The Effect of Pre-Service Teachers’ Beliefs on Behavior and Instructional Management on Their State of Liking of Children*

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Abstract

The aim of this study was firstly, to determine the state of pre-service teachers’ liking of children and their belief in behavior and instructional management (BIM), secondly, to examine them in terms of various variables and finally, to find out the effect of their beliefs on BIM on their state of liking child. This study was designed through correlational survey model which is one of the quantitative research methods. As a result, pre-service teachers' state of liking of child was high. Their belief in behavior management was more interactionist than their beliefs on instructional management and their beliefs on BIM and their states of liking of child differed in terms of some variables. Moreover; their state of liking of child related with their belief in instructional management significantly and their beliefs on BIM together explained %16 of the total variance of their state of liking of children. The attitudes of pre-service teachers to children and their beliefs on BIM should be perceived as professional attitude and value rather than personal feature.

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Keywords: Beliefs on behavior management, belief in instructional management, liking of children, pre-service teachers

1. Introduction

Education and instruction is to enable children to learn the knowledge and skills needed to sustain their lives and to make them feel valuable. Most of the time, they do not have concrete data to understand that they are valued, but they deduce from the behavior of the people they spend time with. Two of the factors that affect behavior are beliefs and attitudes. Therefore, it can be asserted that beliefs of pre-service teachers in the
management of behavior and instruction have an effect on their liking of children and on making children feel valued.

Children spend most of their time in the classroom. It can be said that whether children's time in the classroom is effective and productive or not depends on the quality of classroom management. Classroom management involves all the ideas that will benefit the children's learning and socialization (Williams, 2009). It is the responsibility of the teacher to ensure the management of the curriculum and the classroom environment that the children can use to fullest extent of their capacities (McLeod, Fisher, & Hoover, 2003; Marzano, Marzano & Pickering, 2003). Recent studies indicated that almost the most powerful factor in student learning is classroom management (Martin, Yin and Mayall, 2007). Effective teaching and learning cannot take place in a poorly managed classroom. Although the effect of this factor on student achievement is clear, it is not simple how the teacher will provide such influence. Classroom management is a comprehensive structure. This structure has three factors: instructional management, people management and behavior management. Instructional management involves such activities as monitoring of students' work, organizing daily activities and distribution of equipment; behavior management consists of management of unwanted behavior and people management includes student-teacher relationship (Martin, Yin & Baldwin, 1998). Classroom management can be considered as a two-factorial structure (Martin et al., 2007) owing to the fact that behavior and people management are the human aspects of class management; the management of instruction is based on the teaching process (Martin et al., 1998).

There is no single best way and model to manage a class in an effective way because there is not a single model that can address the wide range of challenges and conditions teachers face (Ming-Tok & Wai-Shing, 2008). Teachers need to understand, think, experiment, and internalize the theories that shape the students' academic and social learning (Curtiss & Williams, 2009). The method teachers choose to manage the classroom also arises from the system of their values and priorities to participate in educational functions (Hall, Quinn & Gollnick, 2017). In effective teaching, classroom management beliefs play an important role (Martin et al., 1998; Gencer-Savran & Çakırdoğlu, 2007). Although a teacher uses different methods for students' needs at different times, an approach is usually more dominant in the teacher's behaviors (Hoang, 2009). Teachers' approaches are based on their beliefs about development of children (Martin et al., 2007) or the nature of desired and undesired behaviors (Martin & Baldwin, 1992). Furthermore, Richardson (1996) states that beliefs stem from personal experiences, schooling and instructional experiences, and knowledge experiences. The teacher's different beliefs are reflected in the discipline, communication and teaching strategies as well as their understanding of how best to achieve classroom management and student participation (Martin et al., 1998).
Belief is based on evaluation and judgment; the information is based on an objective fact (Pajares, 1992). According to Wolfgang and Glickman (1980), there are three categories of belief in how children grow, develop, and learn: these categories are interventionist, interactionist and non-interventionist beliefs, as shown in Figure 1.

Figure 1

<table>
<thead>
<tr>
<th>Interventionist</th>
<th>Interactionist</th>
<th>Non-interventionist</th>
</tr>
</thead>
</table>

(cT)  

\( c \) = child low in power  
\( T \) = Teacher high in power  
\( t \) = teacher low in power  

\( C \) = Child high in power

Figure 1. Wolfgang and Glickman’s Teacher Behavior Continuum (cited in Tauber, 2009, p.38).

Figure one implies that an interventionist teacher does not believe that students have the inner capacity to decide logically. The rules are pre-established and the results are imposed on. In this approach, the teacher has control power through techniques such as reinforcement, modeling, and physical restraint (Onwuegbuzie, Witcher, Filer & Downing, 2000). The most important sources of power are reward and coercion (Levin & Nolan, 1991). The interactionist teacher believes that the environment and the students shape each other (Martin et al., 1998). The interactionist approach is at the mid-point of the interventionist and non-interventionist approaches. The teacher in favor of this approach uses techniques, which satisfy both parts (Glickman & Tamashiro, 1980). In an interactionist approach, responsibility is shared between the teacher and the student (Levin & Nolan, 1991). A non-interventionist teacher believes that students have the ability to direct their behaviors to themselves and they want to do the best and the teacher has an empathic, supportive role. During the process, the teacher has less power but the student has more (Onwuegbuzie et al., 2000). The philosophical and psychological beliefs of those who adopt this approach are based on a humane or student-centered approach. The techniques they use are non-verbal movements, individual interviews, and “I” language messages (Levin & Nolan, 1991).

In addition to beliefs, expectations and perceptions are another factor that influences behaviors (Mueller, 1986). A person’s attitude towards children is the basic belief in children to be together with them (Barnett & Sinisi, 1990). It can be said that one of the professions that spend a large part of their time at work with children is teaching. Since the raw material of educational organizations are students (Bursalioglu, 2005). Pre-service teachers state that a condition of effective teaching is to liking of children and be in with them (Lasley, 1980). Working with children, serving the community, the desire for continuous learning and the effect of their own family or teachers are among the most
common reasons for choosing the teaching profession (Marso & Pigge, 1994). Jantzen (1981), conducted a lot of research on the reasons for choosing this profession with pre-service teachers in 1946, 1949, 1951, 1956 and 1979. The researcher stated that pre-service teachers choose ever-increasingly this profession due to their love for children, the influence of their former teachers and her professional ethics rather than the attractive working schedule, the sufficient income security, the influence of their families, the obligations to the community, the quality of the pension system, the ease of getting a teacher position and the security of the job.

Liking of children for teachers requires that they are able to protect children, to communicate with them well and to feel empathy with them and always to support them (Ercan, 2014), to love them unconditionally and to have knowledge about child development (Arslan, 2014). Teacher's liking of children is one of the main factors of teacher-student interaction (Veenman, 1984). In the field of attitudes and values, which are one of the areas of teacher competence published by MoNE (2017), there is an item which teachers should value all of their students as both a human and an individual. Furthermore, liking of students both personally and professionally is an important factor that motivates teachers to go to work and makes them successful (Blatchford, 2017).

Beliefs and attitudes are important concepts in understanding the teachers' thinking processes, their classroom practices, and their way of learning to teach (Richardson, 1996). The quality of the attitude of the teachers towards students affects the students' attitude towards their friends (Hughes, Cavell & Willson, 2001) and their teachers (Ugurlu, 2013). There are some researches on liking of children of teachers and pre-service teachers (Cimen-Kabakli, 2015; Ercan, 2014; Iman, 2014; Ugurlu, 2013; Yazici, 2013; Gelbal & Duyan, 2010) and on the beliefs of teacher and pre-service teachers about classroom management in Turkey and on abroad (Martin, Yin & Mayall, 2008; Ozyildirim & Ozyildirim-Gumus, 2019; Savran-Gencer & Cakiroglu, 2007; Martin, Yin & Mayall, 2006; Gurcay, 2005; Savran & Cakiroglu, 2004, 2003; Martin, Yin & Baldwin, 1997; Martin & Yin, 1997). However, in the literature, there is no study investigating the relationship between these two issues. Pajares (1992) stated that the beliefs of teacher and pre-service teacher could be investigated in a way that current researches have been not and could not be done and if this research was conducted validly and reliably, it would be valuable. O’Neil and Stephenson (2011) also draw attention to the need to investigate specific contexts and beliefs that direct behaviors of teachers and students.

1.1. Aim of the research

The aim of this study was to determine the relationship between liking of children of pre-service teachers and their beliefs on behavior and instructional management. For this purpose, the following research questions were sought:

1. What was the pre-service teachers’ state of liking of child?
2. What were the pre-service teachers' beliefs on behavior and instructional management?

3. Were there any significant differences about pre-service teachers’ state of liking of child to their gender, age and program variables?

4. Were there any significant differences about beliefs on behavior and instructional management of pre-service teachers to their gender, age and program variables?

5. Was there a significant relationship between pre-service teachers' state of liking of child and their beliefs on behavior and instructional management?

6. What extent to be the effect of pre-service teachers' beliefs on behavior and instructional management on their state of liking of child?

2. Method

In this part of the study, the detailed information on research model of the study, its population and sample, instruments, data analysis process and validity and reliability were presented respectively.

2.1. Research Model

This study was designed through correlational research model. As Fraenkel & Wallen, (2006, p.335) stressed well, correlational research is sometimes referred to as a form of descriptive research because it describes an existing relationship between variables. Through this model, the degree of relationship between two or more variables; whether these variables covary with and how one or more variables enables to predict another variable could be determined (Karasar, 2011; Leech, Barrett & Morgan, 2005). This research model was non-experimental and it was a cross-sectional design. One of the strength of this model is that it enables to collect all of the data in a short period of time (Robson, 2011).

2.2. The Population and Sample

The population of the study consisted of fifty hundred and thirteen first cycle (daytime) pre-service teachers who were studying at senior grade in the education faculty of Akdeniz University, which is a state university in 2017-2018 academic years. Pre-service teachers attending elementary mathematics, science, primary school, preschool, Turkish language, social sciences and English language teaching programs were included.

The research data were collected from the entire working population. Four hundred and sixty pre-service teachers were given the questionnaire and Four hundred and twenty questionnaires were collected back. Twenty-five questionnaires weren’t included to the analysis file because of the missing data and the analysis were conducted on data received from three hundred and ninety six pre-service teachers.
Table 1. Demographic Information of Working Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>f</th>
<th>%</th>
<th>Variable</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
<td>141</td>
<td>35.60</td>
<td>Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>255</td>
<td>64.40</td>
<td>Turkish teaching</td>
<td>70</td>
<td>17.70</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>Pre-school teaching</td>
<td>52</td>
<td>13.13</td>
</tr>
<tr>
<td>21 and below</td>
<td>120</td>
<td>30.30</td>
<td>Primary school teaching</td>
<td>57</td>
<td>14.39</td>
</tr>
<tr>
<td>22</td>
<td>151</td>
<td>38.14</td>
<td>Elementary mathematics</td>
<td>28</td>
<td>7.07</td>
</tr>
<tr>
<td>23 and above</td>
<td>125</td>
<td>31.56</td>
<td>English language teaching</td>
<td>61</td>
<td>15.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Social sciences teaching</td>
<td>71</td>
<td>17.92</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Science teaching</td>
<td>57</td>
<td>14.39</td>
</tr>
</tbody>
</table>

As seen in table 1, it was observed that the working group included 141 male and 255 female pre-service teachers. Furthermore, 120 pre-service teachers were at the age of 21 and below, 151 of them were 22 years old and 125 of them were at the age of 23 and above. Finally, 70 pre-service teachers were studying at Turkish teaching, 52 of them were studying at pre-school teaching, 57 of them were studying primary school teaching, 28 of them were studying at elementary mathematics teaching, 61 of them were from English language teaching, 71 of them were from social sciences teaching and 57 of them were from science teaching programs.

2.3. Instruments

In this research, a three-part questionnaire was used as a data collection instrument. In the first part, there were some questions about the demographic information (gender, age, program) related to the research problems. In the second part, “Barnett Liking of Children Scale” (BLOCS) and in the third part, the “Behavior and Instructional Management Scale” (BIM) were included. The detailed information of the scales including the validity and reliability analysis were presented below.

2.3.1. Barnett Liking of Children Scale

“Barnett Liking of Children Scale” was developed by Barnett and Sinisi (1990) to determine attitudes towards children. It consisted of fourteen items. The scale consisted of a single factor originally. The scale was designed as 7-Likert type (ranging from 1 = strongly disagree to 7 = strongly agree). Four of the items (items 3, 6, 10 and 13) were reversely coded. The evaluation of the scale was based on calculating the sum of the scores given to the items. It could be asserted that the more the calculated score comes closer to 98, which is the highest score, the more liking of children of the participants had. The scale was first adapted to Turkish by Duyan and Gelbal (2008). As a result of the analysis they conducted for validity and reliability, it was confirmed that the scale had one factor, Cronbach’s Alpha coefficient of the scale was found to be .92. Moreover, the model-fit values
of the scale were calculated $\chi^2=2.58$ sd, $p=.000$, $\chi^2/sd=2.58$, RMSEA=.071, NNFI=1.00 CFI=1.00, NFI=1.00 and AGFI=.99 through confirmatory factor analysis results.

In order to verify the reliability and validity of the scale for this research, Cronbach’s Alpha coefficient and confirmatory factor analysis were conducted by the researcher. The Cronbach’s Alpha value of the Barnett Liking of Children Scale was calculated as .894. For validity analysis, chi-square ($\chi^2$), $\chi^2/sd$, RMSEA, GFI and AGFI were the most frequently used statistics for model fit values in confirmatory factor analysis (Jöreskog & Sorbom, 1993; Marsh & Hocevar, 1988). The results of confirmatory factor analysis of Barnett Liking of Children Scale were presented in Table 2.

Table 2. Results of confirmatory factor analysis of Barnett Liking of Children Scale

<table>
<thead>
<tr>
<th></th>
<th>Goodness-of-fit</th>
<th>Acceptable fit</th>
<th>Value of the model</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>0$\leq$ $\chi^2$$\leq$ 2sd</td>
<td>2sd$\leq$ $\chi^2$$\leq$ 3sd</td>
<td>3sd</td>
</tr>
<tr>
<td>$p$</td>
<td>0.05$\leq$p$\leq$1.00</td>
<td>.01$\leq$p$\leq$.05</td>
<td>.00</td>
</tr>
<tr>
<td>$\chi^2/sd$</td>
<td>0$\leq$$\chi^2/sd$$\leq$2sd</td>
<td>2$\leq$$\chi^2/sd$$\leq$3</td>
<td>3.00</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0$\leq$RMSEA$\leq$.05</td>
<td>.05$\leq$RMSEA$\leq$.08</td>
<td>.076</td>
</tr>
<tr>
<td>NFI</td>
<td>.95$\leq$ NFI$\leq$.99</td>
<td>.90$\leq$ NFI$\leq$.96</td>
<td>.96</td>
</tr>
<tr>
<td>NNFI</td>
<td>.95$\leq$ NNFI$\leq$.97</td>
<td>.95$\leq$ NNFI$\leq$.97</td>
<td>.97</td>
</tr>
<tr>
<td>CFI</td>
<td>.95$\leq$ CFI$\leq$.99</td>
<td>.95$\leq$ CFI$\leq$.97</td>
<td>.97</td>
</tr>
<tr>
<td>GFI</td>
<td>.95$\leq$ GFI$\leq$.99</td>
<td>.95$\leq$ GFI$\leq$.95</td>
<td>.92</td>
</tr>
<tr>
<td>AGFI</td>
<td>.90$\leq$ AGFI$\leq$.90</td>
<td>.85$\leq$ AGFI$\leq$.89</td>
<td>.89</td>
</tr>
</tbody>
</table>

In order to obtain the results shown in table 2, error covariance was conducted thrice which were between item 7 and item1, item 2 and item 1, item 6- item 3. The error variances of the observed variables ranged from .91 to .34. As shown in table 2, the highest t-value of the observed variables was found to be as 19.33 and the lowest t-value of the observed variables was 5.90. The indices for evaluating one-factorial model were found to have acceptable fit limits when taken into consideration the values of $\chi^2$ (3sd), $\chi^2/sd$(3.00), RMSEA (.076), GFI (.92) and AGFI (.89). However, it was observed that the values of NFI (.96), NNFI (.97) and CFI (.97) were between goodness-of-fit limits (Hair, Anderson, Tatham & Black, 1998; Jöreskog & Sorbom, 1993). The significance of $\chi^2$ can be explained through the parameter which was too high (Duyan & Gelbal, 2008).

2.3.2. Behavior and Instructional Management Scale

“Behavior and Instructional Management Scale” was developed by Martin and Sass (2010) in order to determine the beliefs on behavior and instructional management. The scale had two different forms. The long form included 24 items while the short form consisted of 12 items. As a result of various researches, it was stated that the use of its short form would be more appropriate for scientific research (Martin & Sass, 2010; Sass, Lopes, Oliveira & Martin, 2016; Ozyildirim & Sabanci, 2018).
Originally, the short form the scale consisted of two factors as behavior management and instructional management. The scale was designed as 6-Likert type (ranging from 1 = strongly disagree to 6 = strongly agree). Six of the items (3, 4, 5, 6, 9 and 12) were reversely coded. The evaluation of the scale was based on calculating the sum of the scores given to the items. It could be asserted that the more the calculated score comes closer to 36, which was the highest score, the more interventionist approach of the participants had. The scale was adapted to Turkish and its validity and reliability studies were conducted by Ozyildirim and Sabanci (2018). As a result of the analysis they conducted for validity and reliability, it was confirmed that the scale has two factors: behavior management and instructional management. Cronbach’s Alpha coefficient of behavior management factor was found to be .780; the Cronbach’s alpha coefficient of the instructional management factor was found to be .893. and the Cronbach alpha coefficient of the overall scale was found to be .784. Moreover, the model-fit values of the scale were calculated $\chi^2=1.311$ sd, $p=.065$, $\chi^2/sd=1.311$, RMSEA=.046, NNFI=.97 CFI=.99, NFI=.94, GFI=.93 and AGFI=.89 through confirmatory factor analysis results.

In this study, Cronbach’s alpha value of the Behavior and Instructional Scale was calculated as .732 (Cronbach’s alpha value of Behavior Management factor was found to be .823 and Cronbach’s alpha value of Instructional Management factor was found to be .751). For validity analysis, chi-square ($\chi^2$), $\chi^2$/ sd, RMSEA, GFI and AGFI were the most frequently used statistics for model fit values in confirmatory factor analysis (Joreskog & Sorbom, 1993; Marsh & Hocevar, 1988). The results of confirmatory factor analysis of Behavior and Instructional Management Scale were presented in Table 3.

Table 3. Results of confirmatory factor analysis of Behavior and Instructional Management Scale

<table>
<thead>
<tr>
<th></th>
<th>Goodness-of-fit</th>
<th>Acceptable fit</th>
<th>Value of the model</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$</td>
<td>0≤ $\chi^2$≤2sd</td>
<td>2sd≤ $\chi^2$≤3sd</td>
<td>2.32</td>
</tr>
<tr>
<td>p</td>
<td>.05≤p≤1.00</td>
<td>.01≤p≤.05</td>
<td>.00</td>
</tr>
<tr>
<td>$\chi^2$/sd</td>
<td>0≤ $\chi^2$/sd≤2sd</td>
<td>2≤ $\chi^2$/sd≤3</td>
<td>2.32</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0≤RMSEA≤0.05</td>
<td>.05≤RMSEA≤.08</td>
<td>.058</td>
</tr>
<tr>
<td>NFI</td>
<td>.95≤ NFI≤1.00</td>
<td>.90≤ NFI≤.95</td>
<td>.94</td>
</tr>
<tr>
<td>NNFI</td>
<td>.97≤ NNFI≤1.00</td>
<td>.95≤ NNFI≤.97</td>
<td>.95</td>
</tr>
<tr>
<td>CFI</td>
<td>.97≤ CFI≤1.00</td>
<td>.95≤ CFI≤.97</td>
<td>.96</td>
</tr>
<tr>
<td>GFI</td>
<td>.95≤ GFI≤1.00</td>
<td>.90≤ GFI≤.95</td>
<td>.95</td>
</tr>
<tr>
<td>AGFI</td>
<td>.90≤ AGFI≤1.00</td>
<td>.85≤ AGFI≤.90</td>
<td>.93</td>
</tr>
</tbody>
</table>

(Hair et al., 1998; Joreskog & Sorbom, 1993)

According to the results given in table 3, the error variances of the observed variables ranged from .86 to .39. Moreover, the highest t-value of the observed variables was 17.22 and the lowest t-value of the observed variables was 6.97. The indices for evaluating two-factorial model were found to have acceptable fit limits when taken into consideration the values of $\chi^2$ (2.32sd), $\chi^2$/sd(2.32), RMSEA (.058), NFI (.94), NNFI (.95) and CFI (.96).
However, it was observed that the values of GFI (.95) and AGFI (.93) were between goodness-of-fit limits (Hair, Anderson, Tatham & Black, 1998; Jöreskog & Sorbom, 1993). The significance of \(\chi^2\) can be explained through the parameter, which was too high (Duyan & Gelbal, 2008).

2.4. Data Analysis

Cronbach alpha values were calculated for the reliability of the instruments and confirmatory factor analysis was conducted for the construct validity of instruments. Lisrel 8.8 for confirmatory factor analysis; SPSS 20.0 programs for the other analyses were used. Since the test values of Komolgov and Simirnogov were \(p \geq .05\) and the values of skewness and kurtosis were between +1 and -1, it could be said that the data was distributed near normal. In addition, the Levene test values were \(p \geq .05\) showed that there was variance equation between variables. Before the hierarchical regression was conducted, Durbin-Watson lower than 2 which indicates that there is no auto-correlation, and VIF value lower than 2 which means that there is no multicollinearity, were taken into consideration (Akgül & Çevik, 2003; Hair et al., 1998; Leech et al., 2005). When the independent variable had two subgroups, T-test was used but ANOVA was conducted on when there were more than two sub-groups. The relationship between two continuous variables was determined by Pearson Moments Correlation analysis, and the effect of a continuous variable on other continuous variables was determined by hierarchical regression analysis technique (Buyukozturk, 2013; Hair et al., 1998; Leech et al., 2005; Secer, 2015).

3. Results

Under this title, firstly the pre-service teachers' state of liking of children and their beliefs on behavior and instructional management were determined. Secondly, it was examined that whether their state of liking of children and their beliefs on behavior and instructional management differed significantly to their gender, age and programs. Thirdly, it was investigated if there was a significant relationship between their state of liking of children and their beliefs on behavior and instructional management. Finally, the effect of their beliefs on behavior and instructional management on their state of liking of children was determined.

Table 4. Descriptive Statistics on Pre-service Teachers' State of Liking of Children and Their Classroom Management Beliefs

<table>
<thead>
<tr>
<th>Factors</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>X</th>
<th>Sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liking of children</td>
<td>396</td>
<td>29.00</td>
<td>98.00</td>
<td>83.542</td>
<td>12.232</td>
</tr>
<tr>
<td>Behavior management beliefs</td>
<td>396</td>
<td>6.00</td>
<td>36.00</td>
<td>24.159</td>
<td>6.088</td>
</tr>
<tr>
<td>Instructional management beliefs</td>
<td>396</td>
<td>6.00</td>
<td>26.00</td>
<td>11.154</td>
<td>3.884</td>
</tr>
</tbody>
</table>

According to the results given in table 4, it was observed that the pre-service teachers' state of liking of children (X= 83.542) was high. In addition, it was found out that pre-service teachers' beliefs on behavior management (X= 24.159) were closer to the
interactionist approach, whereas their belief in instructional management (X = 11.154) was closer to the interventionist approach.

Table 5. *T*-test Results of Pre-service Teachers’ State of Liking of Children in terms of Gender Variable

<table>
<thead>
<tr>
<th>Factor</th>
<th>Gender</th>
<th>N</th>
<th>X</th>
<th>Sd</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liking of</td>
<td>Male</td>
<td>141</td>
<td>69.942</td>
<td>11.256</td>
<td>393</td>
<td>-2.371</td>
<td>.018*</td>
</tr>
<tr>
<td>Children</td>
<td>Female</td>
<td>255</td>
<td>72.674</td>
<td>10.780</td>
<td>819</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p< .05

According to the results given in table 5, it was observed that the pre-service teachers’ state of liking of children differed significantly in terms of gender variable \( t_{(393)} = -2.371, p \leq .05 \). When the means of the groups were examined, it was seen that female pre-service teachers (X = 72.674) liked children significantly more than male pre-service teachers (X = 69.942).

Table 6. ANOVA Results of Pre-service teachers’ state of liking of children in terms of age

<table>
<thead>
<tr>
<th>Factor</th>
<th>Age</th>
<th>N</th>
<th>X</th>
<th>Sd</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liking of</td>
<td>21 and below</td>
<td>120</td>
<td>70.683</td>
<td>11.807</td>
<td>393</td>
<td>.829</td>
<td>.437</td>
</tr>
<tr>
<td>Children</td>
<td>22</td>
<td>151</td>
<td>71.960</td>
<td>10.675</td>
<td>141</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23 and above</td>
<td>125</td>
<td>72.432</td>
<td>10.609</td>
<td>141</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the results given in table 6, it was observed that the pre-service teachers’ state of liking of children didn’t differ significantly in terms of age variable \( F_{(2-393)} = .829, p > .05 \) though the means of the age groups were increasing from the younger to older.

Table 7. ANOVA Results of Pre-service teachers’ State of Liking of Children in terms of Program

<table>
<thead>
<tr>
<th>Factor</th>
<th>Program</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liking of</td>
<td>Turkish teaching</td>
<td>70</td>
<td>70.800</td>
<td>11.382</td>
<td>70</td>
<td>1.21</td>
<td>.300</td>
</tr>
<tr>
<td>Children</td>
<td>Pre-school teaching</td>
<td>52</td>
<td>74.519</td>
<td>9.959</td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary school teaching</td>
<td>57</td>
<td>72.140</td>
<td>11.424</td>
<td>57</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary mathematics teaching</td>
<td>28</td>
<td>71.392</td>
<td>8.945</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>English language teaching</td>
<td>61</td>
<td>69.557</td>
<td>10.825</td>
<td>61</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social sciences teaching</td>
<td>71</td>
<td>71.211</td>
<td>12.137</td>
<td>71</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Science teaching</td>
<td>57</td>
<td>73.000</td>
<td>10.484</td>
<td>57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the results given in table 7, it was observed that the pre-service teachers’ state of liking of children didn’t differ significantly in terms of program variable \( F_{(6-389)} = 1.21, p > .05 \) while the pre-school pre-service teachers liked children more than pre-service teachers from other programs.

Table 8. *T*-test Results of Pre-service Teachers’ Behavior and Instructional Management Beliefs in terms of Gender
According to the results given in table 8, the beliefs of male pre-service teachers differed significantly from female pre-service teachers in both factors. It was observed that male pre-service teachers’ beliefs were closer to interventionist approach than female pre-service teachers both in behavior management \[ (t(393) = 3.978, p \leq .05) \] and in instructional management \[ (t(393) = 2.625, p \leq .05) \].

Table 9. ANOVA Results of Pre-service Teachers’ Behavior and Instructional Management Beliefs in terms of Age

According to the results given in table 9, it was observed that the pre-service teachers’ beliefs didn’t differ significantly both in behavior management \[ F(2,393) = 1.357, p > .05 \] and in instructional management \[ F(2,393) = 3.202, p > .05 \] in terms of age variable.
According to the results given in table 10, it was observed that pre-service teachers’ behavior management beliefs differed significantly \([F(6,389) = 31.67, p<.05]\), whereas their instructional management beliefs didn’t differ significantly \([F(6,389) = 1.608, p>.05]\). As a result of the Scheffe test, it was seen that pre-service teachers from pre-school teaching \((X = 15.461)\) had closer to non-interventionist approach than pre-service teachers from English language teaching and social studies teaching in Behavior management.

Table 11. The Correlation Results of Relationship between Pre-service teachers’ Behavior and Instructional Management Beliefs and Their Liking of Children

<table>
<thead>
<tr>
<th>Liking of children</th>
<th>Behavior management</th>
<th>Instructional management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liking of children</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Behavior management</td>
<td>-.078</td>
<td>1</td>
</tr>
<tr>
<td>Instructional</td>
<td>-.457**</td>
<td>.010</td>
</tr>
<tr>
<td>management</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**p<0.01

According to the results given in table 11, it was observed that a significant relationship couldn’t be found between pre-service teachers’ state of liking of children and their behavior management beliefs \((r = -.078, p>.05)\). However, it was seen that there was a significant relationship between their state of liking of children and their instructional management \((r = -.457, p>.01)\).

Table 12. Hierarchical Regression Results about The Effect of Pre-service Teachers’ Behavior and Instructional Management Beliefs on Their State of Liking Children

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Standard Error</th>
<th>β</th>
<th>T</th>
<th>p</th>
<th>Zero-order</th>
<th>Partial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>75.117</td>
<td>2.262</td>
<td>33.211</td>
<td>.00</td>
<td>-0.078</td>
<td>-0.078</td>
<td></td>
</tr>
</tbody>
</table>
According to the results given in table 12, in model 1 pre-service teachers’ behavior management beliefs didn’t predict their state of liking of children significantly ($R=0.078; R^2=0.004; F(1,396) = 2.395; p>0.05$).

In model 2, their instructional management beliefs were included in the analysis process. It was observed that there was significant change in $R^2$ of established model ($\Delta R^2=0.214; p<0.05$) and their instructional management, together with their behavior management predicted their state of liking of children significantly ($R=0.463; R^2=0.160; F(2,396) = 53.618; p<.001$). Finally, their behavior management beliefs together with their instructional management explained %16 of the total variance in their state of liking of children.

4. Discussion

The aim of this article was to investigate the effect of pre-service teachers’ beliefs on behavior and instructional management on their state of liking of children. More specifically, the state of liking of children and classroom beliefs of pre-service teachers, examination of them in terms of some variables, the relationship between them and the effect of their beliefs on behavior and instructional management on their state of liking of children were sought. The results were presented and discussed below.

4.1. The state of liking children of pre-service teachers and its examination in terms of some variables

In the first part of the study, it was determined that the pre-service teachers’ state of liking of children was high. Therefore, it can be said that this finding is related to the fact that one of the reasons of selection of the teaching profession is the liking of children (Hacıomeroglu & Taskin, 2010; Jantzen, 1981; Marso & Pigge, 1994; Ubuz & Sari, 2008) and that the pre-service teachers thought that the liking of children is an effective factor for teaching (Lasley, 1980). Furthermore, pre-service teachers see liking of children as an
element of being an effective teacher (Witcher, Onwuegbuzie & Minor, 2001; Walls, Nardi, Von Minden & Hoffman, 2002). Besides these, the teachers who do not like children, cannot work at schools for a long time if they work, they become unhappy (Nias, 1997). These findings support the notion which claims that liking of children is a prerequisite for being an educator (Downing, Ryndak & Clark, 2000). In addition, that female pre-service teachers liked children more than male pre-service teachers complies with the research conducted on preschool pre-service teachers by Kaynak, Ergin, Arslan and Pinarcik (2015), Iman (2014) and Durmusoglu-Saltali and Erbay (2013) and Yazıcı (2013), on primary school pre-service teachers conducted by Özkara (2013) and on pre-service teachers conducted by Konan and Yılmaz (2018) and Cimen-Kabakli (2016). Barnett and Sinisi (1990) relate this findings with instinct of females which is a desire having and raising children. However, Gelbal and Duyan (2010) and Aksoy and Baran (2011) found that gender did not have an effect on teachers’ state of liking children. In terms of age variable, it was concluded that the pre-service teachers’ state of liking of children did not differ significantly in this study. Similarly, Cimen (2015) stated that age variable does not cause significant differences among pre-service teachers. However, in the research of Gelbal and Duyan (2010), it was observed that the teachers’ state of liking of children were the highest between the ages of 41-45 among other teachers while Turk, Kardas-Ozdemir and Kerimoglu-Yıldız (2017) stated that the teachers who are older than 36, like children more than younger teachers. And the researchers asserted that the developmental properties are effective in liking children. Since the age groups in this study are close to each other, it can be said that it did not cause any significant differences. Finally, it was observed that pre-service teachers’ state of liking of children did not differ to program variable in this study. This finding indicates that pre-service teachers in this study perceive children as a core element of teaching profession regardless of their programs. However, Gelbal and Duyan (2010) concluded that the primary school teachers’ state of liking of children were more than branch teachers. Furthermore, Turk et al. (2017), stated that pre-school and primary school teachers like children more than other teachers. Durmusoglu-Saltali and Erbay (2013) and Kasapoglu and Akyol find out that pre-school teachers like children more than other teachers.

4.2. Beliefs on behavior and instructional management of pre-service teachers and its examination in terms of some variables

The results of the analysis about pre-service teachers' beliefs on behavior and instructional management showed that their beliefs on behavior management were closer to interventionist approach, but their beliefs on instructional management were closer to interactionist approach. This situation can be related to the transition to constructivist approach in curriculum in 2006. It can be said that the pre-service teachers, who have been taught through the constructivist curriculum, could adapt to the student-centered approach on instructional management. However, the fact that they were closer to the interventionist approach on behavior management may indicate that the traditional
structure in the field of education has been continuing. The research of Castello, Gotzens, Badia and Genovard (2010) pointing out that teachers have more punitive approach for behavioral problems than instructional problems, supports this findings. Moreover, the differences in their beliefs can derive from the contrast between their resources related to instructional activities are prepared with constructivist approach and their observation in teacher-centered classrooms so they might believe that the behaviors of the students should be directed by the teacher owing to the influence of their past experiences and observations. Main and Hammond (2008) support the opinion and they state that pre-service teachers observed reactive strategies. Furthermore; their instructional activities are carried out on their peers and their experiences with children is limited, therefore their behavior management strategies might be limited in the just as the research of Main and Hammond (2008) and they feel safe when using teacher-centered behavior management strategies. In addition that they might think that if they handed over the reins to the students, they couldn’t maintain the control of the class again. And Lang (2013) points out the opinion that effective classroom management can be provided through interventionist approach, have influence on teachers. Nevertheless, the research conducted on science pre-service teachers by Savran and Cakiroglu (2003) and Savran-Gencer and Cakiroglu (2007) indicated that they were closer to interventionist on instructional management but they were more non-interventionist on human management. Moreover, the research conducted by Lang (2013) on Singaporean beginning teachers indicated that teachers are interventionist all factors of classroom management.

When the beliefs of pre-service teachers about behavior and instructional management were examined in terms of gender variable, it was observed that male pre-service teachers had more interventionist beliefs than female pre-service teachers. The fact that male pre-service teachers tend to be more interventionist on instructional management support to the research conducted on pre-service teachers by Gurcay (2005) and Savran-Gencer and Cakiroglu (2007) and on teachers by Martin et al. (2008) and Martin et al. (2006), Rahimi and Hosseini (2012) supports the findings. However, it was stated that gender variable does not have an effect on classroom management beliefs of pre-service teachers (Savran & Cakiroglu, 2004), and of teachers (Martin et al., 1997; Martin & Yin, 1997). In terms of age variable, it is concluded that the belief of the pre-service teachers about behavior and instructional management didn’t differ significantly in this study. In terms of program variable, preschool pre-service teachers tend to be more non-interventionist in terms of behavior management than pre-service teachers from English language and social studies teaching programs. This finding may be due to the fact that pre-service pre-school teachers receive more education on child development. Similarly, Kazemi and Soleimani (2016) found out that Iranian EFL teachers are interventionist all factors of classroom management.

4.3. The relationship between pre-service teachers’ state of liking of children and their beliefs on behavior and instructional management
According to the results, there was a moderate negative relationship between pre-service teachers’ state of liking of children and their beliefs on instructional management. It can be said that pre-service teachers tend to be less interventionist as their liking of children increases and they give children more responsibility to guide their learning process. This finding can be explained with the relationship between liking of children and listening, speaking and empathy skills in communication (Durmusoglu-Saltalı and Erbay, 2013; Uğurlu, 2013). The teachers who like children, listen to students and feel empathy with students, thus they can adopt their instructional techniques in accordance with students’ needs. Moreover, liking children is significant variable in constructive problem solving (Buyuktaskapu-Soydan, Alakoc-Pirpir, Ozturk-Samur & Angın, 2018). In this way, the problems which may be encountered during teaching process can be solved effectively by teachers who like children. Moreover, studies have stated that teachers who love children can both have fun lessons and solve problems more easily (Ergun & Ozdas, 1999). The attitudes and behaviors of teachers against their students will be able to differentiate attitudes, behaviors and interests of children towards their teachers and friends (Uğurlu, 2013).

However, no significant relationship was found between pre-service teachers’ state of liking of children and their beliefs on behavior management. According to this findings, it is likely to assert that pre-service teachers have the idea that desirable behavior can be taught through teacher guidance. Ozbey, Turkoglu and Buyuktanır-Buldur (2014) indicated that pre-service teachers had high self-efficacy for changing undesirable behaviors of students. It can be said that they might think they become good models for desirable behaviors and they can teach them to students. However, it should not be forgotten that disciplinary problems in classrooms will be reduced through teachers’ approaches with love (Ergun & Ozdas, 1999). Finally, their beliefs on behavior and instructional management together with explain 16% of the total variance of their state of liking of children. The effect of teachers’ and pre-service teachers’ behavior and instructional management beliefs and liking of children on education is taken into consideration, their beliefs and affection should be seen as a professional issue rather than as personal matter.

5. Conclusions

The aim of the study was to investigate the effect of pre-service teachers’ beliefs on behavior and instructional management on their state of liking of children. Attitudes, expectations and perceptions affect behavior and they are an important part of work and private life (Robbins & Judge, 2011). Some of the sources of actions and reactions in a class are feelings and expectations (Hall et al., 2017). Since teachers use their professional and field knowledge and skills as well as their affective characteristics during the teaching process (Sahin, 2006). The general understanding of the individual about beliefs, events,
situations and objects (Hoy & Miskel, 1998) and Johnson's (1988) pointing out the uselessness of trying to change the behavior of teachers without changing their beliefs (O’Neil & Stephenson, 2011) points out the importance of the research on this topic. The importance of effective education for children's cognitive and psychological development cannot be ignored. It can be said that a critical component of effective education is qualified teachers. It is believed that the quality of education is affected by their content knowledge as well as their affective sides. Therefore, their state of liking of children and their beliefs on how the behavior and instruction should be managed in effective classroom is important for development of children. In this study, the state of pre-service teachers of liking of children is high. A statistical difference was revealed between genders. According to the results, female pre-service teachers like children more than males.

Belief in behavior management of pre-service teachers is interventionist while their belief in instructional management is interactionist. A statistical difference was revealed between genders as well as among programs. The behavior and instructional management beliefs of males is more interventionist than females. The belief of pre-school teachers in behavior management is more non-interventionist than the belief of pre-service teachers from English language teaching and social sciences.

While behavior management beliefs of pre-service teachers do not correlate with their state of liking of children, their instructional management beliefs do correlate with their state of liking of children negatively at moderate level. In other words, as their state of liking of child increases, their belief in instructional management tends to get closer to non-interventionist beliefs. Finally, the beliefs on behavior management of pre-service teachers alone do not have a significant effect on their state of liking of children, but when combined with their beliefs on instructional management, it explains 16% variance of their state of liking of children.

This research conducted on pre-service teachers can be done on teachers or pre-service teachers from different university and their findings can be compared with this study. In addition, this study was carried out through the quantitative method and the factors affecting the beliefs of pre-service teachers on behavior and instructional management and their state of liking of children could not be addressed. Furthermore, the effect of pre-service teachers’ beliefs about the behavior and instructional management teaching on their state of liking of children has not been studied in depth. In this regard, a qualitative research can provide more detailed information on this topic. When the effect of behavior and instructional management beliefs on liking of children is taken into consideration, activities and arrangements to encourage children’s love in teacher education should be designed and non-interventionist beliefs should be strengthened in classroom management. Thus, constructivist approach can be applied more efficiently at all levels of teaching.
References


Ming-tok, H. & Wai-shing, L. (2008). *Classroom management creating a positive learning environment.* Hong Kong: Hong Kong University Press.


Robbins, S. P. & Judge, T. A, (2008), Organizational behavior, Prentice Hall,


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