Full Length Research Paper

Self-efficacy of teacher candidates for teaching first reading and writing

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The purpose of this study is to determine by different variables the self-efficacy of a teacher candidate for teaching first reading and writing in their 3rd and 4th year in the department of primary school teaching. In line with the purpose of the study, the self-efficacy levels of teacher candidates for teaching first reading and writing were analyzed on the basis of gender and academic year. The screening model was used in the study. The study group is made up of 165 teacher candidates in their 3rd and 4th year in the department of primary school teaching. The "Self-Efficacy Scale for Teaching First Reading and Writing" developed by Delican (2016) was used as the data collection tool. Descriptive statistics and independent samples t-test were used for data analysis. It was found in the study that self-efficacy of teacher candidates for teaching first reading and writing is intermediate, the self-efficacy for teaching first reading and writing shows a statistically significant difference and female teacher candidates have higher self-efficacy for teaching first reading and writing than male teacher candidates; however the academic year does not have any significant effect on the self-efficacy for teaching first reading and writing. Based on the study, suggestions were made to ensure that teacher candidates teach first reading and writing effectively.

Key words: Teaching of first reading and writing, primary school teacher candidates, self-efficacy judgment.

INTRODUCTION

The process of teaching primary school students first reading and writing is called the process of teaching first reading and writing. The quality of teaching first reading and writing is important for the lives of individuals for deriving a meaning from written symbols, expressing feelings and thoughts verbally and in written, supporting social development, making effective communication, and becoming an efficient and productive individual. This process is important since it is not limited to reading and writing skills at fundamental level. It has an important function in improving mental skills such as thinking, comprehending, sorting, analyzing, synthesizing, and evaluating (Millî Eğitim Bakanlığı (MEB), 2018). This requires the task of teaching first reading and writing, which constitutes the foundation of education and learning to be high-quality (Güneş et al., 2016). Therefore, teachers who are in charge of providing the individuals with reading and writing skills should have a

satisfactory level of knowledge and skills about teaching first reading and writing (Akyol, 2007).

One of the factors that affect the quality of the process of teaching first reading and writing is the self-efficacy perceptions of future primary school teachers with regard to teaching first reading and writing. Self-efficacy, which was developed by Bandura, based on perception of the self with regard to certain behaviors (Cassidy and Eachus, 2002) and is one of the key variables of Social Cognitive Theory, requires individuals to have a high level of self-confidence to use their skills effectively (Pajares, 1997).

Self-efficacy is the judgment of an individual about formation of an individual's behaviors, their capacity to be successful by organizing necessary activities to be successful and their ability to cope with potential circumstances (Bandura, 1982; Bandura, 1994).

Eachus and Cassidy (2006) states that, according to Bandura, self-efficacy judgments are given in response to four sources of knowledge, that is, past experiences (success or failure), observational experiences (observing the success or failure of others), persuasion process (by the family, friends or colleagues), affective experiences (experiencing intense feelings such as excitement, fear, etc.).

The knowledge, skills and attitude for carrying out the duties and responsibilities required for teaching as well as the self-efficacy judgment of an individual for their profession are effective in creating an efficient and successful learning environment (Akkoyunlu et al., 2005; Üstüner et al., 2009). The judgments of individuals with regard to their talents and skills are important in handling the problems that may be encountered in creating a competent teaching process (Özdemir, 2008).

Primary school teachers greatly influence the process of teaching primary school children first reading and writing. The self-efficacy judgments of primary school teachers who play an important role in teaching first reading and writing whereby students are made familiar with the awareness of literacy which constitutes the foundation of their future success.

The performance of primary school teachers in teaching first reading and writing is influenced by their judgments to carry out the process effectively. It is thought that the knowledge of a primary school teacher will not be functional if they lack the level of self-efficacy judgment that they are supposed to have with regard to teaching first reading and writing.

Tschannen-Moran and Johnson (2011) revealed strong relations between the self-efficacy of the teacher for teaching first reading and writing and the actual success of reading.

Students who study primary school teaching in Turkey take the Course of Teaching First Reading and Writing in their third year as a theoretical course with 3 credits. While Karadağ and Akkaya (2013) argue that this course is inadequate in terms of course hours and practice,

Yıldırım and Demirtaş (2010) state that the course of teaching first reading and writing should be practice-intensive.

It is stated in the Turkish Lesson Teaching Program prepared by MEB (2018) that a "Voice-based Approach to Teaching First Reading and Writing" is adopted in teaching first reading and writing. The stages of teaching in this program are examined under three headings:

Preparation for first reading and writing, starting first reading and writing, and independent reading and writing.

Efficiency of teaching first reading and writing is very important to ensure that individuals acquire first reading and writing skills. Therefore, self-confidence and self-efficacy of future primary school teachers who will teach first reading and writing play an important role in teaching first reading and writing effectively. An examination of the literature on teaching first self-efficacy reveals that several studies were conducted (Akbaş and Çelikkaleli, 2006; Başer et al., 2005; Ekici, 2008; Kahyaoğlu and Yangın, 2007; Kiremit, 2006; Özdemir and Erdoğan, 2017; Öztürk and Ertem.2017; Taşkın and Hacıömeroğlu, 2010; Torkzadeh and Van Dyke, 2002; Yaman et al., 2004).

Purpose

The purpose of the study is to determine the self-efficacy of a teacher candidate for teaching first reading and writing in their 3rd and 4th year in the department of primary school teaching. The following questions were sought to be answered for this purpose:

(1) What are the self-efficacy levels of teacher candidates for teaching first reading and writing?
(2) Do the self-efficacy levels of teacher candidates for teaching first reading and writing differ depending on the gender variable?
(3) Do the self-efficacy levels of teacher candidates for teaching first reading and writing differ depending on the academic year variable?

METHODOLOGY

This section of the study contains information about the research model, the study group, data collection tool, and data analysis.

Research design

The screening model was used in this study which measured the self-efficacy levels of teacher candidates in their third and fourth year in the department of primary school teaching. In the screening model which aims to describe past or present circumstances without modifying or affecting them, the event, individual or object that is studied is defined under its own conditions and in its current state (Fraenkel and Wallen, 2003; Karasar, 2017).

Table 1. The distribution of teacher candidates according to their year in college and gender variable.

Year	Gender		Total
	Female	Male	
3rd year	54	33	87
4th year	42	36	78
Total	96	69	165

Table 2. Internal consistency coefficients of the data collection tool.

Sub-dimension	Item	Internal consistency coefficient
Preparation	9	0.75
Implementation	12	0.86
Evaluation	4	0.79
General self-efficacy of teaching first reading and writing	25	0.92

Study group

The study group was made up of 165 teacher candidates in their third or fourth year in the Faculty of Education, Department of Primary School Teaching in the academic year 2017-2018. Participation in the study was on a voluntary basis. The distribution of teacher candidates in the study group according to their year in college and gender variable is given in Table 1. An examination of Table 1 reveals that out of 165 teacher candidates that participated in the study, 87 were in the 3rd year, 78 were in the 4th year, and while 96 of the participants were female, 69 were male. Out of 87 participants in their 3rd year, 54 were female, and 33 were male, and out of 78 participants in their 4th year, 42 were female, and 36 were male.

Data collection tool

The data collection tool titled "Self-Efficacy Scale for Teaching First Reading and Writing" developed by Delican (2016) was used as the data collection tool subject to the author's permit. Developed to measure the self-efficacy levels of teacher candidates for teaching first reading and writing, the scale is made up of 25 items and 3 sub-dimensions. The sub-dimensions of the scale were named preparation, implementation and evaluation. The scale accounts for 51.12% of the total variance. The Cronbach alpha reliability coefficient for the entire scale is 0.90. The Cronbach alpha reliability coefficient was 0.90 for preparation, 0.89 for implementation, and 0.78 for evaluation. The two-factor structure was confirmed by the confirmatory factor analysis conducted to determine the validity of the scale. All items in the scale developed as five-point Likert type are positive expressions in a format that allowed the students to express their self-efficacy on a scale of 1 (bottom) to 5 (top). Cronbach Alpha reliability coefficients were calculated for the entire scale and its sub-dimensions. The data derived from the analysis are given in Table 2. An examination of Table 2 reveals that Cronbach Alpha reliability coefficient is 0.75 for preparation, 0.86 for implementation, and 0.79 for evaluation. The Cronbach Alpha reliability coefficient for the general self-efficacy for teaching first reading and writing calculated for the entire scale is 0.92. Based on the Cronbach Alpha reliability coefficients, it can be said that the scale is very reliable.

Data analysis

Whether the data show a normal distribution was determined first to decide which test to be used to analyze the data derived from the scale. Skewness and kurtosis coefficients for each of the independent variables were analyzed to see whether the data showed a normal distribution. According to these analyses, skewness and kurtosis coefficients of the entire scale and its sub-dimensions are given in Table 3. An examination of Table 3 reveals that skewness and kurtosis coefficients of 165 pieces of data in the entire scale and each sub-dimension range from 0.02 to -0.81. Where skewness and kurtosis coefficients are between -1.5 and +1.5, the data set shows a normal distribution (George and Mallery, 2010; Tabachnick and Fidell, 2013). The skewness and kurtosis coefficients reveal that the data derived from the responses of the students to the Self-Efficacy Scale for Teaching First Reading and Writing show a normal distribution. For this reason, parametric tests were used in the analyses. Whether the self-efficacy perceptions of teacher candidates for teaching first reading and writing change by academic year or gender was analyzed by independent samples t-test.

The score interval found by $Interval\ width = \frac{Series\ width}{Number\ of\ groups}$ (Tekin, 2000) was used for interpretation of the average scores of teacher candidates based on the entire scale and its sub-dimensions. The score intervals calculated for the entire scale and its sub-dimensions are given in Table 4. An examination of Table 4 reveals that the interval width is 0.38 for preparation, 0.50 for implementation, 0.45 for evaluation, and 0.41 for general self-efficacy of teaching first reading and writing.

FINDINGS

Self-efficacy levels of teacher candidates for teaching first reading and writing

The question of "what are the self-efficacy levels of teacher candidates for teaching first reading and writing?" was addressed in the first sub-problem of the study. The results of the analyses for the sub-problem are given in

Table 3. Skewness and kurtosis coefficients of the scale and its sub-dimensions.

Sub-dimension	Frequency (f)	Skewness coefficient	Kurtosis coefficient
Preparation	165	0.02	-0.81
Implementation	165	-0.30	-0.33
Evaluation	165	-0.11	-0.68
Scale Total	165	-0.05	-0.60

Table 4. Score intervals used in interpretation of the scores derived from the scale.

Dimension	Self-efficacy levels and score intervals				
	Very low	Low	Medium	High	Very High
Preparation	3.11-3.48	3.49-3.86	3.87-4.24	4.25-4.62	4.63-5.00
Implementation	2.50-2.99	3.00-3.49	3.50-3.99	4.00-4.49	4.50-5.00
Evaluation	2.75-3.19	3.20-3.64	3.65-4.09	4.10-4.54	4.55-5.00
General self-efficacy of teaching first reading and writing	2.92-3.33	3.34-3.74	3.75-4.16	4.17-4.57	4.58-5.00

Table 5. Self-efficacy levels of teacher candidates for teaching first reading and writing.

Dimension	Frequency (f)	$\bar{X}$	Ss	Self-efficacy level
Preparation	165	4.14	0.45	Medium
Implementation	165	4.11	0.51	High
Evaluation	165	4.20	0.53	High
General self-efficacy of first reading and writing	165	4.14	0.45	Medium

Table 5. An examination of Table 5 reveals that the self-efficacy of the teacher candidates who participated in the study was medium for preparation, and high for implementation and evaluation. Considering the entire scale, it was found that the general self-efficacy for teaching first reading and writing is medium.

Comparison of the self-efficacy levels of teacher candidates for teaching first reading and writing based on the gender variable

The second sub-problem of the study addressed the question of "do the self-efficacy levels of teacher candidates for teaching first reading and writing differ depending on the gender variable?" The t-test results for this sub-problem are given in Table 6. An examination of Table 6 reveals that self-efficacy levels of teacher candidates for teaching first reading and writing show a significant difference based on the gender variable. The general self-efficacy of teaching first reading and writing also has significant differences (t(163)= 3.19; p<0.05) based on the gender variable. The mean values in Table 6 indicate that female teacher candidates scored higher averages than their male counterparts. When the significant differences are considered with the mean values, it is fair to say that self-efficacy of female teacher candidates for teaching first reading and writing is higher than that of their male counterparts.

Comparison of the self-efficacy levels of teacher candidates for teaching first reading and writing based on academic year

The third sub-problem of the study addressed the question of "do the self-efficacy levels of teacher candidates for teaching first reading and writing differ depending on the academic year variable?" The t-test results for this sub-problem are given in Table 7. An examination of Table 7 reveals that self-efficacy levels of teacher candidates for teaching first reading and writing do not show a significant difference based on the college year variable. The general self-efficacy of teaching first reading and writing does not have significant differences based on the college year of the teacher candidates either (t(163)= -1,08; p>0,05). Based on these results, it is fair to say that the self-efficacy levels of the teacher candidates in their 3rd year or 4th year in college for teaching first reading and writing are similar.

Table 6. T-test results of the self-efficacy levels of teacher candidates for teaching first reading and writing based on the gender variable.

Dimension	Gender	Frequency (f)	$\bar{X}$	Ss	Sd	t	p
Preparation	Female	96	4.21	0.44	163	2.37	0.019
	Male	69	4.05	0.44			
Implementation	Female	96	4.22	0.51	163	3.21	0.002
	Male	69	3.97	0.47			
Evaluation	Female	96	4.31	0.53	163	3.08	0.002
	Male	69	4.06	0.49			
General self-efficacy of first reading and writing	Female	96	4.23	0.45	163	3.19	0.002
	Male	69	4.01	0.42			

Table 7. T-test results of the self-efficacy levels of teacher candidates for teaching first reading and writing based on the academic year variable.

Dimension	Year	Frequency (f)	$\bar{X}$	Ss	Sd	t	p
Preparation	3rd year	87	4.13	0.46	163	-0.47	0.64
	4th year	78	4.16	0.43			
Implementation	3rd year	87	4.06	0.53	163	-1.27	0.21
	4th year	78	4.16	0.47			
Evaluation	3rd year	87	4.16	0.51	163	-1.16	0.25
	4th year	78	4.25	0.54			
General self-efficacy of first reading and writing	3rd year	87	4.10	0.47	163	-1.08	0.28
	4th year	78	4.18	0.42			

DISCUSSION

Individuals acquire the literacy skills that they need for their lives through the teaching of first reading and writing in their primary school years. Self-efficacy judgments of primary school teachers for teaching first reading and writing is one of the factors that affect the success of the teaching of first reading and writing.

The purpose of this study was to analyze by different variables the self-efficacy of a teacher candidate for teaching first reading and writing in the department of primary school teaching. It was found that the self-efficacy of the teacher candidates whose self-efficacy levels for teaching first reading and writing were attempted to be determined were medium for the sub-dimension of preparation, and high for the sub-dimensions of implementation and evaluation.

Considering the entire scale, it was also found that the general self-efficacy for teaching first reading and writing is medium. The self-efficacy levels of primary school teachers for teaching first reading and writing were found very high in Öztürk and Ertem (2017). This is consistent with the present study.

Significant differences were found in the present study for the self-efficacy levels of the teacher candidates for teaching first reading and writing in the sub-dimensions of preparation, implementation and evaluation, and for the general self-efficacy for teaching first reading and writing based on the gender variable. Female teacher candidates had higher self-efficacy for teaching first reading and writing than their male counterparts. This was consistent with the studies conducted by Günhan and Yavuz (2005), Kiremit (2006), Özdemir and Erdoğan (2017), and Yaman et al. (2004).

However, the results of the studies conducted by Akbaş and Çelikkaleli (2006), Ekici (2008), Taşkın and Hacıömeroğlu (2010) and Torkzadeh and Van Dyke (2002) were inconsistent with the results of the present study. No significant difference was found in the sub-dimensions of preparation, implementation and evaluation

with regard to the self-efficacy of the teacher candidates for teaching first reading and writing or in the general self-efficacy for first reading and writing based on the academic year variable. In other words, it is fair to say that the self-efficacy levels of the teacher candidates in their 3rd year or 4th year in college for teaching first reading and writing are similar. This was consistent with the studies conducted by Kahyaoğlu and Yangın (2007), and Özdemir and Erdoğan (2017).

Based on the results of this study, it is suggested that future primary school teachers should be given the opportunity to improve their dimensions of preparation, implementation and evaluation in the process of enhancing their self-efficacy for teaching first reading and writing.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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