unnecessary and excessive cleaning, communication with the environment via video phone, etc. (T33).”

“Never ending Netflix series (T6).”

“I can say I fell into the cell phone trap. There are no TV shows or movies that I have not watched on my mobile. I set myself a daily limit to look at my mobile phone right now (T25).”

“In this process, excessive communication, unnecessary works was one of the points where I mostly fell into time traps. Like watching a movie, TV series, and looking at shopping websites (T28).”

5 of the participants stated that they did not fall into time traps during the COVID-19 process and were able to manage their time effectively. Some of the participant views regarding this code are presented below.

“I never fell into time traps, it is just because our communication was not face-to-face and business meetings could be extended daily morning and evening, it was stolen from my planned time. But when the necessary warnings were made by the meeting participants, these periods were completed on time (T3).”

“As a person who uses time (especially free time) efficiently, instead of unnecessary works, I did my works that were not done and were constantly postponed by creating a suitable environment for myself, I read my books that should be read, I did the homework that should be done, and I called the close people who I had to call. I made it more positive instead of falling into a trap (T12).”

“I did not fall into any trap that would adversely affect my time management during the pandemic process. I managed my time effectively (T17).”

Discussion, Conclusion and Recommendations

In the first finding of the study conducted to determine the effects of the COVID-19 process on the time management of foreign language teacher candidates, four codes emerged regarding the theme of complying with the plans made for education in the COVID-19 process. In these codes, most of the teacher candidates stated that they obeyed all the plans they made regarding education, while they also stated that they were able to attend classes in this plan, do their homework on time and comply with their plans since they did not have traffic problems. Under the theme of not being able to comply with the plan, it was stated that the plans could not be followed due to the inability to perceive the time, not attending the classes, not being able to get used to online education, forgetting the course hours and problems with internet connection, respectively. It was concluded that time perception
disappeared; especially due to the uncertainty of the future process and that this situation caused psychological negative effects and affected the time planning about their education negatively. In a study examining the effect of students’ time management skills on academic performance, it was found that time planning skill was effective in achieving performance (Tanrıöğen & Işcan, 2009). Similarly, in another study on students’ time management skills, it was found that the participants’ mean of time planning was low and therefore they could not manage their time well (Başak, Uzun, & Arslan, 2008). In another study conducted by Çağlıyan and Göral (2009), it was determined that the participants who had deficiencies in time planning experienced problems about doing academic activities on time. In a study conducted by Gortner Lahmers and Zulauf (2000), it was revealed that students with time planning skills could use their academic time more efficiently. Also in a study conducted by Alharbi (2020), it was concluded that there is an important and positive relationship between time planning, time management and academic performance. Considering that three components, namely goals-setting priorities, listing-planning and field of study, are important in time management (Macan, 1994), it is recommended to plan an orientation process for transition to distance education, to make teacher candidates to adopt the concepts of priority and importance that are effective in time planning in this plan, to keep the records of the time spent, to organize the studying environment and to provide guidance on similar issues. Also, it is important to share the lesson plans, the process and the calendar with the students in advance in order to eliminate the uncertainty, which is the result of the rapid and sudden transition to distance education, especially in the pandemic process.

In the second finding of the study, two themes, positive effect and negative effect, were created from the views on the effects of the COVID-19 process on time management. In the theme of positive effect, the participants stated that they could spare time for themselves in this process and did not waste time in traffic. In the negative effect theme, the participants expressed that the COVID-19 process caused waste of time, psychological pressure, loss of the meaning of the concept of time, laziness, boredom and disruption of sleep patterns and they stated that this process negatively affected time management. In a study examining the effects of the COVID-19 process in distance education, it was concluded that the participants were under stress due to the pandemic, so that it negatively affected their time management (Gupta et al., 2020; Rajab, Gazal, & Alkattan, 2020; Rehman et al., 2020). At the same time, in many studies (Erdoğdu, Koçoğlu, & Sevim, 2020; Görgülü Bee and No Kanat, 2020; Rehman et al., 2020; Romero-Blanco et al., 2020) it was determined that the COVID-19 process disrupted the sleep pattern, causing stress and hopelessness. All these situations, which are also revealed in the results of the research, affect time management negatively. This shows that time management is an important self-control process that shows when and for how long students actively manage the necessary activities to achieve their academic goals (Walters & Brady, 2020). In this
context, it is thought that providing students with self-control skills in advance can eliminate the negative effects of time management.

In the third finding, where opinions were taken to determine how the COVID-19 process affects the perception of time two themes emerged; changing and not changing of time perception. While most of the teacher candidates who stated that their perception of time changed stated that time passed quickly, there were also teacher candidates who stated that time slowed down and time passed slowly at the beginning of the pandemic and fast afterwards. From these findings, it can be concluded that the COVID-19 process caused a change in the perception of time. Time perception is a very important factor when individuals need to make decisions, to plan and to consider the results associated with their choices (Wittmann & Paulus, 2007). It is known that stressful and threatening stimuli such as pandemics have time-distorting effects; and the sense of the interruption of the flow of time creates distorted perceptions such as accelerating, stopping or slowing down time, confusing the days and hours, and fictionalizing only the near future (Holman & Grisham, 2020). All these effects can negatively affect the individual cognitively, emotionally and physically. Considering that the current situation or the distance education process may continue for a while, there is a possibility that the perception of time will continue to be interrupted in this process. For these reasons, in order to improve the perception of time that is interrupted / changed in the COVID-19 process, it is important that individuals first determine their biorhythm patterns and plan their time. Besides, it is recommended that individuals vary / increase the amount of physical activities, and work in an environment where they can see daylight and have a clock. If these suggestions are not resolved, psychological support should be given to individuals.

In the fourth finding of the study, in which the views on the effects of the COVID-19 process on motivation were taken, two themes emerged, namely, experiencing and not experiencing motivation problems. Participants stated that they had motivation problems due to the limitations of freedom, being overwhelmed in details, inability to focus, losing purpose, lack of planning, family factors, unsuitable studying environment, and lack of the necessary explanations about the lessons. There are many studies that conclude that the motivation of students who cannot leave their home due to the COVID-19 process and receive online education is also negatively affected. For example, in a study conducted by Meeter et al. (2020), it was discovered that students' motivation for online education decreased during the pandemic process. Similarly, the same results were obtained in the studies conducted by Zaccoletti et al. (2020), Tekin (2020), Erbaş (2021), Sepulveda-Escobar and Morrison (2020), Bakioğlu and Çevik (2020). In this context, it can be said that motivation has an effect on academic performance. For this reason, in order to eliminate the factors that reduce motivation, it is recommended to make plans, to put the priority and important works in order, to set goals, to organize the studying environment, and also, to make the necessary explanations about online lessons by the course teachers in advance.
In the fifth and final finding of the research, from the opinions obtained on determining whether time is managed effectively in the COVID-19 process two themes emerged; falling and not falling into time traps. The majority of the participants stated that they could not manage time effectively in this process and that they fell into time traps related to social media, excessive hygiene, online shopping, computers, movies and TV series, unnecessary works, unsuitable studying environment, excessive communication and excessive use of mobile phones. Similar findings were also found in many studies related to these results. Also in the studies conducted by Ökdem (2019), Misafiroğlu, Şeref and Yılmaz (2012), Taş (2010), Kocabaş, and Erdem (2003), it was determined that students often fell into time traps such as movies, TV series, telephone, internet, social media, games. Considering all these results, it can be said that the biggest obstacle in effective and efficient management of time is time traps. Especially in the COVID-19 process that we stayed at home, considering that we live more closely with technology with online trainings, it seems likely to fall into time traps. For this reason, it is important to set priorities, to do things on time without delay, to avoid excessive perfectionism, to control habits and, above all, to control by planning in order not to fall into time traps in this process. For this, first of all, it is recommended to determine the time traps that are fallen into, to write down the daily work done during the week and the time spent on these works, to determine the priority works, to make a new plan by removing the works that would not have negative consequences to be done during the day. Therefore, a more effective and efficient time management can be achieved.

Based on all the results of the research, it can be said that the COVID-19 process and the distance education as a result of it negatively affected the time management of the teacher candidates participating in the research. It is recommended that teacher candidates, who assume a great responsibility in the field of education, without limitation of field, should receive training on stress coping, distance education and time management in order to be able to get away from the stress situations caused by negative effects such as pandemic or to be affected less at least.

References


Assessment of 4th Grade Students’ Problem-Solving Skills in Terms of Various Variables

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Abstract
Problem solving is one of the basic skills needed by individuals today. An individual who has attained problem-solving skills can both overcome difficulties in daily life and be successful in professional business life. In this respect, problem solving is considered as a skill that children should attain from an early age. Many variables are effective in the process of teaching problem solving skills. In this study, 4th grade students’ perceptions of problem-solving skills were assessed according to the variables of sex, receiving preschool education, parental education status, family type and person helping with school work. Employing the quantitative research method, the study used the descriptive survey design. The Problem-Solving Inventory developed for elementary school children was used to collect data. The inventory is a 5-point Likert type scale consisting of 24 items and three dimensions. The study universe was 4th grade students attending public schools in the central districts of Gaziantep. Because of the size of the universe, transportation, economic difficulties and lack of time, the study was conducted with a sample determined by simple random sampling method, one of the random sampling methods. 744 4th grade students participated in the study. The data of the research were analyzed with the SPSS 15.0 program. According to the study results, no difference was found in students’ problem-solving perceptions according to the sex variable. However, students’ problem-solving perceptions differ according to the variables of receiving preschool education, mother’s education level, father’s education level and family type. Also, it was concluded that having someone who helps students with school work makes a significant difference in their problem-solving perceptions. The study results were discussed within the framework of the relevant literature, and late various recommendations were given.

Keywords: Problem Solving, Student, Perception, Variable, Assessment

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Introduction

Today, individuals encounter many problems in their daily lives. In this sense, today’s people spend most of their energy and time to solve these problems. This brings the concept of problem solving to the fore. Different definitions about problem solving are given in the literature. According to Korkut (2002), problem solving refers to finding new solutions to solve a problem going beyond the simple application of previous experiences and learned rules. According to Agran and Wehmeyer (1999), problem solving is a skill that gives the individual independence and competence, and forms the basis of learning. Bernardo (1999) stated that problem solving is a process that individuals bring together concepts and processes and use them to solve problems. According to Mithaug (1993), problem solving is a process including the stages of identifying and analyzing problems and developing and implementing solution suggestions in order to solve the problems. Based on these definitions, it can be said that problem solving is a complex process with cognitive, affective and behavioral aspects.

Problem solving is a process in which certain stages are followed within the framework of scientific method. Based on the literature, this process can be summarized as follows (Polya, 1957; Gelbal, 1991; Mayer, 1998; Kökdemir, 2003; Yong & Kiong 2007; Balci, 2007). The first stage of the problem-solving process is recognizing the problem. At this stage, the individual becomes aware of a problem that bothering him or her and starts the process of thinking on that problem. Because, in order to be able to talk about a problem, there should be a problem disturbing the individual and the individual should be aware of this situation. The second stage of the problem-solving process is defining the problem. At this stage, the problem is clearly defined. The general situation of the problem and its contradictions and sources are revealed. Clarifying the problem and determining its contradictory aspects before solving the problem is an important step in solving the problem (Türnüklü & Yeşildere, 2005). The third stage of the process is determining alternative solutions. At this stage, different solutions that can be used to solve the problem are presented. In this way, different components that can be used in the solution of the problem and that can be arranged and changed according to the results obtained are formed. The fourth stage of the process is solving the problem. At this stage, the problem is tried to be eliminated by using one or more of the previously determined alternative solutions. The last stage of the problem-solving process is checking and interpreting the solution. At this stage, the result and the solution of the problem are checked and interpreted from different perspectives. Thus, this stage is considered as an important stage in the problem-solving process, as it allows the process to be internalized and transferred to different problems.

In today’s world, individuals who solve the complex problems of life are needed in every stage of daily life. Studies showed that problem solving is a teachable skill (Verschaffel & De Corte;
In this sense, training individuals who can overcome the problems they may encounter in life is seen as one of the primary goals of education (Soylu & Soylu, 2006). Problem solving with an interdisciplinary approach is an important part of the education process. In the problem-solving process, students should first be taught to understand the problem correctly and then to find a solution by bringing together the concept and solution-oriented processes (Karataş & Güven, 2004; Stayanova, 2005; Xin, 2007). In this context, problem-solving skills and strategies in schools should be attained by students from an early age. In this way, it will be easier to eliminate the factors adversely affecting problem-solving skills.

The social environment, age, family structure and educational background of the individual can be considered as the main factors affecting one’s perspective on problems. The problems of the individual become more complex as the age, location and environmental factors change. In the literature, there are studies conducted to determine the problem-solving skills of students at different age groups and education levels and the factors affecting them. In this context, Serin and Derin (2008) examined 8th grade students’ perceptions of interpersonal problem-solving skills in terms of different variables. The results of this aforementioned study revealed significant differences between students’ perceptions of interpersonal problem-solving skills, and sex, perceived parental attitudes and academic achievement. The study conducted by Yıldırım, Hacıhasanoğlu, Karakurt, & Türkleş (2011) to determine the factors affecting the problem-solving skills of high school students attending 9th, 10th and 11th grades put forth that there was a statistically difference between total problem-solving skill mean scores, and students’ sex, grade level, father’s education level and occupation, study habits, assessment of school achievement, parental attitude, feeling lonely, being self-confident, and smoking and alcohol use. In their study, Durmaz, Kaçar, Can, Koca, Yeşilova, & Tortumluoğlu, (2007) examined the factors affecting the problem-solving skills of vocational school students. The study determined that the problem-solving skills of students who were seniors, who found their own financial situation sufficient, who spent most of their life in the city and who received training to cope with stress were statistically significantly higher than the other students.

Different from the abovementioned studies, there were studies examining students’ problem-solving skills in terms of different variables in the literature (D’Zurilla, & Sheedy, 1992; Meltzer, 2005; Yenice, 2012; Yeşilova, 2013; Kesicioğlu & Güven, 2014). The related studies mostly focused on the problem-solving skills of middle school, high school and university students. Problem solving is a skill that students attain from early childhood with an interdisciplinary approach in line with the contents of the curriculum. Unlike the studies in the literature, the present study examined and assessed the 4th grade students’ perceptions of problem-solving skills in terms of sex, receiving preschool education, father’s education status, mother’s education status, family type and person helping with school work. In this context, the following study questions were formed:
• Do 4th grade students’ perceptions of problem-solving skills differ significantly according to the sex variable?

• Do 4th grade students’ perceptions of problem-solving skills differ significantly according to the receiving preschool education variable?

• Do 4th grade students’ perceptions of problem-solving skills differ significantly according to the mother’s education status variable?

• Do 4th grade students’ perceptions of problem-solving skills differ significantly according to the father’s educational status variable?

• Do 4th grade students’ perceptions of problem-solving skills differ significantly according to the family type variable?

• Do 4th grade students’ perceptions of problem-solving skills differ significantly according to the person helping with school work variable?

Method

Study Design

Examining the 4th grade students’ perceptions of problem-solving skills in terms of sex, receiving preschool education, parental education status, family type and person helping with school work variables, the study employed the descriptive survey design. The descriptive survey model aims the participants meticulously and completely define a situation or phenomenon that they experienced before or they still experience, and also aims to explain the current situation within the framework of different independent variables (Karasar, 2014). In this study, 4th grade students’ perceptions of problem-solving skills were examined and described in terms of different variables.

Participants

The study universe was 4th grade students attending schools in the central districts of Gaziantep. In quantitative research, a satisfactory sample is created in accordance with the characteristics of the researched universe (Cohen, Manion & Mason, 2007; Fraenkel & Wallen, 2009). Because of factors such as the size of the universe, transportation, time and economic limitations, the study was conducted with a sample determined by simple random sampling method. In this sense, the study participants consisted of 744 4th grade students. During the research process, the characteristic left blank in the demographic distribution was not taken into consideration. In this framework, 51.1% (380) of the students in the sample were females and 48.9% (364) were males. 79.80% (591) of the students received preschool education, and 20.20% (150) did not. 79.80% (591) of the participants had between 1-2 siblings, 17.10% (127) between 3-4 siblings, 3.10% (23) had 5 or more siblings. 17.40% (128) of the students’ mothers graduated from elementary school, 24.50% (180) from middle school, 30.90% (227) from high school and 27.20% (200) graduated from university and above. In addition, 9.30% (68) of the students’ fathers graduated from elementary
school, 25.60% (188) from middle school, 29.90% (220) from high school and 35.20% (259) graduated from university and above. For their school work, 188 of the students (25.30%) were helped by their fathers, 447 (60.16%) by their mothers, 74 (9.96%) by their older brothers or sisters, and 8 (1.08%) by others. There was no one to help 26 (3.50%) students with their school work.

**Data Collection Tool**

The “Problem Solving Inventory for Elementary School Children” (PSIESC) developed by Serin, Bulut-Serin, and Saygılı (2010) was used to determine students’ perceptions of problem-solving skills. The inventory is a 5-point Likert type scale consisting of 24 items and three dimensions. The first factor of the scale, named trust, consists of 12 items, and its internal consistency coefficient is .85. The second factor, named self-control, consists of seven items, and its internal consistency coefficient is .78. The third factor, named avoidance, consists of five items, and its internal consistency coefficient was calculated as .66. The internal consistency coefficient of the total scale is .80. The values of $x^2=621.05$, df=249, $x^2/df=2.49$, RMSEA=.051, NNFI=.87, CFI=.90, GFI=.92 and AGFI=.90 obtained in the construct validity of the scale confirmed that the factor structure of the scale was fit. According to the analyses performed by the researchers developing the scale, the scale is a valid and reliable scale that can be used to determine students’ problem-solving perceptions. The necessary permission was obtained from the researchers to use the aforementioned scale.

**Data Analysis**

SPSS 15.0 program was used to analyze the data obtained during the research process. The normality of the distribution was examined before analyzing the data. The extreme values in the data set were determined by calculating the “z” values of the scale items. In addition, Boxplot plot was also examined. As a result of the analysis, three extreme values whose “z” value was not between +3 and -3 and which were found to be outside the normal distribution in Boxplot graph were removed from the data set. Kurtosis and skewness values were calculated to decide about the normality of the data. According to Tabachnick and Fidell (2013), kurtosis and skewness values in the range of +1.5 to -1.5 indicate that the data are distributed normally. After determining that the data had normal distribution, it was decided to use parametric tests in data analysis. The demographic information of the sample was analyzed by frequency and percentage calculations. Independent samples t-test was performed to determine the differentiation of students’ perceptions of problem-solving skills according to the variables of sex and receiving preschool education, while one-way analysis of variance (ANOVA) was used to determine the differentiation of students’ perceptions of problem-solving skills according to the variables of number of siblings, mother’s education level, father’s education level, family type, and person helping with school work.
Results

In the research process, first, whether the students’ perceptions of problem-solving skills differed according to the variables of sex and receiving preschool education was analyzed with independent samples t test. Analysis results are shown in Table 1.

Table 1. T-Test Results Regarding the Differentiation of Students’ Perceptions of Problem-Solving Skills According to the Sex and Receiving Preschool Education Variables

<table>
<thead>
<tr>
<th>Score</th>
<th>Variables</th>
<th>Group</th>
<th>N</th>
<th>x</th>
<th>ss</th>
<th>t</th>
<th>sd</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Problem-Solving Total Score</td>
<td>Sex</td>
<td>Female</td>
<td>380</td>
<td>89.11</td>
<td>13.08</td>
<td>1.12</td>
<td>742</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>364</td>
<td>88.11</td>
<td>13.33</td>
<td>4.56</td>
<td>739</td>
<td>.000*</td>
<td></td>
</tr>
<tr>
<td>Receiving Preschool Education</td>
<td>Yes</td>
<td>591</td>
<td>86.79</td>
<td>13.32</td>
<td>150</td>
<td>84.36</td>
<td>11.85</td>
<td>.000*</td>
</tr>
</tbody>
</table>

According to Table 1, 4th grade students’ problem-solving skills did not differ significantly according to the sex variable (p > 0.05), but differed significantly according to the receiving preschool education variable (p <0.05). The mean scores of the female students were higher than the male students, but this difference did not make a significant difference (p > 0.05). The mean scores of those who received preschool education were higher than those who did not, and this created a statistically significant difference (p <0.05). In other words, while the sex variable was not a determining factor in students’ problem-solving skills, the variable of receiving preschool education was a determining factor in students’ problem-solving skills. Second, in the research process, whether the students’ perceptions of problem-solving skills differed according to the variable of number of siblings was examined. Analysis results are shown in Table 2 and Table 3.

Table 2. The Results of One-Way Analysis of Variance (ANOVA) Regarding the Differentiation of Students’ Perceptions of Problem-Solving Skills According to the Number of Siblings Variable

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum Square</th>
<th>sd</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4304.07</td>
<td>2</td>
<td>2152.04</td>
<td></td>
<td>.000*</td>
</tr>
<tr>
<td>Within Group</td>
<td>124127.3</td>
<td>738</td>
<td>168.19</td>
<td>12.80</td>
<td>.000*</td>
</tr>
<tr>
<td>Total</td>
<td>128431.3</td>
<td>740</td>
<td></td>
<td></td>
<td>.000*</td>
</tr>
</tbody>
</table>

According to Table 2, there was a significant difference between the groups according to the number of siblings variable (F(738) = 12.80, p <.05). Post-Hoc multiple comparison analysis was conducted to find out among which groups this difference was present. According to the result of the Levene’s test performed to decide which Post-Hoc technique would be applied, the variances were not homogeneous (L (2-738)=3.48, p<.05). Since the group variances were not equal, Tamhane’s T2 analysis was performed. Tamhane’s T2 analysis results are presented in Table 3.
According to Table 3, there was a significant difference between students with 1-2 siblings, and students with 3-4 and 5 or more siblings in favor of students with 1-2 siblings (p<0.05). In other words, it can be said that the number of siblings was a determining factor in the problem-solving skills of 4th grade students. As the number of siblings increased, students’ problem-solving skills decreased. Third, in the research process, the differentiation of students’ perceptions of problem-solving skills was examined according to the mother’s education level variable. Analysis results are shown in Table 4 and Table 5.

Table 4. One-Way Analysis of Variance (ANOVA) Results Regarding the Differentiation of Students’ Perceptions of Problem-Solving Skills According to the Mother’s Education Level Variable

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum Square</th>
<th>sd</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3528.69</td>
<td>3</td>
<td>1176.23</td>
<td>6.93</td>
<td>.000*</td>
</tr>
<tr>
<td>Within Group</td>
<td>124116.7</td>
<td>731</td>
<td>169.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>127645.4</td>
<td>734</td>
<td></td>
<td>6.93</td>
<td>.000*</td>
</tr>
</tbody>
</table>

According to Table 4, there was a significant difference between the groups according to the mother’s education level variable (F(731) = 6.93, p < .05). Post-Hoc multiple comparison analysis was conducted to find out among which groups this difference was present. According to the result of the Levene’s test performed to decide which Post-Hoc technique would be applied, the variances were not homogeneous (L (3-731) = 3.83, p < .05). Since the group variances were not equal, Tamhane’s T2 analysis was performed. Tamhane’s T2 analysis results are presented in Table 5.
According to Table 5, there was a significant difference between students with mother’s education level as elementary school and students with mother’s education level as university and above in favor of students with mother’s education level as university and above, and there was a significant difference between students with mother’s education level as middle school and students with mother’s education level as university and above in favor of students with mother’s education level as university and above (p<0.05). In other words, it can be said that 4th grade students’ mothers’ education level was a determining factor in the problem-solving skills of 4th grade students. As the education level of the mother increased, the problem-solving skills of the students also increased.

Fourth, in the research process, the differentiation of students’ perceptions of problem-solving skills was examined according to the father’s education level variable. Analysis results are shown in Table 6 and Table 7.

### Table 6. One-Way Analysis of Variance (ANOVA) Results Regarding the Differentiation of Students’ Perceptions of Problem-Solving Skills According to the Father’s Education Level Variable

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum Square</th>
<th>sd</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4098.629</td>
<td>3</td>
<td>1366.210</td>
<td>8.08</td>
<td>.000*</td>
</tr>
<tr>
<td>Within Group</td>
<td>123671.7</td>
<td>731</td>
<td>169.182</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>127770.4</td>
<td>734</td>
<td></td>
<td>8.08</td>
<td>.000*</td>
</tr>
</tbody>
</table>

According to Table 6, there was a significant difference between the groups according to the father’s education level variable (F(731) = 8.08, p < .05). Post-Hoc multiple comparison analysis was conducted to find out among which groups this difference was present. According to the result of the Levene’s test performed to decide which Post-Hoc technique would be applied, the variances were homogeneous (L (3-731)=.66, p<.05). Since the group variances were equal, Scheffe analysis was performed. Scheffe analysis results are presented in Table 7.

### Table 7. The Results of the Scheffe Analysis Performed to Determine the Source of Differentiation of Students’ Perceptions of Problem-Solving Skills According to the Father’s Education Level Variable

<table>
<thead>
<tr>
<th>Groups</th>
<th>Average Difference</th>
<th>Standard Error</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle School</td>
<td>-1.65</td>
<td>1.84</td>
<td>.848</td>
</tr>
<tr>
<td>High School</td>
<td>-3.08</td>
<td>1.81</td>
<td>.404</td>
</tr>
<tr>
<td>University and above</td>
<td>-6.68*</td>
<td>1.77</td>
<td>.003</td>
</tr>
<tr>
<td>Elementary School</td>
<td>1.65</td>
<td>1.84</td>
<td>.848</td>
</tr>
<tr>
<td>Middle School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>-1.43</td>
<td>1.29</td>
<td>.746</td>
</tr>
</tbody>
</table>
According to Table 7, there was a significant difference between students with father’s education level as elementary school, middle school and high school and students with father’s education level as university and above in favor of students with father’s education level as university and above (p<0.05). In other words, it can be said that 4th grade students’ father’s education level was a determining factor in the problem-solving skills of 4th grade students. As the education level of the father increased, the problem-solving skills of the students also increased. Fourth, in the research process, the differentiation of students’ perceptions of problem-solving skills was examined according to the family type variable. Analysis results are shown in Table 8 and Table 9.

Table 8. One-Way Analysis of Variance (ANOVA) Results Regarding the Differentiation of Students’ Perceptions of Problem-Solving Skills According to the Family Type Variable

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum Square</th>
<th>sd</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1911.140</td>
<td>2</td>
<td>955.570</td>
<td>5.55</td>
<td>.004*</td>
</tr>
<tr>
<td>Within Group</td>
<td>127657.2</td>
<td>741</td>
<td>172.277</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>129568.3</td>
<td>743</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 8, there was a significant difference between the groups according to the family type variable (F(741) = 5.55, p < .05). Post-Hoc multiple comparison analysis was conducted to find out among which groups this difference was present. According to the result of the Levene’s test performed to decide which Post-Hoc technique would be applied, the variances were homogeneous (L (2-741)=2.62, p<.05). Since the group variances were equal, Scheffe analysis was performed. Scheffe analysis results are presented in Table 9.

Table 9. The Results of the Scheffe Analysis Performed to Determine the Source of Differentiation of Students’ Perceptions of Problem-Solving Skills According to the Family Type Variable

<table>
<thead>
<tr>
<th>Groups</th>
<th>Average Difference</th>
<th>Standard Error</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extended Family</td>
<td>3.090</td>
<td>1.50</td>
<td>0.120</td>
</tr>
<tr>
<td>Broken Family</td>
<td>9.634*</td>
<td>3.55</td>
<td>0.025</td>
</tr>
<tr>
<td>Extended Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Family</td>
<td>-3.090</td>
<td>1.50</td>
<td>0.120</td>
</tr>
<tr>
<td>Broken Family</td>
<td>6.544</td>
<td>3.78</td>
<td>0.224</td>
</tr>
<tr>
<td>Broken Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Family</td>
<td>-9.634*</td>
<td>3.55</td>
<td>0.025</td>
</tr>
<tr>
<td>Extended Family</td>
<td>-6.544</td>
<td>3.78</td>
<td>0.224</td>
</tr>
</tbody>
</table>

According to Table 9, there was a significant difference between students with nuclear family and students with broken family in favor of students with nuclear family (p<0.05). In other words, it can be said that 4th grade students’ family type was a determining factor in the problem-solving skills.
of 4th grade students. In terms of average difference between groups, students with nuclear families had a higher average than students with both extended and broken families. However, there was no statistically significant difference between students with a nuclear family and those with extended families (p> 0.05). Finally, in the research process, the differentiation of students’ perceptions of problem-solving skills was examined according to the person helping with school work variable. Analysis results are shown in Table 10 and Table 11.

**Table 10. One-Way Analysis of Variance (ANOVA) Results Regarding the Differentiation of Students’ Perceptions of Problem-Solving Skills According to the Person Helping with School Work Variable**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum Square</th>
<th>sd</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2661.925</td>
<td>4</td>
<td>665.481</td>
<td>3.87</td>
<td>.004*</td>
</tr>
<tr>
<td>Within Group</td>
<td>126852.5</td>
<td>738</td>
<td>171.887</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>129514.4</td>
<td>742</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 10, there was a significant difference between the groups according to the person helping with school work variable (F(738) = 3.87, p < .05). Post-Hoc multiple comparison analysis was conducted to find out among which groups this difference was present. According to the result of the Levene’s test performed to decide which Post-Hoc technique would be applied, the variances were not homogeneous (L (4-738)=1.93, p<.05). Since the group variances were not equal, Tamhane’s T2 analysis was performed. Tamhane’s T2 analysis results are presented in Table 11.

**Table 11. The Results of the Tamhane’s T2 Analysis Performed to Determine the Source of Differentiation of Students’ Perceptions of Problem-Solving Skills According to the Person helping with School Work Variable**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Average Difference</th>
<th>Standard Error</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>-0.97</td>
<td>1.21</td>
<td>1</td>
</tr>
<tr>
<td>Brother-sister</td>
<td>0.13</td>
<td>1.79</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>0.16</td>
<td>5.24</td>
<td>1</td>
</tr>
<tr>
<td>No helper</td>
<td>9.38*</td>
<td>2.76</td>
<td>0.02</td>
</tr>
<tr>
<td>Father</td>
<td>0.97</td>
<td>1.21</td>
<td>1</td>
</tr>
<tr>
<td>Brother-sister</td>
<td>1.1</td>
<td>1.57</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>1.13</td>
<td>5.17</td>
<td>1</td>
</tr>
<tr>
<td>No helper</td>
<td>10.34*</td>
<td>2.62</td>
<td>0</td>
</tr>
<tr>
<td>Father</td>
<td>-0.13</td>
<td>1.79</td>
<td>1</td>
</tr>
<tr>
<td>Mother</td>
<td>-1.1</td>
<td>1.57</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>0.03</td>
<td>5.33</td>
<td>1</td>
</tr>
<tr>
<td>No helper</td>
<td>9.25*</td>
<td>2.93</td>
<td>0.03</td>
</tr>
<tr>
<td>Father</td>
<td>-0.16</td>
<td>5.24</td>
<td>1</td>
</tr>
<tr>
<td>Brother-sister</td>
<td>-1.1</td>
<td>1.57</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>0.03</td>
<td>5.33</td>
<td>1</td>
</tr>
<tr>
<td>No helper</td>
<td>9.21</td>
<td>5.73</td>
<td>0.77</td>
</tr>
<tr>
<td>Father</td>
<td>-9.38*</td>
<td>2.76</td>
<td>0.02</td>
</tr>
<tr>
<td>Mother</td>
<td>-10.34*</td>
<td>2.62</td>
<td>0</td>
</tr>
<tr>
<td>Brother-sister</td>
<td>-9.25*</td>
<td>2.93</td>
<td>0.03</td>
</tr>
<tr>
<td>Other</td>
<td>-9.21</td>
<td>5.73</td>
<td>0.77</td>
</tr>
</tbody>
</table>

p<0.05
According to Table 11, there was a significant difference between students with father, mother, brother-sister as the person helping with school work, and students with no one to help with school work in favor of students with father, mother, brother-sister as the person helping with school work (p<0.05). In other words, it can be said that 4th grade students having someone to help with their school work causes a significant difference.

Discussion, Conclusion and Recommendations

First, in the study, the differentiation of 4th grade students’ perceptions of problem-solving skills was discussed in terms of the sex variable. According to the independent samples t-test results, 4th grade students’ perceptions of problem-solving skills did not differ significantly according to the sex variable. The analysis results revealed that the mean scores of female students were higher. However, the difference was not statistically significant. This result is in line with some of the study results from the literature such as Çam (1997), Butcher (1997), Saracaloğlu, Serin, and Bozkurt (2001), Locksmith (2006), Olgun, Öntürk, Karabacak, Aslan, and Serbest (2010), Yenice (2011), Akkaya (2012), Kanbay, Aslan, Işık, and Kişç (2013), Erdem and Genç (2014), and Sungur and Bal (2016). On the other hand, there are also studies in the literature indicating that problem-solving skills differ according to sex, although they are few in number (Ferah, 2000; Serin & Derin, 2008; Kürtüncü, Ergöl, & Demirbağ, 2013). In this sense, it is believed that the relevant studies worked with specific groups. Based on both the findings in the literature and the results of the present study, it can be stated that problem solving is a skill that does not differ according to sex, and that boys and girls have a similar skill level in problem solving. There may be different problems that boys and girls have to deal with in daily life. According to Heppner and Baker (1997), there are many ways to deal with a problem. In this sense, both male and female students should be taught ways to cope with the problems they may encounter in their lives.

Second, in the study, the differentiation of 4th grade students’ perceptions of problem-solving skills was discussed in terms of the receiving preschool education variable. The results of the independent samples t-test revealed that 4th grade students’ perceptions of problem-solving skills differ significantly according to the variable of receiving preschool education. In this framework, similar results are encountered in the literature. The study conducted by Aslanargun and Tapan (2012) determined that the self-expression skills of students who received preschool education improved, they did not have difficulty during communication, and they were more proficient in academic and social areas. Similarly, a direct relationship was found between variables such as communication, desire to learn, motivation, and duration of attending preschool education (Killen & Smetana, 1999; McCabe & Altamura, 2011). Based on these results, it can be stated that preschool education is an effective variable on students’ problem-solving skills. It is believed that increasing the schooling rate
in preschool education is an important step in raising individuals who can overcome the problems encountered in daily life.

Third, in the study, the differentiation of 4th grade students’ perceptions of problem-solving skills was discussed in terms of the number of siblings variable. The results of the one-way analysis of variance (ANOVA) put forth that 4th grade students’ perceptions of problem-solving skills differed significantly according to the number of siblings’ variable. In this sense, the mean score of the problem-solving skill perceptions of the students with 1-2 siblings was found to be significantly higher than the mean scores of the students with more siblings (between 3-4, and 5 and above). The findings of the study conducted by Savcı and Aysan (2014) support these results of the present study. On the other hand, unlike these studies, Düzakın (2004); Locksmith, (2006); Çağlayan, Taşgün, & Yıldız, (2008) revealed that the number of siblings does not affect students’ problem-solving skills. This difference is considered to be associated with the age groups the studies were conducted with. It is believed that the problem-solving skills of students are positively affected as a result of the increase in the interest of mothers and fathers due to the decrease in the number of siblings at the elementary school level.

Fourth, in the study, the differentiation of 4th grade students’ perceptions of problem-solving skills was discussed in terms of the mother’s education level variable. The results of the one-way analysis of variance (ANOVA) revealed that 4th grade students’ perceptions of problem-solving skills differed significantly according to the variable of mother’s education level. In this sense, it can be stated that the education level of the mother is an effective variable in the perceptions of students’ problem-solving skills, and that as the education level of the mother increases, the students’ perceptions of problem-solving skills also increase. This finding is in line with the findings in the literature presented by Saygılı (2000), Eroğlu (2001), Ünüvar (2003), Akbaş (2005), Hamarta, (2007) and Sungur and Bal (2016). It is believed that the main factors of this difference are that mothers who have university and above education spend more effective and quality time with their children and also increase their motivation and guide them in the process of problem solving.

Fifth, in the study, the differentiation of 4th grade students’ perceptions of problem-solving skills was discussed in terms of the father’s education level variable. The results of the one-way analysis of variance (ANOVA) revealed that 4th grade students’ perceptions of problem-solving skills differed significantly according to the father’s education level variable. In this sense, it can be stated that the father’s education level is an effective variable in students’ perceptions of problem-solving skills, and that as the father’s education level increases, the students’ perceptions of problem-solving skills also increase. While this result is in line with the findings in the literature presented by Saygılı (2000), Genç and Kalafat (2007), Çağlayan et al. (2008), and Yıldırım et al. (2011), this result is not parallel with the findings in the literature presented by Korkut (2002), Hamarta, (2007), Serin and
Derin, (2008), and Sungur and Bal (2016). Due to the fact that this study was conducted at the elementary school level, it is believed that as the education level increases, fathers spend more effective and quality time with their children, just like mothers, and this positively reflects on the problem-solving processes of elementary school students. It is believed that elementary school students living apart from their mothers or fathers in broken families are emotionally affected, have difficulty in stress management, and consequently, they have difficulty in showing sufficient and necessary motivation in the problem-solving process. Studies (Eisenberg, Shepard, Fabes, Murphy, & Guthrie, 1998; Findlay, Coplan, & Bowker, 2009; Burgess, Wojslawowicz, Rubin, Krasnor, & LaForce, 2006) put forth that stressed individuals with high social anxiety use avoidance behavior frequently. It can be stated that in broken families, students have high levels of anxiety and stress, and consequently, they exhibit more avoidance behaviors and have difficulties during the problem-solving process.

Finally, in the study, the differentiation of 4th grade students’ perceptions of problem-solving skills was discussed in terms of the person helping with school work variable. The results of the one-way analysis of variance (ANOVA) revealed that 4th grade students’ perceptions of problem-solving skills differed significantly according to the person helping with school work variable. Among students who are helped by their fathers, mothers and brother-sister with their school work and students who cannot get help with their school work, this difference was in favor of the students who are helped by their fathers, mothers and brother-sister with their school work. This result is considered important in terms of showing that providing students with the necessary guidance in their school work has a positive effect on their problem-solving process. The important thing here is not to solve students’ problems instead of them, but to be a role model for them in problem solving and to provide the right guidance.

Based on the study results, it can be stated that factors such as mother, father, preschool education and guiding students with their school work are very important in the problem-solving processes of elementary school students. In this sense, educational environments should be created to develop students’ problem-solving skills right from elementary school. Necessary works should be done by the counseling service for students who are deemed insufficient in solving problems, and these students should be supported in solving daily life problems. When necessary, informative works should be carried out for the families of these students, and awareness should be raised on issues like the effect of factors such as parents’ attitudes and family structure in students’ problem-solving processes. Based on the results of the present study, the following recommendations can be given to the researchers.

• In this study, 4th grade students’ perceptions of problem solving were assessed in terms of different variables. Similar studies can be conducted with students at the middle school, high school and higher education levels.
• This study employed the descriptive survey design. Unlike this study, students’ problem-solving perceptions can be examined employing the relational survey design by taking into account different variables (creative thinking, critical thinking, personality type, academic achievement, functional literacy, etc.).

• Action researches can be conducted to improve students’ problem-solving levels at the middle school, high school and higher education levels.

• Textbooks used at the elementary school, middle school and high school levels can be assessed in terms of their adequacy to provide students with problem-solving skills.

• Projects can be carried out to improve the problem-solving levels of students from rural areas.

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Evaluation of Teachers’ Motivation and Curriculum Autonomy Levels

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Abstract

The aim of this research is to evaluate teachers’ motivation and curriculum autonomy levels. The research is quantitative and descriptive and designed according to the survey model. The sample of the research consisted of 340 teachers who have been reached by simple random sampling method who have been worked in public primary and secondary schools in Istanbul. Motivation Scale developed by Gagné, Forest, Gilbert, Aube, Morin, and Malorni (2010) and adapted into Turkish by Çevik and Köse (2017) has been used to determine teachers’ motivation levels. Teachers’ curriculum autonomy levels have been determined with The Teacher Autonomy Scale developed by Yolcu (2019). According to the research results, teachers’ motivation and curriculum autonomy levels are high. It has been examined whether the motivation and curriculum autonomy levels of teachers differ significantly according to the variables gender, professional seniority, educational status and the number of projects participated in professional life. It has been found that the levels of motivation differ significantly according to gender and the levels of curriculum autonomy differ according to number of projects participated in professional life. Finally, the research has revealed that there is a medium-level, positive and significant relationship between teachers’ motivation and curriculum autonomy levels.

Keywords: Motivation, Teacher Motivation, Curriculum Autonomy

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Introduction

Rapid changes and transformations in education and science cause changes in the needs of students and teachers as well as the need for new regulations regarding the educational process (Yazıcı, 2016). In other words, these changes bring new responsibilities to the field of education (Lee, 2014). Education is expected to raise individuals who can understand the problems arising in the national and international arena, interpret them with a critical point of view, and express constructive thoughts by actively participating in social life in the context of democratic principles and elements. The teacher element comes to the fore in meeting the constantly changing expectations during the education process. The teacher is expressed as the driving force of change and a factor that makes a difference in the educational renewal process (Julião, 2018). In other words, the teacher is an important figure that controls and balances the education process (Sehrawat, 2014).

It is thought that teachers with high motivation are needed for this process to be effective and efficient. As a matter of fact, as Özbilen, Günay and Yıldız (2020) stated, teacher motivation stands out as an important component of teacher quality. Teacher motivation is necessary for the education and training process in order to motivate students to learn, to realize educational reforms through teachers, and to ensure teachers’ own personal satisfaction (Neves de Jesus & Lens, 2005). Teacher motivation also has a role that affects job success (Sari & Yetkiner, 2020). In addition, it can be said that teacher motivation will contribute to the redesign of the applied national education curriculums in accordance with the current situation. In this respect, it can be said that the centrally prepared curriculum has the potential to reduce the gap between the educational goals that teachers expect to realize and the real learning needs of students. As Julião (2018) stated, teachers have responsibilities in ensuring that the elements that make up the central curriculum comply with the real learning needs at the local level. Again, as stated by the researcher, teachers have a significant role in the regulation of education-training processes, that is, in making the curriculum functional, independent of the basic paradigm of the applied education curriculum. Therefore, there is a need for teachers who can organize the central education curriculum by using the principles of curriculum autonomy as a catalyst with their critical and relational skills in the context of local conditions and student needs for an effective education process. As a matter of fact, as Wu (2015) stated, teachers’ high curriculum autonomy increases the motivation for participating in school activities. In this context, when teacher motivation is considered as a factor affecting the quality of the education process, such as curriculum autonomy, it is thought that qualified education can be provided by motivated teachers who have curriculum autonomy.

Motivation, in the most general sense, is expressed as the processes that activate and maintain human behavior (McMillan & Forsyth, 1991). In the expression of Tohidi and Jabbari (2012), motivation in human behavior; it is a driving force that directs, controls and resists. Şeker (2015)
Motivation is closely related to needs. An employee gets motivated when his/her needs are met. In other words, employees’ needs affect their motivation. Needs can be viewed as physiological or psychological deficiencies that trigger the behavior. They can be strong or weak and are influenced by environmental factors, so a person’s needs may vary at different times and in different places, and they must be met (Utomo, 2018). It can be said that meeting psychological needs in particular plays an important role in professional success and satisfaction. According to the self-determination theory, intrinsic and extrinsic sources of motivation affect professional performance. The theory also suggests that professional satisfaction is greater in work environments where intrinsic motivation is provided (Worth & Van den Brande, 2020). Deci and Ryan (2008) state that the existence of three psychological needs, namely professional competence, professional autonomy, and relations with colleagues, increases intrinsic motivation. Therefore, the theory points out that teachers’ being autonomous in the teaching process can increase their intrinsic motivation. In addition, Yıldırım...
(2021) suggests that, with an approach that overlaps with the theory, mechanisms that support school autonomy should be established in order to increase teachers’ intrinsic motivation.

Gender plays an important role in determining motivation. Meece, Glienke and Burg (2006) state that motivational beliefs develop depending on stereotypes based on gender roles. The teaching profession is perceived as a female profession according to the results of the study based on social perception (Yaman, 2001). In this respect, it can be said that the motivation levels of teachers may differ depending on gender. As a matter of fact, it is striking that many studies compare the motivation levels of teachers according to the gender variable (Bastick, 2000; Ertürk, 2016; Triyanto, 2016). Except for gender in the literature; studies also suggesting that teachers’ motivation levels differ according to the variables of professional seniority (Gokce, 2010; Uğraş & Özen, 2019), educational status (Çevik & Köse, 2017; Çiftçi, 2017; Emiroğlu, 2017; Triyanto, 2016; Uğraş, 2019) and participation in professional projects (Gorozidis, & Papaioannou, 2014; Iliya & Ifeoma, 2015; Schellenbach-Zell & Gräsel, 2010) draw attention. In this respect, it can be said that the variables of gender, professional seniority, educational status and participation in professional projects may be factors that differentiate teacher motivation.

The concept of autonomy literally means “self-management”, “independence” or “self-direction” (Collier, 2002; Ryan & Deci, 2006). In the words of Yoleu and Akar-Vural (2020), autonomy is the ability of an individual to have a say over her own choices and actions. In the context of education, autonomy is expressed as “independent learning capacity” (Dickinson, 1995). In other words, it is the capacity to take responsibility and control our own learning (Little, 1995). Teacher autonomy is simply defined as “the freedom to learn and teach” (Sehrawat, 2014). The concept is also described as reflecting the teacher’s own choices and decisions to the educational processes in the classroom (Öztürk, 2011). Teacher autonomy is also defined as teachers’ capacity to control their own teaching processes (Sehrawat, 2014) or “teachers’ willingness, capacity and freedom to control their own teaching and learning” (Huang, 2005, p. 206). Considering the contexts of the profession, Canbolat (2020) defines teacher autonomy as “the freedom of the teacher to make decisions regarding the development and implementation of the education and training curriculum, materials, and school management and other professional activities” (p. 142). Indeed, teacher autonomy serves as an umbrella for innovations in teacher education and ongoing teacher development. In this context, with the autonomy of teachers, it is possible for them to interpret the ideas about teaching and learning with others to make them more meaningful and realistic and to identify unique teaching-learning situations in order to find new answers to the problems encountered (Mello, Dutra & Jorge, 2008).

The concept of curriculum autonomy is generally considered as a sub-dimension of teacher/teaching autonomy in the literature. As a matter of fact, Öztürk (2011) states that teacher autonomy includes three main elements as “planning and implementation of teaching, active
participation in decision-making processes of school administration and developing professional knowledge and skills” (p. 86). It can be said that the dimension stated by Öztürk (2011) as planning and implementation of teaching indicates curriculum autonomy in context. Silberstein and Ben-Peretz (1987) express that teachers produce ideas by evaluating the intended curriculum and develop new curriculums as the relationship between teacher autonomy and the curriculum dimension. Julião (2018) likewise points out that curriculum autonomy is a prominent concept in curriculum restructuring and development. Little (1995), on the other hand, defines teachers as successful teachers who take responsibility for their own teaching processes and provide the highest level of emotional and cognitive control of the teaching process through continuous thinking and analysis, and also emphasizes the importance of curriculum autonomy in one aspect. Curriculum autonomy is simply defined as the ability of teachers to take an active role in the development of the curriculum and to provide flexibility in the curriculum during the implementation process (Ben-Peretz, 1980). Lee (2014) states that curriculum autonomy contributes to filling the gap between what is expected from the intended curriculum and reality. According to Park (2008), curriculum autonomy can be expressed as teachers’ designing national curriculums to meet local contexts and the needs of students (cited in Hong & Youngs, 2016). Similarly, Morgado (2011, p. 397) defines curriculum autonomy as “the ability to generate ideas in the adaptation of the intended curriculum at the national level in the process of developing national curriculum, and to adapt the curriculum to the characteristics of the students, needs and the region where the school is located” (as cited in Julião, 2018, p. 4). Based on these definitions, curriculum autonomy can be defined as the capacity of teachers to redesign all aspects of the curriculum (purpose, content, learning-teaching process, evaluation) in order to adapt the nationally aimed curriculums to local conditions, student interests and learning needs.

When the literature is reviewed, it is seen that curriculum autonomy is examined as a sub-dimension of teacher autonomy in many studies (Moomaw, 2005; Pearson & Moomaw, 2005; 2006; Ulaş & Aksu, 2015). When looking at the studies on teacher autonomy, studies that examine and emphasize the relationship between teachers’ behaviors of supporting teacher autonomy and learner autonomy (Lamb, 2008; Little, 1995; Smith, 2003; Yazıcı, 2016) and studies examining the relationship between teacher autonomy and student achievement (Ayral et al., 2014; Gurganioous, 2017) draw attention. In addition, studies comparing teachers’ curriculum autonomy levels depending on gender and professional seniority (Behroozi & Osam, 2016; Çolak, Altnkurt & Yılmaz, 2017; Yazıcı, 2016), educational status (Behroozi & Osam 2016) and participation in professional projects (Yolcu, 2019) draw attention. Within the scope of this study, it can be said that the variables of gender, professional seniority, educational status and participation in professional projects may be factors that can affect the level of curriculum autonomy of teachers.

In the context of the main subject of the research, there are a limited number of studies that reveal a significant relationship between the two variables in studies on teacher motivation and
teacher autonomy (Worth & Van den Brande, 2020; Wu, 2015). In addition, there is no study in the literature that can be considered as an important sub-component of teacher autonomy, examining teacher curriculum autonomy and teacher motivation together and aiming to reveal the link between the two variables. Motivation and curriculum autonomy are mainly teacher-driven important factors that can affect the efficiency of the educational process. In this respect, the research is considered important as it tries to determine the motivation and curriculum autonomy levels of teachers and to determine the relationship between these two variables. In addition, the research is also important in terms of shedding light on the effects of these factors, which have an important place in increasing teacher qualifications.

**Purpose of the Research**

The purpose of this research is to evaluate teachers’ levels of motivation and curriculum autonomy. In line with this main purpose, the following sub-goals have been seek answers:

1. What are the teachers’ motivation and curriculum autonomy levels?
2. Do teachers’ motivation levels differ significantly according to the variables of gender, professional seniority, educational status and number of projects participated in professional life variables?
3. Do teachers’ curriculum autonomy levels differ significantly according to gender, professional seniority, educational status and number of projects participated in professional life variables?
4. Is there a significant relationship between teachers’ motivation and curriculum autonomy levels?

**Method**

In this section, information about the research model, research sample, data collection tools, data analysis and validity and ethical considerations have been given.

**Research Model**

This research is based on the positivist paradigm. The positivist paradigm advocates that researchers try to explain the phenomenon studied in the most economical way using quantitative research methods and adapt the results reached to other situations with inductive inferences (Kivunja & Kuyini, 2017). In this context, this research is descriptive and has been designed according to the survey model. Survey models are based on presenting the existing situation as it is and with an objective approach (Karasar, 2009). In this research, it has been tried to evaluate the motivation and curriculum autonomy levels of teachers working in schools affiliated to the Ministry of National Education.
Research Population

The population of the study consisted of 2823 teachers working in public primary and secondary schools in Avcılar and Esenyurt districts of Istanbul during the first half of the 2019-2020 academic year. The reason why these districts have been chosen as the universe is that the first researcher has worked as an administrator in District National Education Directorate of Avcılar and the third researcher has worked as a school principal in Esenyurt. In this context, the distribution of teachers in the research population on district basis and as school grade has been given below:

Table 1. Research Population

<table>
<thead>
<tr>
<th>Schools</th>
<th>Avcılar District</th>
<th></th>
<th>Esenyurt District</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Primary School</td>
<td>482</td>
<td>17.07</td>
<td>582</td>
<td>20.62</td>
<td>1064</td>
</tr>
<tr>
<td>Secondary School</td>
<td>791</td>
<td>28.02</td>
<td>968</td>
<td>34.29</td>
<td>1759</td>
</tr>
<tr>
<td>Total</td>
<td>1273</td>
<td>45.09</td>
<td>1550</td>
<td>54.91</td>
<td>2823</td>
</tr>
</tbody>
</table>

Research Sample

The sample of the study is 340 teachers who have been reached by simple random sampling method who have been worked in public primary and secondary schools in Avcılar and Esenyurt districts of Istanbul in the first semester of the 2019-2020 academic year. At the stage of determining the research sample, the sampling error has been accepted as 0.05 and the minimum number expected to be included in the sample was calculated with the following formula as Saka (2004) also stated:

\[ n = \frac{N t^2(p.q)}{d^2(N-1)+t^2(p.q)} \]

In the above formula, \( n \) is the number of teachers in sample (338.25), \( N \) is the number of teachers in the population (2823), \( p \) is the frequency of the situation being investigated (0.5), \( q \) is the frequency of the situation being investigated (0.5), \( d \) is the sampling error (0.05) and \( t \) is the accepted significance level (the value corresponding to 0.05 is 1.96). Considering the specified population value, it is seen that more people have participated in the study than the number of the calculated sample. The distribution of the teachers who constitute the sample of the research according to their demographic characteristics has been given in Table 2 below.

Table 2. Distribution of the teachers in the sample according to their demographic characteristics

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Groups</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>225</td>
<td>66.0</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>115</td>
<td>34.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>340</td>
<td>100</td>
</tr>
<tr>
<td>Professional Seniority</td>
<td>1-10 years</td>
<td>167</td>
<td>49.0</td>
</tr>
<tr>
<td></td>
<td>11-20 years</td>
<td>114</td>
<td>34.0</td>
</tr>
<tr>
<td></td>
<td>21 years and above</td>
<td>59</td>
<td>17.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>340</td>
<td>100</td>
</tr>
</tbody>
</table>
When Table 2 above is examined, it is seen that 225 of the teachers are women and 115 are men in the sample group. In addition, 167 of the same teachers have a seniority of 1-10 years, 114 of them 11-20 years, and 59 of them 21 or more years. 267 of the these teachers’ educational status are undergraduate education and 73 of them are graduate education. Finally, 93 of these teachers have not involved in any project in their professional lives, while 142 of them have took part in 1-2 times and 105 of them 3 or more projects.

**Data Collection Tools**

“The Motivation Scale” developed by Gagné, Forest, Gilbert, Aube, Morin and Malorni (2010) and adapted to Turkish by Çevik and Köse (2017) and “Curriculum Autonomy Scale” developed by Yolcu (2019) have been used as data collection tools in the research.

The Motivation Scale used to determine teachers’ motivation levels is a five-point Likert-type scale and it is answered as “I do not agree at all (1), I do not agree (2), I have no idea (3), I agree (4), and I completely agree (5)”. The scores that can be obtained from the 12-item scale range between 12 and 60. While the scale has been adapted to Turkish, it is seen that the four-dimensional structure of the scale has been preserved during the exploratory factor analysis process in testing the construct validity. These dimensions are in the form of “intrinsic motivation”, “identified regulation”, “internalized regulation” and “external regulation”. After the exploratory factor analysis, confirmatory factor analysis has been also performed for construct validity. In this process, Chi-Square Fit Test value has been found as 2.4, CFI value as .962, TLI value as .945 and RMSEA value as .067. Considering these values Chi-Square Fit Test, CFI, RMSEA values are within good fit (Schermelleh-Engel, Moosbrugger & Muller, 2003); TLI value is within acceptable compliance limits (Hu, & Bentler, 1999). Within the scope of reliability analysis, the Cronbach Alpha value has been calculated as .88 for the whole scale. The Cronbach Alpha value has been calculated for the reliability analysis in this research is .809. This value can be evaluated as giving reliable results regarding the usability of the scale on the sample group studied.

The Curriculum Autonomy Scale is a five-point Likert-type scale used to determine teachers’ curriculum autonomy levels and it is answered as “Never (1), Rarely (2), Occasionally (3), Very often (4) and Always (5)”. The scores that can be obtained from the 13-item scale range between 13 and 65. Exploratory and confirmatory factor analyzes have been conducted to determine the construct validity during the development process of the scale. Yolcu (2019) first performed the Kaiser-Meyer-Olkin

<table>
<thead>
<tr>
<th>Educational Status</th>
<th>Undergraduate</th>
<th>267</th>
<th>78.5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Graduate</td>
<td>73</td>
<td>21.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>340</td>
<td>100</td>
</tr>
</tbody>
</table>

| Number of Projects Participated in Professional Life | Never participated | 93  | 27.0 |
|                                                     | 1-2 times        | 142 | 42.0 |
|                                                     | 3 and above      | 105 | 31.0 |
| **Total**                                           |               | 340 | 100  |
(KMO) test to test the sample size and Bartlett’s test of sphericity to examine the normality distribution of the data. As a result of the exploratory factor analysis performed after the values found, a total of 13 items and a 4-factor scale structure that explains 67.44% of the total variance has been reached. These dimensions are in the form of “professional development autonomy”, “process autonomy”, “assessment autonomy” and “planning autonomy”. Afterward, the researcher has conducted a confirmatory factor analysis in order to support the 4-factor structure of the scale. In this process, Chi-Square Fit Test value has been found as 1.47, CFI value as .98, RMSEA value as .052 and RMR value as .05. Additionally GFI value has been found as .93, AGFI value as .89 and SRMR value as .06 has been found. Considering these values Chi-Square Fit Test, CFI, RMSEA and RMR values are within good fit and GFI, AGFI and SRMR values are within acceptable compliance limits (Schermelleh-Engel et al., 2003). Those values have shown that the original structure of the scale has been supported. Within the scope of the researcher reliability analysis, the Cronbach Alpha value has been calculated as .91 for the whole scale. In this research, the Cronbach Alpha value has been calculated for the reliability analysis and found as .835. This value can be evaluated as giving reliable results regarding the usability of the scale on the sample group studied.

Data Analysis

The answers of the teachers regarding the scales prepared on the internet through Google forms has been downloaded to the computer as an Excel file and transferred to the SPSS v.22 package program. Afterwards, in line with the teachers’ responses to the Motivation Scale and Curriculum Autonomy Scale, the normality distribution of the data has been examined and the analyzes has been carried out accordingly. In this context, the descriptive statistics values obtained from the Motivation Scale are detailed in Table 3 below.

Table 3. Descriptive statistics obtained from the Motivation Scale and Sub-dimensions of the Scale

<table>
<thead>
<tr>
<th>Scale and Sub-dimensions</th>
<th>N</th>
<th>X</th>
<th>Median</th>
<th>Mode</th>
<th>sd</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Min. Max. Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation Scale</td>
<td>340</td>
<td>3.56</td>
<td>3.58</td>
<td>3.58</td>
<td>.53</td>
<td>-.426</td>
<td>.422</td>
<td>1.92-4.75</td>
</tr>
<tr>
<td>Intrinsic Motivation</td>
<td>340</td>
<td>4.39</td>
<td>4.33</td>
<td>5.00</td>
<td>.62</td>
<td>-.843</td>
<td>.892</td>
<td>1.67-5.00</td>
</tr>
<tr>
<td>Identified Regulation</td>
<td>340</td>
<td>3.94</td>
<td>4.00</td>
<td>4.00</td>
<td>.81</td>
<td>-.813</td>
<td>.519</td>
<td>1.33-5.00</td>
</tr>
<tr>
<td>Internalized Regulation</td>
<td>340</td>
<td>3.32</td>
<td>3.33</td>
<td>3.33</td>
<td>.92</td>
<td>-.318</td>
<td>-.386</td>
<td>1.00-5.00</td>
</tr>
<tr>
<td>External Regulation</td>
<td>340</td>
<td>2.59</td>
<td>2.67</td>
<td>2.67</td>
<td>.61</td>
<td>.202</td>
<td>.188</td>
<td>1.00-4.33</td>
</tr>
</tbody>
</table>

When Table 3 above is examined, it is seen that the values of skewness and kurtosis coefficients of the data in the Motivation Scale and sub-dimensions of the scale are between -1 and +1. These values indicate that the data show a normal distribution (Tabachnick & Fidell, 2013). In
addition, since the mean, median and mode values are seen to be close to each other, it can be said that the data show a normal distribution (Büyüköztürk, 2010).

The descriptive statistics values obtained from the Curriculum Autonomy Scale and sub-dimensions of the scale are detailed in Table 4 below.

**Table 4.** Descriptive statistics obtained from the Curriculum Autonomy Scale and Sub-dimensions of the Scale

<table>
<thead>
<tr>
<th>Scale and Sub-dimensions</th>
<th>N</th>
<th>X</th>
<th>Median</th>
<th>Mode</th>
<th>sd</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Min. Max. Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Autonomy Scale</td>
<td>340</td>
<td>3.82</td>
<td>3.77</td>
<td>3.62</td>
<td>.53</td>
<td>.023</td>
<td>-.035</td>
<td>2.08-5.00</td>
</tr>
<tr>
<td>Professional Development Autonomy</td>
<td>340</td>
<td>3.58</td>
<td>3.67</td>
<td>3.00</td>
<td>.84</td>
<td>-.189</td>
<td>-.255</td>
<td>1.00-5.00</td>
</tr>
<tr>
<td>Process Autonomy</td>
<td>340</td>
<td>4.12</td>
<td>4.00</td>
<td>4.00</td>
<td>.59</td>
<td>-.443</td>
<td>.304</td>
<td>2.00-5.00</td>
</tr>
<tr>
<td>Assessment Autonomy</td>
<td>340</td>
<td>4.01</td>
<td>4.00</td>
<td>4.00</td>
<td>.67</td>
<td>-.499</td>
<td>.829</td>
<td>1.00-5.00</td>
</tr>
<tr>
<td>Planning Autonomy</td>
<td>340</td>
<td>3.49</td>
<td>3.33</td>
<td>3.00</td>
<td>.89</td>
<td>-.044</td>
<td>-.402</td>
<td>1.00-5.00</td>
</tr>
</tbody>
</table>

When Table 4 above is examined, it is seen that the values of skewness and kurtosis coefficients of the data in the Curriculum Autonomy Scale and sub-dimensions of the scale are between -1 and +1. In addition, it can be said that the data in the scale and its sub-dimensions show a normal distribution, since the mean, median and mode values are also close to each other.

In the study, in order to make comparisons between groups in the independent variables, whether the data in these groups meet the normality assumptions has been also examined with descriptive statistics. In this context, descriptive statistics values obtained from the groups in the independent variables of gender, education status, professional seniority and number of projects participated in professional life for the Motivation Scale are detailed in Table 5 below.

When Table 5 below is examined, it is seen that the values of the skewness and kurtosis coefficients of the data in the independent variables for the Motivation Scale are between -1 and +1. In addition, since the mean, median and mode values are also close to each other, it can be said that the data in each of the independent variables show normal distribution separately.

**Table 5.** Descriptive statistics for Motivation Scale obtained from independent variables of gender, educational status, professional seniority and number of projects participated in professional life

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Group</th>
<th>N</th>
<th>X</th>
<th>Median</th>
<th>sd</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>225</td>
<td>3.60</td>
<td>3.58</td>
<td>.49</td>
<td>-.359</td>
<td>.637</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>115</td>
<td>3.48</td>
<td>3.50</td>
<td>.58</td>
<td>-.395</td>
<td>-.026</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>267</td>
<td>3.58</td>
<td>3.58</td>
<td>.53</td>
<td>-.455</td>
<td>.385</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>73</td>
<td>3.49</td>
<td>3.50</td>
<td>.51</td>
<td>-.368</td>
<td>.822</td>
</tr>
</tbody>
</table>
In addition, before determining which test types to be used in the analysis of the data, it has also been examined whether the data in the independent variables provided the normality assumptions. Descriptive statistics values obtained from the groups in the independent variables of gender, education status, professional seniority and number of projects participated in professional life for the Curriculum Autonomy Scale are detailed in Table 6 below.

When Table 6 below is examined, it is seen that the values of the skewness and kurtosis coefficients of the data in the independent variables for the Curriculum Autonomy Scale are between -1 and +1. In addition, since the mean, median and mode values are also close to each other, it can be said that the data in each of the independent variables show normal distribution separately. For this reason, Independent Samples t-Test and One-Way Analysis of Variance (ANOVA), which are among parametric tests, have been performed in order to compare dependent variables for independent variables in the analysis of the data. In addition, the Pearson Product-Moments correlation coefficients (r) have been calculated to examine the relationship between two dependent variables, namely motivation and curriculum autonomy.

**Table 6.** Descriptive statistics for Curriculum Autonomy Scale obtained from independent variables of gender, educational status, professional seniority and number of projects participated in professional life

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Group</th>
<th>N</th>
<th>X</th>
<th>Median</th>
<th>sd</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>225</td>
<td>3.85</td>
<td>3.77</td>
<td>.54</td>
<td>.142</td>
<td>-.275</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>115</td>
<td>3.77</td>
<td>3.69</td>
<td>.50</td>
<td>-.310</td>
<td>.423</td>
</tr>
<tr>
<td>Educational Status</td>
<td>Undergraduate</td>
<td>267</td>
<td>3.80</td>
<td>3.77</td>
<td>.53</td>
<td>.021</td>
<td>-.056</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>73</td>
<td>3.90</td>
<td>3.85</td>
<td>.52</td>
<td>.046</td>
<td>.121</td>
</tr>
<tr>
<td></td>
<td>1-10 years</td>
<td>167</td>
<td>3.79</td>
<td>3.77</td>
<td>.50</td>
<td>-.026</td>
<td>.141</td>
</tr>
<tr>
<td></td>
<td>11-20 years</td>
<td>114</td>
<td>3.87</td>
<td>3.85</td>
<td>.52</td>
<td>.150</td>
<td>-.199</td>
</tr>
<tr>
<td></td>
<td>21 years and above</td>
<td>59</td>
<td>3.82</td>
<td>3.77</td>
<td>.61</td>
<td>-.068</td>
<td>-.281</td>
</tr>
<tr>
<td>Professional Seniority</td>
<td>1-2 times participated</td>
<td>93</td>
<td>3.62</td>
<td>3.54</td>
<td>.52</td>
<td>.178</td>
<td>-.061</td>
</tr>
<tr>
<td></td>
<td>3 and above times participated</td>
<td>142</td>
<td>3.79</td>
<td>3.77</td>
<td>.49</td>
<td>.152</td>
<td>-.206</td>
</tr>
<tr>
<td></td>
<td>Never participated</td>
<td>105</td>
<td>4.04</td>
<td>4.00</td>
<td>.51</td>
<td>-.265</td>
<td>.972</td>
</tr>
</tbody>
</table>

**Validity and Ethical Considerations**

For the validity of the research, it is important that all three researchers are educational sciences experts. In line with the purpose of the research, firstly the literature have been searched and
scales suitable for data collection have been determined. Afterwards, permission for use have been obtained from the researchers who adapted and developed the scales through e-mail. The teachers participating in the study have been diversified according to certain demographic characteristics and the opportunity to make comparisons between groups have been obtained. The data have been obtained by sharing the access link regarding the scale forms on the internet. In this regard, the purpose and scope of the research have been clearly stated at the beginning before personal information and scale questions. The demographic characteristics of the teachers participating in the research in terms of reliability have been clearly stated in the sample part of the research. The data in the research have been collected with the voluntary participation of teachers. Based on the answers has been obtained in the data analysis section, reliability coefficients for both scales has been calculated and the findings obtained through the analysis have been reported clearly.

**Results**

In this section, the results obtained after the analysis of the research data have been given in order.

**Results Regarding Teachers’ Motivation and Curriculum Autonomy Levels**

According to Table 3 above, the arithmetic mean of the scores obtained from the 12-item Motivation Scale is $\bar{X}=3.56$. In this context, it can be said that teachers’ motivation levels are high. According to Table 4 above, the arithmetic mean of the scores obtained from the 13-item Curriculum Autonomy Scale is $\bar{X}=3.82$. This value indicates that teachers’ level of curriculum autonomy is high as well. These values show the findings that both motivation and curriculum autonomy levels increase as the scores obtained from both scales increase.

**Results Regarding the Comparison of Teachers’ Motivation and Curriculum Autonomy Levels for Independent Variables**

In the Table 7 below, the findings for the Independent Samples t-Test conducted to determine whether the motivation and curriculum autonomy levels of teachers differ significantly according to the variables of gender and educational status have been given.

**Table 7. Results for the Independent Samples t-Test conducted to examine the average scores of teachers’ motivation and curriculum autonomy levels according to the variables of gender and educational status**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Group</th>
<th>N</th>
<th>$\bar{X}$</th>
<th>ss</th>
<th>sd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation Level</td>
<td>Gender</td>
<td>Female</td>
<td>225</td>
<td>3.60</td>
<td>.49</td>
<td>338</td>
<td>2.113</td>
<td>.035*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>115</td>
<td>3.48</td>
<td>.58</td>
<td>338</td>
<td>1.207</td>
<td>.228</td>
</tr>
<tr>
<td>Curriculum</td>
<td>Educational Status</td>
<td>Undergraduate</td>
<td>267</td>
<td>3.58</td>
<td>.53</td>
<td>338</td>
<td>1.366</td>
<td>.173</td>
</tr>
<tr>
<td>Autonomy Level</td>
<td></td>
<td>Graduate</td>
<td>73</td>
<td>3.49</td>
<td>.51</td>
<td>338</td>
<td>-1.481</td>
<td>.139</td>
</tr>
<tr>
<td>Motivation Level</td>
<td>Gender</td>
<td>Female</td>
<td>225</td>
<td>3.85</td>
<td>.54</td>
<td>338</td>
<td>1.207</td>
<td>.228</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>115</td>
<td>3.77</td>
<td>.50</td>
<td>338</td>
<td>1.481</td>
<td>.139</td>
</tr>
<tr>
<td>Curriculum</td>
<td>Educational Status</td>
<td>Undergraduate</td>
<td>267</td>
<td>3.80</td>
<td>.53</td>
<td>338</td>
<td>1.366</td>
<td>.173</td>
</tr>
<tr>
<td>Autonomy Level</td>
<td></td>
<td>Graduate</td>
<td>73</td>
<td>3.90</td>
<td>.52</td>
<td>338</td>
<td>1.481</td>
<td>.139</td>
</tr>
</tbody>
</table>

*p<0.05
When the Table 7 above is examined, the arithmetic mean of the scores related to the motivation levels of the teachers does not show a significant difference according to the variables of education level (p>.05). However, it has been determined that the arithmetic mean of the scores regarding the motivation levels of the teachers has showed a significant difference according to the gender variable [t (338)=2.113, p<.05]. In this context, it has been revealed that female teachers (X̅=3.60) have higher motivation levels than male teachers (X̅=3.48). This finding reveals that teachers’ motivation levels can differ significantly according to gender. Again, according to Table 7, it has been determined that the arithmetic mean of the scores the teachers get regarding the curriculum autonomy levels have not show a significant difference according to the variables of gender and education level (p>.05).

In Table 8 below, the findings of Single Factor Analysis of Variance (ANOVA) for Independent Samples have been given to determine whether teachers’ motivation and curriculum autonomy levels differ significantly with respect to professional seniority variable.

**Table 8. Results for One-Way Analysis of Variance (ANOVA) for independent samples conducted to examine teachers’ motivation and curriculum autonomy levels according to professional seniority variable**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation Level</td>
<td>Professional Seniority</td>
<td>Between Groups</td>
<td>.466</td>
<td>2</td>
<td>.233</td>
<td>.839</td>
<td>.439</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Groups</td>
<td>93.528</td>
<td>337</td>
<td>.278</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>93.994</td>
<td>339</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum</td>
<td>Professional Seniority</td>
<td>Between Groups</td>
<td>.460</td>
<td>2</td>
<td>.230</td>
<td>.825</td>
<td>.439</td>
<td>-</td>
</tr>
<tr>
<td>Autonomy Level</td>
<td></td>
<td>Within Groups</td>
<td>93.842</td>
<td>337</td>
<td>.278</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>94.301</td>
<td>339</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the data in Table 8, the average scores of teachers regarding motivation levels do not show a significant difference according to the professional seniority variable [F (2, 337) =.839, p> .05]. This finding can be interpreted as that the motivation levels of teachers do not change significantly depending on professional seniority. Likewise, the average scores of teachers regarding curriculum autonomy levels do not show a significant difference according to the professional seniority variable [F (2, 337)=.825, p> .05]. This finding can be interpreted as that teachers’ curriculum autonomy levels do not change significantly depending on their professional seniority.

In the following Table 9, the findings of One-Way Analysis of Variance (ANOVA) have been given to determine whether teachers’ motivation and curriculum autonomy levels differ significantly according to the variable of the number of projects involved in professional life.
Table 9. Results for One-Way Analysis of Variance (ANOVA) conducted to examine teachers’ motivation and curriculum autonomy levels according to the variable of the number of projects participated in professional life

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>p</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation Level</td>
<td>Number of projects participated in professional life</td>
<td>Between Groups</td>
<td>.111</td>
<td>2</td>
<td>.055</td>
<td>.199</td>
<td>.820</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Groups</td>
<td>93.883</td>
<td>337</td>
<td>.279</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>93.994</td>
<td>339</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum Autonomy Level</td>
<td>Number of projects participated in professional life</td>
<td>Between Groups</td>
<td>8.958</td>
<td>2</td>
<td>4.479</td>
<td>17.686</td>
<td>.000</td>
<td>B&gt;A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Groups</td>
<td>85.344</td>
<td>337</td>
<td>.253</td>
<td></td>
<td></td>
<td>C&gt;A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>94.301</td>
<td>339</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<.05, A: Never participated; B: 1-2 times; C: 3 times and above

According to the data in Table 9, the average scores of teachers regarding motivation levels do not show a significant difference according to the variable of the number of projects participated in professional life \[F (2, 337) = .199, p>.05\]. This finding can be interpreted as that the motivation levels of teachers do not change significantly depending on the number of projects participated in professional life. However, according to Table 9, the average scores of teachers regarding curriculum autonomy levels show a significant difference according to the variable of number of projects participated in professional life \[F (2, 337)= 17.686, p>.05\]. According to the results of the Scheffe test conducted to determine between which groups have a significant difference, teachers who has participated 1-2 times (X̅=3.79) and 3 or more (X=4.04) projects in professional life has been found higher levels of curriculum autonomy than those who has never participated in the project (X̅=3.62). Depending on these findings, it can be said that with the increase in the number of teachers’ participation in projects in professional life, their level of curriculum autonomy also increases.

In Table 10 below, the relationship between teachers’ motivation and curriculum autonomy levels and the sub-dimensions related to them is tried to has been examined. Results regarding the Simple Linear Correlation Analysis performed within this context have been given.

Table 10. Results regarding the relationship between teachers’ motivation and curriculum autonomy levels and sub-dimensions

<table>
<thead>
<tr>
<th>Identified Regulation</th>
<th>.381**</th>
<th>.405**</th>
<th>.193**</th>
<th>.276*</th>
<th>.442**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Motivation</td>
<td>.218**</td>
<td>.184**</td>
<td>.112*</td>
<td>.113*</td>
<td>.220**</td>
</tr>
<tr>
<td>Introjected Regulation</td>
<td>.248**</td>
<td>.263**</td>
<td>.205**</td>
<td>.053</td>
<td>.261**</td>
</tr>
<tr>
<td>External Regulation</td>
<td>.036</td>
<td>-.025</td>
<td>.050</td>
<td>-.089</td>
<td>-.015</td>
</tr>
<tr>
<td>Motivation</td>
<td>.314**</td>
<td>.296**</td>
<td>.203**</td>
<td>.121*</td>
<td>.324**</td>
</tr>
</tbody>
</table>

**: significant at .01 level, p <.01; * significant at level of .05, p <.05
In Table 10 above, it is seen that there is a moderately positive and significant relationship between teachers’ motivation and curriculum autonomy levels \((r=.324, p<.01)\). In addition, it is seen that the highest relationship with the curriculum autonomy of teachers is in the sub-dimension of motivation identified with the regulation \((r=.442, p <.01)\). On the other hand, no significant relationship has been found between the mean scores of teachers’ curriculum autonomy and sub-dimensions of curriculum autonomy with the external regulation sub-dimension of motivation. Accordingly, it can be said that the level of motivation for external regulation does not affect teachers’ level of curriculum autonomy. In other words, teachers’ level of curriculum autonomy is not significantly affected by the sub-dimension of motivation related to external regulation.

**Discussion, Conclusion and Recommendations**

The following results have been obtained in this research, which deals with teachers’ motivation and curriculum autonomy levels and in which 340 teachers participated: In the research, it has been determined that teachers’ motivation levels is high \((\bar{X}=3.56)\). Considering the fact that the motivation increases with the increase in the scores obtained from the Motivation Scale, this result can be accepted as high level. Similarly, in the studies of Çevik and Köse (2017), Çobanoğlu ve Barutçu (2020), Uçar and Dağlı (2017) and Keller, Neumann and Fischer (2017), it has been found that teachers’ motivation is at a high level. On the contrary, there are studies that indicate that teachers’ motivation is at medium level (Memişoğlu & Kalay, 2017; Sucu, 2016; Ugar, 2019) and low level (Barlı, Bilgili, Çelik, & Bayrakçeken, 2005; Yılmaz, 2017). These different results are thought to be due to the fact that the studies examining teacher motivation has been conducted in different regions and the factors motivating teachers are different from each other. In this context, it is thought that teachers’ motivation should be increased so that they can take a more active role in the education-training process, enrich the teaching-learning process, take more responsibility and increase their commitment to their profession.

In the research, it has been determined that the motivation levels of the teachers differ significantly according to the gender variable, but not according to the variables of education level, professional seniority and the number of projects participated in professional life. When the differentiation between teachers’ motivation levels according to gender variable is examined, it has been determined that female teachers \((\bar{X}=3.60)\) have higher motivation than male teachers \((\bar{X}=3.48)\). Similarly, Emiroğlu (2017) has concluded that the motivation levels of female teachers differ significantly from male teachers. However, Triyanto (2016) has found that male teachers’ motivation is higher than female teachers. The researcher has interpreted this situation as male teachers want to be more successful in their professional career. On the contrary, there are studies that found that teachers’ motivation levels do not differ significantly according to gender (Çevik & Köse, 2017; Çobanoğlu & Barutçu 2020; Sarı, Canoğulları, & Yıldız, 2018; Taşkesen, Taşkesen, Bakırhan, &
Tanoğlu, 2018; Urhan, 2018). It is thought that these differences may arise from the perspective of the teaching profession and the roles of the teaching profession regarding women or men in the countries where the studies has been conducted.

In the analysis according to the educational status variable, it has been found that graduating from undergraduate or graduate programs does not cause a significant motivation difference in teachers. Similarly, Çevik and Köse (2017), Çiftçi (2017) and Emiroğlu (2017) also has concluded that teachers’ motivation levels have not differ significantly according to their educational status. Ugar (2019) also has found that there are no significant differences in the intrinsic and extrinsic motivations of teachers according to their educational status. On the contrary, in Triyanto’s (2016) research, it has been found that the motivation of teachers with undergraduate education is higher than those with a master’s degree. She has stated that this might be due to the fact that teachers who have a master’s degree think they have sufficient knowledge and do not need to participate in capacity building curriculums. It is thought that this result of the present research may have been taken for different individual or career purposes of graduate education and therefore does not make a significant difference on motivation.

When the motivation levels of teachers in terms of professional seniority has been examined, no significant difference in motivation has been found among teachers with a professional seniority of 1-10 years, 11-20 years and 21 years or more. In parallel with this research result, Çiftçi (2017), Çobanoğlu and Baruçu (2020), Emiroğlu (2017) have concluded that the motivation levels of teachers for their professional seniority do not differ. On the contrary, in Triyanto’s (2016) research, it has been determined that teachers’ motivation decreases with the increase in their professional seniority. Similarly, in the research of Urban (2018), it has been determined that the motivation of teachers with a seniority year of 5 or less is higher than those with a seniority year of 11-19 and 20 or more. However, the result of the present research is thought to be due to the fact that half of the participating teachers have been in the profession between 1-10 years and the distribution between groups is not balanced.

When the number of projects participated in professional life has been examined, it has been determined that there is no significant difference in the motivation levels of teachers who have not participate in any project, participated 1-2 times or participated 3 or more times. On the contrary, Schellenbach-Zell and Gräsel (2010) have concluded that teacher motivation is an important factor affecting participation in projects carried out within the scope of the innovative school. Similarly, Gorozidis, and Papaioannou (2014) have concluded that there is a significant relationship between autonomous motivation, a sub-dimension of motivation, and participation in projects. Teacher teams that organize local research projects in schools learn on their own and gain original experiences by working together, thanks to the motivation to seek new information, to work on problem-based school
development, to take into account problems, to produce solutions to problems (Iliya & Ifeoma, 2015). However, in the present research, it can be said that the fact that participating in the project in professional life do not create significant differences on motivation among the participants may be due to the fact that the groups regarding the number of participation in the project are close to each other. However, when the motivation averages between the groups has been examined, it has been determined that the teachers who participated in the project before is partially higher than those who never has participated. From this point of view, it is thought that the motivation levels of teachers may increase as they participate in projects in schools.

It has been also determined in the research that teachers’ level of curriculum autonomy is high (X̅=3.82). Considering the fact that the curriculum autonomy increases with the increase in the scores obtained from the Curriculum Autonomy Scale, this result can be accepted as high level. Similarly, Çolak and Alunkurt (2017) and Çolak et al. (2017) has found that teachers’ autonomy behaviors are high in their studies. Different from the result obtained, it has been concluded in the research conducted by Yazıcı (2016) in the province of Muğla that the curriculum autonomy levels of teachers are at a medium level. In his research in Yolcu (2019), she has concluded that science teachers have curriculum autonomy above the intermediate level. Behroozi and Osam (2016), in their research on English teachers in Iran, have concluded that teachers’ level of curriculum autonomy is low. Similarly, in the studies of Worth and Van den Brande (2020), teachers in England has reported that they have a low level of autonomy towards the curriculum content of the courses. The reasons for this differentiation among the research results; it can be interpreted as the result of the diversity of branches covered by the country, region and sample groups. In the study of Varatharaj, Abdullah, and İsmail (2015), it has stated that teachers' high curriculum autonomy enables them to make the teaching process more functional and convenient. In the same study, it has concluded that curriculum autonomy has positive effects on student learning, student autonomy and student performance.

In the research, it has been determined that teachers’ curriculum autonomy levels do not differ significantly according to gender, educational status and professional seniority variables, but significantly differentiate according to the variable of the number of projects involved in professional life. Similarly, in the research of Behroozi and Osam (2016); it has been concluded that teachers’ curriculum autonomy levels do not show a significant difference according to gender, seniority, educational status and professional seniority variables. Çolak et al. (2017) has concluded that the autonomy levels of the teachers do not differ significantly according to gender and seniority. Similarly, it has been concluded in Yazıcı’s (2016) research, the autonomy levels of teachers do not differ significantly according to gender variable but according to the professional seniority variable, teachers who has worked for 10 years or less have a higher level of curriculum autonomy than those who has worked for more than 20 years. It can be said that this difference may be due to the tendency of teachers to take more initiative in the first years of the profession.
When the number of projects participated in professional life has been examined, it has been determined that the teachers who have participated in the project 1-2 times in professional life ($X = 3.79$) and 3 or more times ($X = 4.04$) have higher curriculum autonomy than those who have never participated in the project ($X = 3.62$). Based on these findings, it can be said that taking part in any project, regardless of whether it is regional, national or international, has an important effect on curriculum autonomy during the practice of the teaching profession. It can be thought that this result is due to teachers’ ability to gain flexibility by determining all steps themselves during the creation, maintenance or finalization of projects. In a research, Yolcu (2019) has concluded that teachers’ curriculum autonomy levels do not differ significantly according to the variable of participation in the project. In Yolcu’s (2019) research, this variable has been categorized as participating or not participating in the project. In the present research, it is thought that the categorization of the number of participation in the project may be the reason for this differentiation. As a matter of fact, the high number of participations in the project indicates more experience in project processes. Thus, it can be said that a project-based teaching process can provide an environment that will allow the curriculum to be redesigned. As a matter of fact, Shome and Natarajan (2013) emphasize that project creation and implementation differentiates the concepts of learning and philosophical understanding of education for teachers. In this context, it can be stated that teachers can redesign their curriculum by reviewing them in the light of their experiences from projects.

Finally, a moderately positive and significant relationship has been determined between teachers’ motivation and curriculum autonomy levels ($r = .324$, $p < .01$). In other words, it can be evaluated that the autonomy levels of the curriculum increases with the increase of the motivation of teachers, or on the contrary, their motivation increases with the increase in the level of curriculum autonomy. In addition, in the present research, it has been determined that the highest relationship between teachers’ perceptions of curriculum autonomy levels is in the dimension of motivation identified with regulation. Similarly, Worth and Van den Brande (2020) has found a positive relationship between teachers’ professional autonomy and motivation levels. In the same way, Wu (2015) has concluded that there is a high level of positive and significant relationship between teachers’ motivation levels and teacher autonomy. In the same research, it has been concluded that teacher curriculum autonomy is a significant predictor of teacher motivation. Namunga (2017), on the other hand, has concluded in his research that there is a significant relationship between teachers’ motivation and their way of implementing the curriculum. In the context of these results, it can be said that teachers with high motivation can behave more autonomously during the implementation of the curriculum.

In addition, it has been found that the highest relationship in the research is between the identified regulation sub-dimension of motivation and curriculum autonomy. In other words, it can be said that teachers can make an effort to make the current curriculum the most functional by defining...
their profession as a sacred value. As a matter of fact, Çermik, Doğan and Şahin (2010) has concluded in their research that internal and altruistic reasons are more prominent in teachers’ choice of profession. Similarly, Worth and Van den Brande (2020) stated in their research that teachers’ professional autonomy is related to their intrinsic motivation. In this context, it is thought that the instructional innovations and practices that teachers will realize thanks to the autonomy of the curriculum, who are committed to providing benefit to the society, are an important way to achieve their goals. Another important finding of the research is that the external regulation dimension of teachers’ motivation levels has no significant relationship with either curriculum autonomy or any of the dimensions of curriculum autonomy. In this context, it can be said that the motivation that teachers gain externally is not a determining factor on curriculum autonomy. Unlike Wu (2015), it has concluded that teacher curriculum autonomy is a significant predictor of teacher extrinsic motivation.

The reason for this difference can be interpreted as the change in external factors motivating the sample groups. In other words, these results can be interpreted as they can be effective in redesigning the curriculum by passing through various filters according to the type of extrinsic motivation elements. Based on these results obtained from the research, the following recommendations can be offered:

1. Qualitative research can be conducted that examine teacher motivation and curriculum autonomy in a more comprehensive and in-depth manner.

2. During the implementation of the curriculum, a trust-building administrator approach that will allow teachers to revise the curriculum can be adopted.

3. In the context of the research results, it can be ensured that teachers who prefer the profession for altruistic reasons are determined and appointed.

4. Teachers should be supported to produce projects and integrate the projects into the curriculum.

References


An Investigation into the Views of Refugee Students’ Teachers on Their Subjective Well-Being: A Qualitative Descriptive Study

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Abstract

The negative effects of natural and social issues on individuals have necessitated the discussion of the concept of subjective well-being as a major health concern. Teachers’ subjective well-being has a crucial role in the functioning of the education system. This qualitative descriptive study aims to examine the views of refugees’ teachers on their subjective well-being. The data obtained in the study were collected with semi-structured interviews. The data were collected from seven teachers working at a public primary school in Çanakkale, Turkey in the fall semester of the 2020-2021 academic year. The analyses of the semi-structured interviews with the teachers of the refugee students produced four subjective well-being themes – i.e., family relationships, communication with refugee students, cooperation with parents, and working conditions. The data revealed that teacher's good relationships with the refugee students’ family members and parents, culture-sensitive education-oriented communication with students, and working conditions with a supporting school environment were key to enhancing subjective well-being of the refugees’ teachers. This result presented a crucial implication for policymakers to prepare in-service training for the population of the interviewed teachers.

Keywords: Subjective Well-Being, Primary School Teachers, Refugee Students, Primary Schools

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Introduction

The fact that today's world is facing with the negative effects of global warming, natural disasters, economic recessions, homelessness, terrorism, and wars causes sadness, anxiety, and fear. People’s challenging experiences affect well-being, a subject of positive psychology, which focuses on such other areas as happiness, strong personality, intelligence, creativity, groups, and institutions (Hefferon & Boniwell, 2011). Well-being has complex definitions, and researchers have used similar terms, such as “happiness”, “quality of life”, or “life satisfaction”. Despite these conceptualizations, what happiness and well-being are and how they are felt is still a question that positive psychology seeks to answer (Hefferon & Boniwell, 2011). Diener, Suh, and Oishi (1997) define subjective well-being (SWB) as how people evaluate their lives considering variables, such as life satisfaction, marital satisfaction, lack of depression and anxiety, and positive moods and emotions. SWB is a result of the individual's evaluations of their lives and emotional responses to events. Accordingly, SWB is defined as experiencing mostly positive emotions but fewer negative emotions and getting high satisfaction from life (Myers & Diener, 1995). If individuals have positive emotions, they derive high levels of satisfaction from their lives, thus have a high level of SWB (Diener, 2000). Similarly, Albuquerque et al. (2012) confirms that SWB is a multidimensional construct comprising three components, i.e., life satisfaction, positive emotion, and negative emotion. SWB is an essential indicator of the quality of life (Eid & Diener, 2004) and provide a necessary condition for mental health because if a person has been depressed for a long time or suffers from devastating anxiety, and they cannot function well (Diener, Suh, & Oishi, 1997). As seen in the above definitions, SWB is not composed of a single construct, and many variables affect well-being (Bergman & Scott, 2001; Forgeard, Jayawickreme, Kern, & Seligman, 2011). In compliance with these definitions, SWB is related to happiness, life satisfaction, and positive emotions, which play a vital role in life and determine the judgments of a person in and about their life (Haybron, 2000).

More specifically, teachers' SWB has a crucial role in the functioning of the education system. The well-being of teachers has long and positive consequences in the schooling of students (Hung, Lin, & Yu, 2016). Teachers' SWB depends on various variables such as their life satisfaction, status, curriculum, coping with work-related stress, school administrator (Cenkseven-Onder & Sari, 2009), school environment, and classroom management challenges (Renshaw, Long, & Cook, 2015). According to Veronese et al. (2018), economic factors, psychosocial factors, professional factors, and contextual factors shape teachers’ SWB. Furthermore, job satisfaction is also significantly related to SWB (Calaguas, 2017). These studies highlight that teachers’ SWB is directly associated with the quality of educational service. The professional, environmental, and psychosocial conditions of teachers have considerably impacted their perceptions about SWB. In the last decade, many studies have been conducted on the nature of this phenomenon and what affects it. Poormahmood, Moayedi, and Alizadeh (2017) have examined the relationships between psychological well-being, happiness,
and perceived occupational stress among primary school teachers. They have concluded that occupational stress in teaching may lead to poor psychological well-being and reduced happiness in primary school teachers. Moreover, Song, Gu, and Zhang (2020) have researched the nature of teachers’ SWB and explored the dynamic interaction between the key aspects of teachers’ subjective wellbeing: altruism, self-efficacy, work satisfaction, and income satisfaction. Likewise, Cansoy, Parlar, and Turkoglu (2020) have found a positive and significant relationship between the self-efficacy levels of teachers and their psychological well-being. Additionally, Tang (2018) has pointed out that gender, age, administrative position, marital status, class size, wages, and professional training affect rural teachers’ SWB.

Given that teachers’ SWB is important to their life satisfaction and the quality of the education they would provide, revealing teachers’ views on their SWB potentially offers us a deeper understanding of this phenomenon. Examining the views of classroom teachers regarding their SWB, may contribute to the studies in this field to foster alternative ways intended for the motivation and performance of teachers. Recently, a migration wave to Turkey from Syria has had a crucial impact on teachers’ roles. Teachers teaching refugee students must be culturally competent to apply a more humanistic approach in a school setting and provide effective education for Syrian refugee children; therefore, it is crucial to understand teachers’ well-being (Üzar-Özçetin, Çelik, & Özenç-İra, 2020). Teachers’ SWB may be an important factor in coping with hardships associated with refugee education. Despite the importance of this issue, there is limited number of studies focusing on the SWB of the refugee students’ teachers. Given the importance of teachers’ well-being, this study aimed to examine primary school teachers’ views on their SWB, and the factors related to their SWB. To this end, the authors sought to answer the following questions:

- How do the primary school teachers’ relationships with the families of the refugee children affect the teachers’ SWB?
- How do the primary school teachers’ relationships with the refugee students affect the teachers’ SWB?
- How do the attitudes of the refugee students’ parents affect the primary school teachers’ SWB?
- How does the school environment affect the primary school teachers’ SWB?

**Method**

**Study Design and Participants**

The present paper is a qualitative descriptive research study. Seven teachers working at a public primary school participated in this study. The data were collected in the fall semester of the 2020-2021 academic year. The participating teachers were determined through criterion sampling,
one of the purposive sampling methods of the qualitative research. For this purpose, two criteria were considered in determining the participants: (1) voluntary participation and (2) serving as a teacher with refugee students in their classes. The personal facts of the participating teachers are available in Table 1.

**Table 1. Personal facts of the participant teachers**

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Gender</th>
<th>Level</th>
<th>Professional experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>Female</td>
<td>Primary School</td>
<td>15 years</td>
</tr>
<tr>
<td>T2</td>
<td>Male</td>
<td>Primary School</td>
<td>30 years</td>
</tr>
<tr>
<td>T3</td>
<td>Male</td>
<td>Primary School</td>
<td>25 years</td>
</tr>
<tr>
<td>T4</td>
<td>Female</td>
<td>Primary School</td>
<td>13 years</td>
</tr>
<tr>
<td>T5</td>
<td>Female</td>
<td>Primary School</td>
<td>23 years</td>
</tr>
<tr>
<td>T6</td>
<td>Female</td>
<td>Primary School</td>
<td>24 years</td>
</tr>
<tr>
<td>T7</td>
<td>Female</td>
<td>Primary School</td>
<td>24 years</td>
</tr>
</tbody>
</table>

As seen in Table 1, most of the teachers (n=5) participating in the study were women. All were primary school teachers with refugee students in their classrooms. Most (n=5) were senior teachers.

**Instruments**

The data of this study were collected using semi-structured interview forms and analyzed descriptively. The interview questions were presented in Figure 1.

- What does the concept of SWB mean to you?
- What does your SWB depend on?
- How does your school environment affect your psychology?
- How do the attitudes of your fellow teachers at your school affect your psychology?
- How does the school administration affect your psychology?
- How do the behaviors of the students at your school affect your psychology?
- How do the refugee students at your school affect your psychology?
- How do the attitudes of your refugee students’ parents affect your psychology?
- How do the positive reactions from your environment affect your psychology?
- How do your relationships with your family affect your psychology?

**Figure 1. Questions in the semi-structured interviews**

**Data Analysis**

The data were collected using semi-structured interviews with the participant teachers. The interviews lasted for about 20-40 minutes. Initially, all the audio recordings were transcribed. Then, the data were grouped and matched with the relevant research questions. Themes were created and classified by the researchers separately. Finally, the researchers agreed upon the final coding under
four themes. To ensure the validity of the study, verbatim quotes were isolated from the responses. Additionally, the researchers included no comments during the analysis to achieve a higher reliability. The continuous comparison method was adopted in the analysis of the data.

**Results**

In this section, the themes of the study and the quotations from the interviews with the teachers were included. The analyses yielded four themes concerning the teachers’ SWB. The relevant themes were family relationship, communication with refugee students, cooperation with parents, and working conditions, which are presented in Table 2.

**Table 2. Themes related to teachers’ SWB**

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Family relationship</th>
<th>Communication with refugee students</th>
<th>Cooperation with parents</th>
<th>Working conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>- Spending time with the family - Fellowship</td>
<td>- Inability to communicate with refugee students</td>
<td>- Cooperating with parents - Receiving positive feedback from parents</td>
<td>- School administration acting in cooperation - Presence of sincere teachers</td>
</tr>
<tr>
<td>T2</td>
<td>- Positive and negative communication with the family</td>
<td>- Visiting homes of refugee students - To make refugee students feel that they belong in the school</td>
<td>- Parents acting in cooperation - Being ready for any kind of help to school</td>
<td>- Low number of teachers - Teachers knowing each other - Having sincere relationships</td>
</tr>
<tr>
<td>T3</td>
<td>- Positive or negative situations experienced at home</td>
<td>- Difficulties in negotiating and communicating with refugee students</td>
<td>- Acting in cooperation with parents - Making joint decisions with parents</td>
<td>- Having a good working environment</td>
</tr>
<tr>
<td>T4</td>
<td>- Positive and negative situations experienced with the family</td>
<td>- Inability to communicate with refugee students and their parents - Parents’ indifference</td>
<td>- Cooperating with parents - Receiving too many messages on WhatsApp during the pandemic and re-making the statements already made</td>
<td>- School administration and other teachers open to cooperation - Having a sincere environment</td>
</tr>
<tr>
<td>T5</td>
<td>- Positive and negative situations experienced with the family</td>
<td>- Inability to communicate with refugee students</td>
<td>- Parents’ efforts to establish contact via WhatsApp and the need to make a separate statement to each parent.</td>
<td>- Having a sincere relationship with teachers - The school administration open to cooperation</td>
</tr>
<tr>
<td>T6</td>
<td>- Establishing good communication with the family - Healthy family members</td>
<td>- Inability to communicate with refugee students</td>
<td>- Making joint decisions with parents - Cooperating with parents</td>
<td>- School administration and other teachers’ transparency - School administration providing the necessary materials</td>
</tr>
<tr>
<td>T7</td>
<td>- Good family relationships</td>
<td>- Having trouble communicating with refugee students</td>
<td>- Parents trying to establish too much contact both in private and group</td>
<td>- School administration in cooperation - Teachers knowing each other and acting in cooperation</td>
</tr>
</tbody>
</table>
Family relationship

The well-being of teachers was directly related to their family relationships. In the study, the teachers stated regarding the theme of family relationships that good relationships with the family positively affected their SWB. One of the teachers (T1) expressed that being able to share all kinds of emotions in family relationships too has a positive effect on SWB. Another teacher (T6) said that good relationships with family members too influenced SWB. The views of some teachers were as follows:

The concept of family is very important to me. Good communication with my family and the health of my family positively affects my psychology. (T1)

Communication with my family, being able to share every emotion with them, being with my family every moment makes me feel safe. However, my psychology is negatively affected by problems I have had with my family from time to time and situations where I feel that I cannot be understood by them, which inevitably reflects on my daily life. (T5)

Communication with refugee students

All the teachers stated that they could not communicate with refugee students effectively. They pointed that this situation had a negative effect on their psychology and their SWB. The views of some teachers were as follows:

We work in cooperation with the school administration, other teachers, and parents in the school family union so that our refugee students feel like they belong to the school. We express to them that our refugee students and their families fled the war and took refuge in our country, and our other parents should be understanding towards refugee students and their families. Together with our parents in the school family union, we visit the homes of our refugee students and help them socialize with other parents. Our refugee students had a hard time communicating with their friends and teachers at the beginning of the semester, but as they learn Turkish over time and feel like they belong to the school, it becomes easier for them to adapt to the school. This situation makes me feel productive as a teacher and positively affects my subjective well-being. (T4)

We have many refugee students at our school. At the beginning of the term, the biggest problem we faced with our refugee students was the inability to communicate. It is really hard not to speak the same language and to get along. However, they have started to learn Turkish during the semester, and I have had many refugee students so far, some of them have been very successful. Witnessing the success of the students and being able to teach them something make me feel professionally satisfied. This has a positive effect on my SWB. (T1)
Cooperation with parents

All the teachers expressed that they worked in cooperation with the parents, and this cooperation had positive effects on their SWB. T4, T5, and T7 stated that, as a result of the transition to distance education during the COVID-19 pandemic, they communicated with the parents via WhatsApp groups to share the necessary information with them. However, they also noted that some parents disturbed them a lot through this communication process, and this situation exhausted them and negatively affected their SWB. The views of some teachers were as follows:

We did not experience any problems with the parents until the pandemic process, on the contrary, we acted in cooperation with the parents. We shared information about the students, school and lessons with parent WhatsApp groups that we established with the pandemic. Despite this, the number of parents who tried to contact us privately was quite high, and it was tiring to share the information I give in the group again for each parent, which lowered my motivation. (T7)

 Acting in cooperation with parents and getting their support has had a positive impact on me so far. ...but with the [COVID-19] pandemic, I think the parents' level of anxiety about their children's education has increased, and accordingly, there are many parents who try to reach and get information about their children via WhatsApp. This situation may be a little tiring and affects my psychology negatively. (T4)

Working conditions

The teachers remarked that working conditions impacted their SWB since good relationships between school administrators and teachers had a decisive role in teachers’ certain behaviors in school settings. All the participants stated that the school administration's being open to cooperation and establishing a sincere atmosphere among the teachers positively affected their SWB. The views of some teachers were as follows:

I have worked at many schools in my 24-year career. I have been working at this school for 6 years. I can say [it is] the best school I have worked at. It is not crowded, the number of teachers is low, and all teachers know each other, which ensure a friendly atmosphere. We cooperate with the school administration. We have no problem reporting the materials we need to the school administration; the administration always helps us. Factors like these also keep me motivated.

The presence of a peaceful environment, our success in what we do, the appreciation of students, parents, and colleagues show us that we are on the right track and give us happiness. The requests for help from the individuals around our school also help us be motivated. (T2)
The close relationships between teachers were found to be related to the teachers’ well-being. The teachers stated that being a small population of teachers in school led to sincere relationships.

*We have a small number of teachers; this simply means all teachers know each other. We can communicate sincerely and effectively with our fellow teachers, and we can work in cooperation. We make some requests for provision of materials to the school administration. The school administration provides the necessary materials. Matters like this also positively affect my SWB.* (T4)

*SWB reminds me of having positive relationships with each other, and life satisfaction. In other words, I can say that it is a person’s point of view on life. It is a privilege to be able to look at life positively and see the positive aspects of the events experienced. I think people who can achieve this would have a high level of SWB.* (T3)

**Discussion, Conclusion and Recommendations**

The SWB of teachers is one of the prerequisites for a qualified education (Bashaireh & David, 2019). Çetin (2019) stated that there is a significant relationship between teachers’ SWB and occupational resilience. It can be inferred that teachers better adapt to challenging working conditions whenever they have a high level of well-being, which in turn, can improve their beliefs that their training is more efficient and will strengthen their job satisfaction. Therefore, it is important to investigate factors related to teachers’ SWB (Arslan, 2018). The current research showed that participating teachers regarded SWB as an important issue for their life satisfaction. In this study, family relationships, communication with refugee students, cooperation with parents, and working conditions were found to be the themes related to the participants’ well-being.

The first theme of the study was family relationship. This theme referred to the teacher’s good relationships with their family members. According to the teachers, if they had a positive relationship with their family members, they felt happy, which reflected on their job. Good relationships do not mean everything for SWB, but they are an essential element (Biswas-Diener, Diener & Tamir, 2004). Gülaçtı (2010) has found that perceived family support considerably predicted SWB. Therefore, teachers’ positive family relationships may make them feel happier and positively affect their daily relationships and professional behaviors. Similarly, Situmorang et al. (2019) supported these findings as there was a highly significant positive relationship between female teachers’ SWB and the variables gratitude, optimism, and work-family balance. Jalali and Heidari (2016) have specified that happiness and SWB are the strongest predictors of job performance of primary school teachers. It is expectable that individuals who have problems in their familial lives are unhappy, which is likely to adversely affect their SWB.
Another critical finding of this study was concerned with communication with refugee students. Almost all the teachers stated that the increased number of refugee students in their schools with the refugee migration in recent years influenced their SWB because they did not know how to conduct a culturally responsive education. All the teachers expressed that being unable to communicate with refugee students diminished their motivation for teaching and caused a feeling of inefficiency. Similarly, Üzar-Özçetin, Çelik, and Özenç-Ira (2020) found that teachers of refugees are unwilling to teach refugee students. These findings may indicate that teachers cannot effectively apply cultural education in their classrooms. Thus, they may find communication with refugee students challenging.

The third theme of the study was cooperation with parents. Some of the teachers stated that they formed WhatsApp groups upon the pandemic-induced transition to distance education, yet many parents wanted to get information about their children individually through private channels, and the repetition of the information given in the common groups for each parent harmed the SWB of the teachers. As parents intervened with educational processes over WhatsApp groups, it seems to have affected teachers' performance and SWB. It is certain that the positive relationships that teachers will have will lead them to meaningful integrity and they will be emotionally positive (Chan, 2010). In this sense, the deteriorated relations with parents over WhatsApp groups created for in-class communication prevented the teachers from feeling positive. In the last decade, many studies have been conducted on the nature of teachers' SWB and what affects their SWB. Poormahmood, Moayedi, and Alizadeh (2017) have investigated the relationships between psychological well-being, happiness, and perceived occupational stress among primary school teachers. They have concluded that occupational stress in teaching may lead to poor psychological well-being and reduce happiness in primary school teachers. If teachers have no good relationships with parents, teachers’ professional stressors may increase, which may diminish their teaching performance.

The last theme of this study was working conditions. The participating teachers stated that the relationships between their colleagues and the attitudes of administrators impacted their SWB. Most of the participants expressed that the school they worked at was not crowded, the teachers knew each other, and the school administration was open to cooperation. Similarly, Arslan (2018) stressed that a high level of well-being is associated with the successful functioning of teachers in the workplace. Additionally, the leadership style of school principals may be considered a factor shaping teachers' well-being at school and teachers’ emotional commitment thereto (Heidmets & Liik, 2014). Janovská, Orosová, and Janovský (2017) mention that the supportive behavior of the principal, which is defined as active participation, interest, determination, advising, emotional support, and appropriate information provision, is associated with well-being. Increased physical and psychological health and SWB of teachers is crucial in improving the overall atmosphere at schools. Furthermore, a high level of well-being is associated with additional benefits that enhance teachers' professional performance.
Schools should create a positive and healthy work environment that cares not only for the physical health but also for the psychological health of teachers, recognizes the teacher with signs of burnout, and provides stress-coping strategies for training or workshops (Hung, Lin, & Yu, 2016).

**Limitations**

This study had some limitations. Firstly, the sample size could be larger to provide a higher level of data saturation. Besides, the participating teachers had students of varying origins (i.e. Syrian, Afghan). Therefore, the sample of teachers was not homogeneous.

**Implications**

In this study, the refugees-related themes concerning SWB of teachers were found to be family relationships, communication with refugee students, cooperation with parents, and working conditions. This finding provides an implication for policymakers to prepare in-service training for the teachers of refugee children. It is obvious that there is a need for enhanced education to promote teachers’ SWB. Since SWB is a complex phenomenon, further studies should be conducted to gain deeper insights into the SWB of the teachers of refugees.

**Acknowledgment**

The authors declare that they did not receive any financial support for this study during the research and writing processes.

**Conflicts of Interest**

The authors declare that there are no conflicts of interest in the preparation and publication of this study.

**Ethical Considerations**

An ethical approval was obtained from the Ethics Committee to conduct the study (Project number: 2020-YÖNP-0047). Written and verbal consents were obtained from each teacher participating in the study.

**References**


The Analysis of the Relationship Between Internet Addiction and Loneliness in Science and Art Education Center (Bilsem) Students

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Abstract

The purpose of this study is to determine the relationship between internet addiction and loneliness levels of the gifted high school students studying at the Turkish Science and Education Center; the relationship analysis is carried out on the basis of different variables. As the goal is to present the current situation, descriptive survey model is preferred and used in the study. Internet addiction scale and UCLA (University of California, Los Angeles) Loneliness Scale are used as data collection tools. Unrelated groups t-test is used while analyzing the obtained data to determine if there is a meaningful difference between internet addiction and the variables. Kruskal Wallis H test and Mann Whitney-U test are preferred to see if there is a meaningful difference between the UCLA loneliness scale and the variables. At the end of the research process, it is found that the gifted high school students studying at the Science and Art Education Center didn’t have internet addiction; however, according to the findings, they experience a high level of loneliness. Finally, according to the findings of the research study, the variables of gender, daily internet use period, and parents’ education level didn’t cause any meaningful difference in the internet addiction level and in the loneliness state of the gifted students.

Keywords: The Gifted, Internet Addiction, Loneliness.

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Introduction

In today’s modern life, it is almost impossible to remove internet and technology from our life or try to continue a life without using it. Some of the reasons why the internet has become an indispensable instrument are; it allows reaching information without any kind of time limitation, it enables people to communicate with the world, it ensures easy access to daily life activities such as shopping, social media, and entertainment. Internet, an important part of social life and communication has been affecting human beings from a variety of dimensions and this impact seems to increase every day (Yıldız, 2017). Internet is a communication tool that has been commonly used in everyday life and the use area of this important instrument has been continuously increasing. As modern people started to continue their life on the internet, it has become an inseparable part of the life of most people.

In line with the increase in worldwide internet use, according to the data of the Turkish Statistics Institute in 2019, the internet use ratio of individuals between the ages of 16 and 74 was 75.3% in 2019, according to the data of the Turkish Statistics Institute in 2019 (TSI, 2019). According to the data of the same institute in 2019, while 81.8% of males between the ages 16-74 use the internet, 68.9% of females between the ages 16-74 use the internet. On the other hand, the same data indicate that while at-home internet use rate in 2018 had been 83.8, this ratio increased to 88.3% in 2019; similarly, while online shopping ratio in 2018 had been 29.9%, it increased to 34.1% in 2019.

The Internet is a new communication network affecting the world and combining different kinds of technologies. The increasing use of it on a daily basis and its existence in every field of life has increased the concerns about internet addiction (Erbaş, 2020; Ko, Yen, Yen, Lin and Yang, 2017). As people today cannot control the time they spend on the internet, their social, real-life relationships are negatively affected. The overuse of the internet not only causes ignoring daily activities and responsibilities but also increases depression, academic failures, and social isolation; these commonly observed negativities indicate that internet addiction is a serious problem that has serious impacts on a global scale (Young, 2017). The uncontrolled and unlimited use of the internet causes internet addition, and social life is neglected; these two significant results bring different kinds of problems together with them (Widyanto and McMurran, 2004).

The uncontrollable existence of the internet in every corner and at every moment of our daily life naturally causes the problem of internet addiction. Professionals describe the gifted as the ones who can show high performance in mental skills, who have special academic talent, creative thinking, leadership skills, visual, artistic and psychomotor skills (Uyaroğlu and Bülbin Aktı, 2016). Being highly gifted involves special cognitive, affective, and psychomotor skills in different fields; moreover, it is believed that it is a dynamic qualification and should be supported according to a specific plan and program (Gürlen, 2018). One of the most significant skills in gifted students is
creativity. According to Course (2015), rather than forming students as sole information consumers, the method of evoking creativity in the gifted combines the process of directing students towards being creative thinkers and technologically skillful individuals; moreover, individuals who want to be successful in today’s modern world should have the ability to adapt to the necessities of the 21st century (Blainea, Rulea, and Walkerb, 2019).

Determining and educating the gifted at early age should be an obligation and priority in the Turkish education system. One of the important duties of modern educators is to foresee and determine some exceptional skills and innate abilities of these children when they enter the wheel of education (Kelemen, 2020). It is considered that there are two goals of determining these special children at an early age. The first goal is to reach the maximum level in terms of cognitive growth and self-realization by supporting and developing the performance field and/or fields in the gifted student. The second goal is to establish a structure that enables students to solve the problems of modern civilization by producing information rather than consuming the already existing information (Renzulli, 1999). The Science and Art Education Center aims at practicing activities that support the research and discovery processes of the gifted. There are information technologies and software classes in the education program of the Science and Art Education Center (The Ministry of National Education, 2006). The gifted students make significant contributions to information technologies. The possible internet addiction problems of these students, resulting from the misuse of the internet, may harm their communication with other people in social life (Yavuz, 2018). It is necessary to design and develop mobile games that support the creativity of gifted individuals (Blainea, Rulea, and Walkerb, 2019). The gifted students’ preferences in terms of digital games mostly include mental games/brain teasers, and educational games that will contribute to their development (Sevgili-Koçak, 2019).

Internet addiction is a kind of habit that can be seen at any age and social level; the gifted children, however, are in danger in this respect as they have a high ability to use technology. In this respect, professionals in this field should be careful in directing these children towards using technology for productive purposes; they should prevent negative impacts of technology. The purpose of this research study is to analyze the relationship between loneliness and internet addiction of gifted high school students who continue education in the Science and Art Education Center, in terms of a variety of variables (gender, parents’ education level). It is believed that, as the variations in internet addiction of the gifted students is analyzed in this research, the obtained results will be efficiently used in preventive guidance, and personal and educational counseling researches, which are the parts of psychological guidance and counseling fields. On the other hand, researching the gifted students’ internet use that may lead to addiction and discussing the obtained results may contribute to creating awareness about the negative sides of the internet.
The purpose of this research is to analyze the relationship between loneliness and internet addiction of the gifted high school students, continuing education in the Science and Art Education Center, in terms of different variables (gender, parents’ education level).

1. What is the internet addiction level of Science and Art Education Center high school students?
2. What is the loneliness level of Science and Art Education Center high school students?
3. Do the internet addiction levels of Science and Art Education Center high school students vary according to the variables of:
   - Gender,
   - Daily internet use period,
   - Mother education level,
   - Father education level?
4. Do the loneliness levels of Science and Art Education Center high school students vary according to the variables of:
   - Gender,
   - Daily internet use period,
   - Mother education level,
   - Father education level?
5. Is there a relationship between the addiction level and loneliness of Science and Art Education Center high school students?

**Method**

**General Background of Research**

Survey model, one of the descriptive research methods is applied in this research study to reveal the relationship between the loneliness and internet addiction of high school students currently continuing education in the Science and Art Education Center. In descriptive research, the researcher describes an existing situation and reveals the existing phenomenon (Sönmez and Alacapınar, 2011). The survey model preferred for the research is a relational survey model, which aims at revealing the rate of co-change in two or more variables (Karasar, 2018). The relational survey model is used in line with the variables and goals of this research.

Internet addiction of high school students, continuing education in Science and Art Education Center, is analyzed in terms of different variables (gender, parents’ education level).
Sample of Research

The research group is made of 105 students who have completed the education in 2019-2020 semesters in the city of Sivas, Turkey. The students have been studying in the Science and Art Education Center in the city and they are in 9th, 10th, and 11th grades. The stratifying sampling method, one of the probability sampling methods, is chosen for the research. Stratified sampling is a type of sampling method in which the total population is divided into smaller groups or strata to complete the sampling process. The strata are formed based on some common characteristics in the population data. The purpose of this method is to reach the sampling based on the existence of strata instead of assuming that the sampling is pure and similar (Yıldırım and Şimşek, 2018). According to Çiğlı (1994), in-strata changes should be as homogenous as possible while inter-strata changes should be as heterogeneous as possible and the sub-groups should be accordingly determined (cit: Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz and Demirel, 2010).

Instrument and Procedures

Personal Information Form, Internet Addiction Scale, and UCLA (University of California, Los Angeles) Loneliness Scale are used as data collection tools.

Personal Information Form includes participant information about the gender, daily internet use period, and mother and father’s education level. Internet addiction scale was formed by Young in 1988. The Likert-type scale, designed for the individuals between the ages 12-17, involves 20 items; it was adapted to Turkish by Bayraktar (2001). The Cronbach’s Alpha reliability coefficient of the study is determined to be .91; the value of the scale in this research is determined to be .83. UCLA Loneliness Scale, aiming at determining the general loneliness of a given individual consists of 20 items. The scale is a type of self-assessment and was developed by Russell, Peplau, and Ferguson in 1978; it was adapted to Turkish by Yaparel in 1980. Demir reviewed the translation of the scale and completed validity and reliability studies of it. It was determined that the internal consistency coefficient of the scale is 0.96, while the test-retest correlation coefficient is 0.94 (Demir, 1989). Cronbach’s Alpha coefficient of UCLA loneliness scale in this research is 0.82.

Data Analysis

Unrelated groups t-test is used while analyzing the obtained data to determine if there is a meaningful difference between internet addiction and the variables. Kruskal Wallis H test and Mann Whitney-U test are preferred to see if there is a meaningful difference between the UCLA loneliness scale and the variables.

Results

Findings of the Science and Art Education Center High School Students’ internet addiction level are presented in table 1.
Table 1. Science and art education center high school students’ internet addiction levels

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>( \bar{X} )</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Addiction Levels</td>
<td>105</td>
<td>3</td>
<td>69</td>
<td>34.66</td>
<td>13.26</td>
</tr>
</tbody>
</table>

When table 1 is analyzed, it can be seen that the average point of Science and Art Education Center High School Students is 34.66. This value is below 50, which indicates that Science and Art Education Center High School Students are in the category of “Not Showing Any Symptoms” in terms of internet addiction level (Internet addiction levels are divided into three groups: Scale scores below 50 are defined as “Not Showing any Symptoms”, the scores between 50-79 are defined as “Limited Symptoms” and finally the scores over 80 are defined as “Pathological Internet User”).

Findings of Science and Art Education Center High School Students’ Loneliness Levels are presented below;

Table 2. Science and art education center high school students’ loneliness levels

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>( \bar{X} )</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness Levels</td>
<td>105</td>
<td>43</td>
<td>79</td>
<td>62.44</td>
<td>9.20</td>
</tr>
</tbody>
</table>

When table 2 is analyzed, it can be seen that the Science and Art Education Center High School Students' loneliness levels score average is 62.44. This value is between 61-80 score range, which indicates a “High” loneliness level in Science and Art Education Center High School Students (Scores between 20-40 are in the category of “Low”, scores between 41-60 are in the category of “Medium” and scores over 61 are in the category of “High” loneliness group level).

Findings of the Variations in Science and Art Education Center High School Students’ Internet Addiction Levels in terms of the variable of gender are presented below;

Kolmogorov-Smirnov normalcy was calculated for choosing the test to be used in determining the variations of Science and Art Education Center High School Students’ internet addiction levels in terms of gender; values determined in the test are summarized and presented in table 3.

Table 3. Kolmogorov-Smirnov normalcy test results for internet addiction scale scores of students in terms of gender

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Kolmogorov-Smirnov</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Z</td>
<td>sd</td>
</tr>
<tr>
<td>Internet Addiction Levels</td>
<td>Male</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>0.81</td>
</tr>
</tbody>
</table>

As can be seen in Table 3, internet addiction levels of Science and Art Education Center students have a normal distribution in terms of the variable of gender (Male students: Z=0.96; p>0.05 and Female students: Z=0.81; p>0.05).
The variations in the gifted high school students’ internet addiction level in terms of gender is calculated with the independent group t-test and the obtained results are presented in table 4 (Levene test is used for ensuring equalization between variances and the results are organized accordingly).

**Table 4. Independent t-test results for internet addiction scale scores of students in terms of gender**

<table>
<thead>
<tr>
<th>Score</th>
<th>Group</th>
<th>N</th>
<th>X̄</th>
<th>S</th>
<th>t</th>
<th>sd</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Addiction Levels</td>
<td>Male</td>
<td>53</td>
<td>35,19</td>
<td>10,31</td>
<td>0,411</td>
<td>87,538</td>
<td>.682</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>52</td>
<td>34,12</td>
<td>15,80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When table 4 is analyzed, it can be seen that $t(87,538)=0,411$ and $p>.05$; according to the results, it can be said that the variable of gender didn’t cause any meaningful change in the internet addiction levels of students.

Findings of the internet addiction level variation of Science and Art Education Center High School Students in terms of the variable of daily internet use period are presented below;

Shapiro-Wilk normalcy test is calculated for the test to be used for determining the variation in the internet addiction level of Science and Art Education Center Students in terms of the variable of daily internet use period. Science and Art Education Center High School Students’ internet addiction levels don’t distribute normally according to the variable of internet use period.

Kruskal-Wallis H test is used for analyzing the variation in Science and Art Education Center High School Students’ internet addiction levels according to the internet use period; the results are presented below in table 5.

**Table 5. Kruskal-Wallis h test results for internet addiction scale scores of students in terms of daily internet use period**

<table>
<thead>
<tr>
<th>Score</th>
<th>Internet Use Period</th>
<th>N</th>
<th>Rank Average</th>
<th>sd</th>
<th>$X^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Addiction Levels</td>
<td>Less than 1 hour</td>
<td>11</td>
<td>43,18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 1-4 hours</td>
<td>57</td>
<td>52,48</td>
<td>2</td>
<td>1,714</td>
<td>.425</td>
</tr>
<tr>
<td></td>
<td>More than 4 hours</td>
<td>37</td>
<td>56,72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in table 5, the difference between internet addiction level sorting average and daily internet use period groups sorting average isn’t statistically meaningful ($X2=1,714; sd=2; p>.05$).

Findings of the variation in the internet addiction level of Science and Art Education Center High School Students according to the variable of mother education level are presented below;

Kolmogorov-Smirnov normalcy test is calculated for the test to be used for determining the variation in the internet addiction levels of Science and Art Education Center High School Students in
terms of the variable of mother education level. According to the calculated results, Science and Art Education Center High School students’ internet addiction levels normally distribute according to the mother education level ($Z=1.11; p>.05$ for Primary/High school graduates; and $Z=1.04; p>.05$ for University and Higher education graduates).

Science and Art Education Center High School students’ internet addiction level variations according to mother education level are calculated with independent groups t-test and the results are presented below in table 6 (The variances aren’t equalized with Levene test and the findings are accordingly organized).

**Table 6.** Independent groups t-test results of science and art education center high school students’ internet addiction scale scores according to mother education level

<table>
<thead>
<tr>
<th>Score</th>
<th>Group</th>
<th>N</th>
<th>$\bar{x}$</th>
<th>S</th>
<th>$t$</th>
<th>sd</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Addiction</td>
<td>Primary-High School Graduate</td>
<td>49</td>
<td>35.80</td>
<td>13.98</td>
<td>0.822</td>
<td>103</td>
<td>.413</td>
</tr>
<tr>
<td></td>
<td>University or Higher Education Graduate</td>
<td>56</td>
<td>33.67</td>
<td>12.64</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When table 6 is analyzed, it can be seen that $t(103)=0.822$ and $p>.05$; students’ internet addiction levels don’t vary according to the mother education level.

Findings of the variation in the internet addiction level of Science and Art Education Center High School Students according to the variable of father education level are presented below;

Shapiro-Wilk normalcy test is calculated for the test to be used for determining the variation in the internet addiction levels of Science and Art Education Center High School Students in terms of the variable of father education level. According to the calculated results, Science and Art Education Center High School students’ internet addiction levels normally distribute according to the father education level ($Z=0.938; p>.05$ for Primary/High school graduates; $Z=0.986; p>.05$ for University and Higher education graduates).

Science and Art Education Center High School students’ internet addiction level variations according to father education level are calculated with independent groups t-test and the results are presented below in table 7 (The variances aren’t equalized with Levene test and the findings are accordingly organized).
Table 7. Independent groups t-test results of science and art education center high school students’ internet addiction scale scores according to father education level

<table>
<thead>
<tr>
<th>Score Levels</th>
<th>Group</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>S</th>
<th>T-Test</th>
<th>t</th>
<th>sd</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Addiction</td>
<td>Primary/High School Graduate</td>
<td>28</td>
<td>33.68</td>
<td>13.68</td>
<td>-0.454</td>
<td>103</td>
<td>1.651</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University or Higher Education Graduate</td>
<td>77</td>
<td>35.01</td>
<td>13.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When table 7 is analyzed, it can be seen that t(103)=0.454 and p>.05; students’ internet addiction levels don’t vary according to the father's education level.

Findings of the variation in the loneliness of Science and Art Education Center High School Students according to the variable of gender are presented below;

Kolmogorov-Smirnov normalcy test is calculated for the test to be used for determining the variation in the loneliness levels of Science and Art Education Center High School Students in terms of the variable of gender. The values obtained for this test are summarized and presented in table 8.

Table 8. Kolmogorov-Smirnov normalcy test results for the loneliness scale scores in terms of gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Kolmogorov-Smirnov</th>
<th>Z</th>
<th>sd</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td>.116</td>
<td>53</td>
<td>.071</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>.113</td>
<td>52</td>
<td>.098</td>
</tr>
</tbody>
</table>

When Table 8 is analyzed, it can be seen that Science and Art Education Center High School Students’ loneliness levels normally distribute according to gender (Z=.116; p>.05 for male students and Z=.113; p>.05 for female students).

Science and Art Education Center High School students’ loneliness state variations according to gender are calculated with independent groups t-test and the results are presented below in table 9 (The variants are equalized with Levene test and the findings are accordingly organized).

Table 9. Independent groups t-test results of science and art education center high school students’ internet addiction scale scores according to gender

<table>
<thead>
<tr>
<th>Score Levels</th>
<th>Group</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>S</th>
<th>T-Test</th>
<th>t</th>
<th>sd</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness</td>
<td>Male</td>
<td>53</td>
<td>61.72</td>
<td>8.63</td>
<td>-0.810</td>
<td>103</td>
<td>1.420</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>52</td>
<td>63.17</td>
<td>9.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 9, t(103)=-0.810 and p>.05; there is no variation in the loneliness state of students in terms of gender.

Findings of the variation in the loneliness of Science and Art Education Center High School Students according to the variable of daily internet use period are presented below;
Shapiro-Wilk normalcy test is calculated for the test to be used for determining the variation in the loneliness levels of Science and Art Education Center High School Students in terms of the variable of daily internet use period. It is determined that the loneliness level of Science and Art Education Center High School Students don’t normally distribute according to their internet use period.

Science and Art Education Center High School students’ loneliness state variations according to daily internet use period are calculated with independent Kruskal-Wallis and the results are presented below in table 10.

**Table 10.** Kruskal-wallis h test results of science and art education center high school students’ loneliness scale scores according to daily internet use period

<table>
<thead>
<tr>
<th>Score</th>
<th>Internet Use Period</th>
<th>N</th>
<th>Rank Average</th>
<th>sd</th>
<th>X^2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness Levels</td>
<td>Less than 1 hour</td>
<td>11</td>
<td>55.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 1-4 hours</td>
<td>57</td>
<td>52.36</td>
<td>2</td>
<td>0.118</td>
<td>.943</td>
</tr>
<tr>
<td></td>
<td>More than 4 hours</td>
<td>37</td>
<td>53.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in table 10, the difference between the loneliness level rank average and daily internet use period groups’ rank average isn’t statistically meaningful (X^2=0.118; sd=2; p>.05).

Findings of the variation in the loneliness state of Science and Art Education Center High School Students according to the variable of mother education level are presented below;

Kolmogorov-Smirnov normalcy test is calculated for the test to be used for determining the variation in the loneliness levels of Science and Art Center High School Students in terms of the variable of mother education level. The calculated results indicate that the loneliness levels of students don’t normally distribute according to the variable of mother education level (Z=1.62; p<.05 for primary/high school graduate and Z=.081; p>.05 for university and higher education graduate).

Science and Art High School students’ loneliness state variations according to mother education level are calculated with the Mann Whitney-U test and the results are presented below in table 11.

**Table 11.** Mann whitney-u test results of science and art education center high school students’ loneliness scale scores according to mother education level

<table>
<thead>
<tr>
<th>Score</th>
<th>Group</th>
<th>N</th>
<th>Rank Average</th>
<th>Rank Total</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness Levels</td>
<td>Primary-High School Graduate</td>
<td>49</td>
<td>56.26</td>
<td>2756.50</td>
<td>1212.50</td>
<td>-1.026</td>
<td>.305</td>
</tr>
<tr>
<td></td>
<td>University or Higher Education Graduate</td>
<td>56</td>
<td>50.15</td>
<td>2808.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As can be seen in Table 11, Mann Whitney-U Test is conducted to understand if there are any variations in Science and Art Education Center High School students’ scores from the loneliness scale according to mother education level; the obtained results indicate that there is not a meaningful difference between groups (Mann Whitney-U=1212.50; z=-1.026; p=.305).

Findings of the variation in the loneliness state of Science and Art Education Center High School Students according to the variable of mother education level are presented below:

Shapiro-Wilk normalcy test is calculated for the test to be used for determining the variation in the loneliness levels of Science and Art Education Center High School Students in terms of the variable of mother education level. According to the calculated results, the loneliness levels of students don’t normally distribute according to the variable of mother education level (Z=-1.026; p≤.05).

Science and Art Education Center High School students’ loneliness state variations according to mother education level are calculated with the Mann Whitney-U test and the results are presented below in table 12.

### Table 12. Mann whitney-u test results of science and art education center high school students’ loneliness scale scores according to mother education level

<table>
<thead>
<tr>
<th>Score Levels</th>
<th>Group</th>
<th>N</th>
<th>Rank Average</th>
<th>Rank Total</th>
<th>U</th>
<th>z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>University or Higher Education Graduate</td>
<td>77</td>
<td>55.90</td>
<td>4073.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in Table 12, Mann Whitney-U Test is conducted to understand if there are any variations in Science and Art Education Center High School students’ scores from the loneliness scale according to father education level; the obtained results indicate that there is not a meaningful difference between groups (Mann Whitney-U=1070.50; z=-0.054; p=.957).

Findings of the relationship between the internet addiction of Science and Art Education Center High School Students and their loneliness state are presented below:

Kolmogorov-Smirnov normalcy test is calculated for the test to be used for determining the relationship between the internet addiction of Science and Art Education Center High School Students and their loneliness state. According to the calculated results, the internet addiction levels of students don’t normally distribute according to their loneliness state level (Z=.077; p>.05 for internet addiction level and Z=.105; p<.05 for loneliness level).
Results of Spearman rank difference correlation analysis, used in determining the relationship between Science and Art Education Center High School Students’ internet addiction level and loneliness states are presented in table 13.

**Table 13.** Results of the spearman rank difference correlation analysis conducted for determining the relationship between internet addiction levels and the loneliness states of students

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Addiction Levels</td>
<td>105</td>
<td>-0.143</td>
<td>0.145</td>
</tr>
<tr>
<td>Loneliness Levels</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in table 13, Spearman Rank Difference Correlation analysis is conducted to determine the relationship between the internet addiction level of Science and Art Education Center High School students and their loneliness states. According to the results, there is not a statistically meaningful relationship between scores. On the other hand, according to Bursal (2017), there is a negative and weak relationship between these scores ($r_s=-0.143$; $n=105$; $p=0.145$).

**Discussion, Conclusion and Recommendations**

The purpose of this research is to analyze the relationship between the loneliness and internet addiction of the students studying at the Science and Art Education Center according to different variables (gender, parents’ education level). When the related literature is analyzed in the scope of this research study, it is determined that there is no domestic or foreign study directly focusing on the relationship between loneliness and internet addiction. The results of this study indicate that the gifted students studying at Science and Art Education Center don’t have internet addiction. When the literature is analyzed, it is observed that the gifted students studying at these centers between the ages of 12-17 have higher internet addiction scores when compared to the students between the ages of 9-11 (Yavuz, 2018). According to the results of the Turkish Statistical Institute, individuals between the ages of 16-24 use the internet more than the other individuals (Turkish Statistical Institute, 2019).

According to the second finding of the research the gifted students studying at Science and Art Education Center experience a high level of loneliness. Bayram and Gündoğmuş (2016) mention that according to their research study, the individuals who stand alone are more outgoing.

This research study’s results indicate that there is not a differentiation between internet addiction levels and gender of the gifted students studying at the Science and Education Art Center. When the related literature is analyzed, it is seen that Fariz and Sarıcı-Bulut (2019) determined that there is not a meaningful difference in the internet addiction level of high school students in terms of gender. There are studies in the literature supporting our finding of the inefficiency of the variable of gender’s impact on internet addiction (Bayraktar and Gün, 2007). Although it is determined that there isn’t a difference in internet addiction in terms of gender, it should be noted that the number of male students in the group of internet addicts is higher than that of females. On the other hand, there are
studies in the related literature showing that the number of internet addict male students is higher than the internet addict female students. The internet addiction level of males is statistically higher than the internet addiction level of females (Doğan, 2013). According to the research study of Derin and Bilge (2016), internet addiction is significantly affected by gender, which is a demographic variable. The results of their study show that internet addiction score average of males is higher than that of females.

When the findings of the research study by Bayram and Gündoğmuş are analyzed, it can be seen that internet addiction total score of male students is higher than the total score of female students. This result indicates that male students have a higher tendency to be internet addicts when compared to female students (Bayram and Gündoğmuş, 2016). In their study, Karasu, Bayır, and Çam (2017) determined that male students’ internet addiction level is higher than that of female students.

In this research study, it is found that there is not a differentiation between internet addiction levels and daily internet use period of the gifted students studying at Science and Art Education Center. In the study they completed, Bayram and Gündoğmuş (2016) mention that there is an increase in the tendency towards internet addiction in line with the increase in internet use period. This finding corresponds to the fact that Science and Art Education Center students aren’t internet addicts.

In this research study, it is determined that internet addiction levels of students of the Science and Art Education Center don’t vary according to the mother and father’s education level. The analyses in the literature similarly indicate that parents’ education level doesn’t cause any meaningful difference in internet addiction (Fariz and Sarıcı-Bulut, 2019). High school students’ internet addiction states don’t have any statistical difference according to parents’ education level. There are also some different results in the related literature about the relationship between internet addiction and parents’ education level (Doğan, 2013). There are many studies about the effects of parental behaviors (controlling the duration of internet usage, trying to deter, etc.) with similar thinking on internet addiction (Manap and Durmuş, 2021; Venkatesh, Sykes, Chan, Thong and Hu, 2019).

Loneliness status of the gifted students studying at Science and Art Education Center involved in this study don’t vary according to gender. However, there are different types of results in the literature. This research study’s results show that the perception of loneliness doesn’t meaningfully change according to gender. This finding indicates that the perception of loneliness may be related to personality types rather than the context of gender. On the other hand, it is thought that the feeling of loneliness generally experienced during puberty, maybe the reason behind the inefficiency of the gender variable in this study. As mentioned in the literature, individuals at the period of puberty mostly tend to feel lonely (Bayram and Gündoğmuş, 2016).
In this research study, it is found that the loneliness state of the gifted students at the Science and Art Education Center doesn’t vary according to their daily internet use period. There are different types of results about the issue in the literature. There are some studies in the literature, supporting the findings of our study. For instance, according to the study by Bayram and Gündoğmuş (2016), there is not a meaningful difference in feeling lonely and internet use period. In some studies, it is found that the individuals who have high scores in internet addiction scale feel lonelier (Durak-Batığün and Hasta, 2010).

According to the results of this research study, the loneliness state of the gifted students at the Science and Art Education Center doesn’t vary according to their parents’ education level. On the other hand, there is a negative and weak relationship between loneliness state and internet addiction levels of the gifted students included in this study.

The problem of internet addiction in Turkey is more commonly seen in the young and children, who are more efficient internet users. Because of this fact, parents are in search of centers that can treat the problems caused by internet addiction. Although this problem has been currently experienced in Turkey, Far-Eastern countries and the United States have gotten used to this situation; many treatment centers are serving the purpose of treating internet addicts (Bozkurt, Şahin, and Zoroğlu, 2016).

Features and necessities of the students living in the modern, fast-changing world should carefully be determined by the school counseling services. These services should contact the family, teachers, and friends of the students who tend to have internet addiction; in addition to this, preventive and intervening studies should be organized and carefully followed. As this research study is conducted in the Science and Art Education Center in the city of Sivas, Turkey, the topic of “Internet Addiction and Loneliness” can be studied in different cities; based on these studies, the state of Science and Art Education Center Students in terms of internet addiction can be generalized in Turkey and the results can be analyzed in a much broader frame. The problem of internet addiction has been increasing every day not only in Turkey but also all around the world. Public Service Announcements can be prepared and the general public can be informed, which can increase the consciousness about this modern type of addiction.

References


Civics Education in Higher Education: “Project Citizen” Sample

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Abstract

Project Citizen is an interdisciplinary curriculum for students, youth organizations, and adult groups that encourages citizens’ competent and responsible participation in local and state governments in about 35 countries worldwide. In this article, based on an example of Project Citizen activities done with university students, the application stages were examined, and the opinions of the students who applied were analyzed. The research was carried out with 38 students studying at the education faculty of a university in the United States during the 2018-2019 academic year. In the study, the projects prepared by the students in the activities were analyzed with the qualitative analysis program MAXQDA. As a result of the research, it was observed that the students needed comprehensive and detailed information at the beginning stage of Project Citizen, the projects they produced generally consisted of problems in their own lives, and they had the most difficulties in the public policy section while preparing projects. However, they found the project production process effective, efficient, and enjoyable.

Keywords: Project Citizen, Civics Education, Student Opinions.

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Introduction

The development of more vital civic education systems through successful pre-service teacher preparation, as schools provide concrete laboratories for teaching democracy, helps to provide the requisite building blocks to encourage civic effectiveness in society at large (Fine & Scheiner-Fisher, 2013). Projects in civics education give learners significant and constructive learning opportunities to help them understand their potential as committed and involved citizens and practice the responsibilities (Kopish, 2017). One example of teaching democratic citizenship is Project Citizen, which teachers have used in the U.S. and other countries for years.

The foundations of project-based education have been debated since the late 19th and early 20th centuries. The development of project-based education became one of the most significant features in the progressive era of American education. As a result, objectives, rational concepts, and the pedagogies of Project Citizen were inspired by progressive education theorists such as Francis Parker, John Dewey, and William Heard Kilpatrick (Adha & Yanzi, 2014). First implemented in California in 1992 and expanded into a national program in 1995, Project Citizen is a subject-oriented teaching practice to develop the knowledge, skills, and inclinations of democratic citizenship to participate in government and civil society (Vontz, Metcalf, & Patrick, 2000). It is an interdisciplinary curriculum developed by the Center for Civic Education in Calabasas, California, to prepare students for democratic citizenship. Since its inception in 1992, the project has gradually expanded and is now used in all 50 states in the U.S. and many countries worldwide (Adha & Yanzi, 2014). The program encourages students to monitor and actively engage in public policy to address various school or community issues and acquire the necessary social and intellectual capital for responsible democratic citizenship.

Project Citizen is a learning technique to inspire students in the classroom that can then be used as a model of civic behavior in everyday life (Adha & Yanzi, 2014). It aims to increase the authority of the individual to exercise the rights and responsibilities of democratic citizenship by examining the schools, the society, the environment in which students live, and an actual public problem (Balkute, 2006). This aim can be done by understanding the importance of active participation by the citizen and ensuring that democratic values and principles are internalized (Center for Civic Education, 2020a).

Budimansyah (2009) argued that the theoretical justification of Project Citizen is based on five principles that connect the philosophy of education and politics:

1. Democracy requires sovereignty, which means the active participation of responsible and informed citizens in the daily life of a community.
2. By participating in the life of a community, students learn how to become active and responsible citizens.

3. By exploring the problems and issues in their communities, students acquire knowledge about functioning democracy.

4. Although Project Citizen was initially designed for middle school students, some teachers use it for high school students.

5. Project Citizen provides students with a real-life communal experience that helps them develop civic knowledge, civic skills, and civic values to observe, monitor actively, and directly participate in public policy.

Project Citizen allows students to participate in government and civil society while engaging in critical thinking, dialogue, discussion, negotiation, cooperation, decision-making, and social action for public interests (Center for Civic Education, 1998).

By participating in Project Citizen, students share their understanding of democratic citizenship. Not only does Project Citizen promote students’ involvement in and awareness of the issues in their communities, but it also teaches them how to solve those problems. It helps them better understand the government’s principle, by the people, and for the people (Adha & Yanzi, 2014).

In the United States and many other countries around the world, teachers and students are encouraged to participate in competitive local, regional, state, or simulated national hearings, which is the final stage of Project Citizen. Although there is no obligation to participate in the program, competitions serve to motivate learning, reward success, and highlight the program to community members and potential financial backers. Some teachers who use Project Citizen prefer organizing in-school sessions and not participating in competitions. While many of these teachers state that academic competitions are generally rejected, others are concerned about including competitions in a rigorous curriculum. They feel pressure to move quickly to other issues (Stimmann Branson, 1999).

Research demonstrates that Project Citizen has a positive impact on the development of civic literacy and efficacy (Atherton, 2000; Liou, 2002, 2004; Morgan, 2016; Root & Northup, 2007; Vontz, Metcalf, & Patrick, 2000). Nairne (2008) found that the program was well-received by educators in a survey of teachers who engaged in Project Citizen training. Trisiana (2015) concluded that the implementation of the Project Citizen model in high school civic education generated effective reinforcement and intellectual attitudes that affect social attitudes, social skills, spiritual attitudes based on the competence of civic education, civil awareness, civic skills, and civic disposition.

Researchers noted that Project Citizen is an effective vehicle for addressing various civic goals in elementary and secondary education. There is, however, a gap in empirical research about efficient ways to introduce Project Citizen in teacher education curricula and programs. This gap
mainly concerns Social Studies/Social Sciences Education programs that prepare social studies teachers for elementary and secondary schools (Daly et al., 2010). Research among pre-service teachers can help develop specific pedagogies and curricular devices that will trigger further interest among social studies education professionals to include Project Citizen in their curricular and extracurricular practices.

**Purpose of the Research**

The purpose of this study was two-fold: a) to examine and describe the introduction of Project Citizen as one of the project-based techniques available to pre-service teachers in teacher education programs in the United States, and b) to investigate pre-service teachers’ opinions about Project Citizen at various stages of its introduction. The following research questions guided this study:

1. How did the instructor introduce Project Citizen to pre-service teachers?
2. How did pre-service teachers determine the theses of their projects and present the final projects in class?
3. What were pre-service teachers’ opinions about the preparation of Project Citizen?

**Method**

**Method, Data Collection, and Analysis**

Qualitative research data were collected through observations, document and artifact analyses, and interviews. The first and second researchers observed classroom instructions and pre-service teachers’ performance during two courses: “Social Studies Methods in Secondary School” and “Social Studies Methods in Elementary School.” The observation lasted for 15 weeks (one semester) and was conducted in classrooms on campus. Researchers kept field notes that they analyzed after every class. The limitations noted for participatory observation (Patton, 2002) were also present for this study. However, after the first week, the coherence between the class and the observer-researcher was achieved, and it was thought that it was not a problem to be a guest participant in the course in the following weeks.

Document and artifact analyses included course syllabi, lesson plans, various written assignments, and visuals that the instructor and pre-service teachers prepared for Project Citizen.

Semi-structured interviews were conducted with five participants. Each interview lasted approximately 30-35 minutes and was audio recorded. Audio recordings were transcribed using “Dragon Professional Software,” and transcripts were sent to participants to review for accuracy. All interviews were scheduled in advance, and the place of the interview was selected based on participants’ requests.
To ensure the validity and reliability of the results, researchers consulted experts about the interview protocol and data collection. Data collected from various sources were triangulated to ensure internal validity.

**Participants**

Thirty-seven participants were recruited through purposeful convenience sampling. They included 12 pre-service teachers who were enrolled in a secondary social studies methods course and 25 pre-service teachers who, at the time of the study, were enrolled in an elementary social studies education methods course. Participants were informed about the purpose of the study. All participants consented to participate by signing consent forms. Five participants volunteered to be interviewed about their opinions about the preparation of Project Citizen.

**Research Implementation**

After reviewing relevant literature, researchers contacted the Department of Curriculum and Instruction at Purdue University (West Lafayette, Indiana, U.S.), which administers several teacher education programs, and received permission to conduct the research. The research was conducted after approval by the Purdue University Institutional Review Board (IRB).

All participants were pre-service teachers who took elementary and secondary social studies methods courses at the study time. The implementation of the research was completed in the second half of the spring semester. The students were given the assignment to prepare projects as required by the course syllabus. They submitted their progress reports to the instructor every week. The projects’ presentations completed by the students were presented within the scope of the course in the last five weeks. They were discussed and evaluated in the classroom environment.

The purpose of assigning project tasks related to democratic participation to prospective teachers as an out-of-school activity is to raise teacher candidates as citizens involved in democratic participation processes and to enable them to do such activities as teachers while performing their profession. Project Citizen is a platform that tries to bring students together within the scope of social responsibility at every step from primary school to university.

The process was explained to the students by the instructor before the research as follows.

**1. Explanation of the project, its objectives, and outcomes:** The instructor explained the advantage of group projects in general. He particularly emphasized the importance of group projects in the development of civic knowledge and skills. Then he explained what public policy was and the importance of engaging students in monitoring and developing public policies that would benefit communities and the public good. He also asked students to give examples of a public policy. He then explained that the purpose of Project Citizen is to teach students how to monitor and develop public
policy, and the outcome of the project would be an analysis of a specific public policy and an action plan for how this policy might be implemented.

2. Identification of the problem: Students selected a problem in their community to study, analyze, and develop an appropriate public policy to solve. The instructor suggested brainstorming to identify the problem and recommended multiple ways of discovering problems that concern the community (T.V., printed media, chats with friends or neighbors, etc.). Students used “Problem ID and the Analysis form” to document their decisions (see Appendix 1).

3. Researching the problem: Inquiry as a theoretical and practical basis of research. Throughout the project, the instructor demonstrated the importance of reflective inquiry as a theoretical and practical tool to research the problem, develop the solution, and implement the solution in practice. The inquiry process includes several steps, each of which is vital for developing students’ sense of democratic citizenship and responsibility. These steps are:

   Gathering information about the problem and searching for alternative solutions;

   Analysis of the collected data and testing the application of possible solutions in a given social, cultural, and political environment;

   Develop an action plan based on collected data regarding legal issues, democratic principles, and cultural environment.

   To implement the project, and students were split into four groups. Each group was responsible for an element of the project:

   Group 1: Explanation of the problem

   Group 2: Alternative solutions to the problem

   Group 3: New solution of the problem

   Group 4: Development of action plan

   Each group member was encouraged to actively participate in searching for information relevant to her/his group. Students were told to use critical thinking during data gathering by asking the following questions:

   Is this information accurate?

   How do you know?

   Could you show me the evidence?

   Is the evidence reliable?
The collected data were included in portfolios. The collection of group portfolios constituted a project portfolio. This portfolio was the critical document of the project. In making a portfolio, students collaborated to put ideas together (Iwan, Rusli, & Ruslan, 2018).

4. Presentation of the projects: Students present their portfolios at mock hearings. These can be mock hearings of any legislative body, from a school board or city council to mock congressional hearings. In presenting the portfolio, each student has a responsibility. Students from other groups or classes can attend their peers’ presentations and serve as the committee, board, or council members. After presentations, students politely ask questions to clarify the information presented. Students are prepared to listen to the responses to questions posed by other groups (Iwan, Rusli, & Ruslan, 2018). A portfolio is usually presented in the form of a poster that consists of four parts related to each group (Center for Civic Education, 2020b):

- Panel 1: Explanation of the Problem
- Panel 2: Alternative Solutions
- Panel 3: Our Solution/Public Policy
- Panel 4: Plan of Action (see Appendix 2 for poster samples)

The Roles of the Researchers

The first researcher developed the project, reviewed literature, collected data through observations, text analysis, and interviews, developed an interview protocol. The second researcher obtained IRB approval and served as the course instructor. The third researcher analyzed the data by MAXQDA.

Findings

The instructor conducted lessons in two different groups in a similar way with different participants. The projects developed by teacher candidates were examined and evaluated. They were found appropriate both thematically and in terms of the number of participants. During the course, students developed ten projects. Each week, 2-3 projects were presented in class. The presentation time of each project was 12-15 minutes and depended on the number of questions raised after the presentation.

The projects developed and presented by the participants are defined as P1-P10. Project topics were:

- P1 transportation problem at the university with the title of “Ride, Walk or Run.”
- P2 brought up a social problem with the title of “Support Veterans.”
• P3 projected the accommodation problem on campus with the title of “Housing at Purdue.”

• P4 projected the transportation problem with the title of “We Need Tunnels.”

• P5 projected the lecture time problem with the title “7:30 Classes: You Snooze You Lose.”

• P6 was about state laws that ban alcohol on Sundays with the title “Blue Laws Make Me Blue.”

• P7 projected the problem of quality nutrition on campus with the title of “Chick-Fil-A in the Union.”

• P8 was about the transportation problem in winter with the title of “Too Much TCE This Won’t Suffice.”

• P9 discussed the problem of not having course standards for the College of Education under the title of “Universal Lesson Plan.”

• P10 was about nutrition problems in university dining halls under the title of “Purdue Dining.”

Content information of these projects was analyzed and visualized in the MAXQDA qualitative analysis program, supported by observation and interview data, and presented below as five themes:

• Title of the Projects

• Explanation of the Problems

• Alternative Solutions

• Our Solution/Public Policy

• Action Plan, Possible Solution
As seen in Figure 1, most of the projects developed (except P2) are related to the problems faced by students in their own lives. Since the participants are students, they have developed projects for nutrition, transportation, accommodation, lesson hours, and the content of lessons due to their social roles. As stated in the observation notes, the project topics were determined by brainstorming as a result of the joint decisions of students. While Student 1 (S1) expressed his opinion as “I think the hardest part of a project is choosing the topic sometimes,” Student 3 (S3) emphasized that determining a topic is more difficult when working with a group.
Figure 2: Explanation of the Problem

Figure 2 shows how problems are stated in the portfolios. One of the most critical topics in the projects is identifying the problem and justifying or explaining it. While P1 and P2 do not explain the problem sufficiently, P5 (early course hours) revealed the issue with data regarding health and mental clarity. Similarly, in other projects, the definition of the problem and its justification is given in detail, supported by visuals supported by data. The researcher’s observation data on P10 supports this: “The project is about the unhealthy dining options on campus, and they said they are uncomfortable about this situation. First-year students cannot live in dorms if they do not have a meal plan. They also gathered information from a national health source. Women need 2000 calories, men need 2500 calories, and they gathered information that people on campus have 3,121 calories on average. They also stated that if a student does not have a meal plan, it is 10 dollars per person per meal. It shows that detailed problem definition has been made.” S2’s view saying that “gathering data and information to define the problem, sometimes it gets tedious” is vital in terms of emphasizing that defining the problem requires intensive research.
Alternative solutions are usually solutions to the problem that are suggested and implemented elsewhere. They help students see alternatives to current public policy and provide examples of how elements or whole alternative policies can be applied to the discussed problem. Figure 3 helps us better compare various alternative solutions suggested by various groups. Not all examples are similar in content. P5, for example, only includes the subject as a title. P9 does not demonstrate any information except a form. P6, on the other hand, turned to solutions. According to field notes, the most confusing part that was difficult to understand was the concept of public policy. The instructor had to explain what public policy was at the beginning of each lesson.

As P3 is the researcher’s observation, notes states, “The project is about on-campus housing. The student started to explain how expensive the housing of students is. The other student started to explain Indiana state university prices. After the presentations, one of the students has questions. Presenters have some answers to them to make it clearer. On-campus housing is expensive here at Purdue. The presenter said that with a meal plan, he is saving about 10,000 USD per year. The instructor said he paid over half of its price when he was a graduate student at Purdue. Presenters also explained about the student loans. The instructor offered to the presenters that their students be more specific in their presentations; in that way, the projects would be better to understand.” Instructor mediation and examples play an important role in clarifying the purpose of various elements of the project. They also provide an opportunity for students to negotiate and interpret their own experiences.
As it follows from Figure 4, action plans are usually prepared by writing official letters to the authorities regarding the problems, collecting signatures from students, and taking videos about the problems and sharing them. From field notes: “Instructor said that the most important part of the projects was the action plan. It presents a combination of collective decisions made based on all collected information. It also requires a clear understanding of the structure of a given community.” Students were serious about this part of the project. For example, Student 5 (S5) said: “It is a bit difficult to prepare this section individually because it requires discussing and producing different ideas.” Student 3 (S3): “It was very instructive to prepare this section as a group.”
The most important aspects of the action plan, as we can see in Figure 5, are clarity, ability to be implemented, and adherence to laws and constitutional principles. Implementing an action plan is evidence of students’ understanding of their role as citizens in a democratic society. Student 10 (S10) stated in P10, “Democracy is important because it allows people to have a voice in their community. It means that as citizens, people have the opportunity to recognize when something needs to be changed and take action.” The ability to speak to authorities, monitor and change unsuccessful public policies, and make their voices heard is democratic citizenship in action. Student 2 (S2) and Student 5 (S5) said that any problem could be overcome if people actively participate in democratic processes.

Discussion, Conclusion and Recommendations

Project Citizen is a participatory citizenship program to engage students in monitoring public policy, solving community problems, and promoting political efficacy (Rekow Walker, 2015). It is also an educational device used to develop civic awareness, civic skills, knowledge, and values and educate responsible politicians passionate about good government and mature civil society. The Project Citizen curriculum encourages learners to participate actively in government and civil society to solve problems at school or sharpen social and intellectual intelligence, which are very important for citizenship’s responsible democratic structure (Trisiana et al., 2015).

The study demonstrated that in the process of preparation and presentation of Project Citizen, pre-service teachers applied critical and analytical thinking skills, information search skills, critical
literacy skills, and other skills relevant to the development of inquiry. In general, pre-service teachers expressed positive opinions about the project, curricular and pedagogical tools they used, and new knowledge they acquired during the preparatory work. This explanation is consistent with the results of Fry & Bentahar’s (2013) study that demonstrated that high school students had positive perceptions of Project Citizen and reported improved understanding of civic duty and civic responsibility. Fry & Bentahar (2013) also outlined the importance of specific learning experiences that helped students develop civic knowledge, skills, and dispositions in Project Citizen.

Observations and interviews confirmed that students generally enjoyed doing the projects. Their interest was stimulated by the fact that they addressed the problems that were close to their everyday lives: They developed projects about meal plans, campus transportation, and accommodation on campus, lesson hours, and the content of lessons. The study demonstrates that students are sensitive to the problems in their environment. From this point of view, Project Citizen makes them confident about their abilities to solve their problems because it provides the tools to solve them.

Participants noted that the most difficult conceptual part of the project was realizing multiple components of public policy. It confirms the findings of other authors that underscored the importance of developing critical thinking skills related to understanding public policy (Fitzgerald, 2020). Observing participants’ preparation and presentations of the project, we noticed that students relied heavily on their own experiences when they discussed possible solutions to the problem and action plans. We believe that such personalization of decision-making is critically important: Project Citizen Participants “rehearsed” self-governance as responsible citizens.

According to the interviews, participants reported acquiring knowledge and academic growth triggered by work on projects. These reports are consistent with other studies that found improved participants’ academic abilities associated with civic engagement and engagement in Project Citizen (Fry & Bentahar, 2013). Although Fine and Scheiner-Fisher (2013) concluded that Project Citizen did not demonstrate a significant impact on participants’ perceptions about the components they will use in their potential classrooms, the pre-service teachers still found many experiences worth including in citizenship education.

Participants were able to select topics that they or their peers considered of high importance. The ability to select and discuss these topics transformed to heightened interest in participating in Project Citizen. This opportunity confirms findings by Fine and Scheiner-Fisher (2013), who emphasized the importance of pre-service teachers’ implementation of civic education initiatives that they can later demonstrate to their students.
By the publishing principles of this academic paper and based on the results of this study, we would like to make the following recommendations that may prove helpful for both researchers and practitioners:

- We suggest that educators include Project Citizen in their curricula, particularly citizenship education curricula, as an activity application model to hone students’ cognitive, affective, and psychomotor abilities in the learning process (Sulistyarini, Utami, & Hasmika, 2019).
- Each Project Citizen presents a unique set of activities, including topics and procedures that students undertake in preparation and presentation. It will be beneficial if students learn about past projects before they develop their own.
- It is recommended that the educators who will implement Project Citizen for the first time benefit from the experiences of experienced educators have a pre-implementation interview with them and, if possible, make a conversation to gain familiarity about the difficulties (such as understanding public policy) and easy aspects of the process.
- Although Project Citizen is applied in various countries in the literature, the scarcity of studies examining student products and opinions draws attention. For this reason, there is a need for new studies that examine student views on Project Citizen with participants from different countries. Better information about the efficiency of this activity can be obtained by providing data diversity.

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3. IRB (Institutional Review Board) approval of this research was obtained from the Purdue University (Indiana/USA) Human Research Protection Program on 03/11/2019 with number 1902021706.

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APPENDICES

Appendix 1: Problem Identification and Analysis Form

Name of group: ……………………………………………………………………………………………

Members: ……………………………………………………………………………………………

Date: ………………………………………

The problem statement: ………………………………………………………………………………

1. Is this a problem that you and other people in your community think is important? Why?

2. What level of government or governmental agency is responsible for dealing with the problem?

3. What policy, if any, does the government now have to deal with this problem? If a policy does exist, answer the following questions:
   • What are its advantages and disadvantages?
   • How might it be improved?
   • Does this policy need to be replaced? Why?
   • What disagreements, if any, exist in your community about this policy?

4. Where can you get more information about this problem and the positions taken by different individuals and groups?

5. Are there other problems in your community that you think might be useful for your class to study? What are they?
Appendix 2: Portfolio Samples