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# **Educational Research and Reviews**

Full Length Research Paper

# Preservice preschool teachers' self-efficacy beliefs and attitudes toward teaching profession

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The purpose of this study is to investigate preservice preschool teachers' self-efficacy beliefs and attitudes toward the teaching profession. The population of the present study consisted of 855(Female= 729) preservice preschool teachers studying at the Faculty of Education, Cumhuriyet University, in the fall semester of the 2015 - 2016 academic year. This study used mixed methods, both quantitative and qualitative methods. There were two samples (n = 407and; n = 278). While the quantitative phase of the study involved a descriptive research design, the qualitative phase included a case study research method. Quantitative data were collected through Preschool Teachers' Self Efficacy Beliefs Scale and Teaching Profession Attitude Scale. In qualitative method, preservice preschool teachers were asked to describe their perceptions about teaching profession through a metaphor. Quantitative results revealed that preservice preschool teachers had high level of selfefficacy beliefs and positive attitudes toward teaching profession. With regard to the gender differences, the analyses indicated that females had more selfefficacy beliefs and positive attitudes toward teaching profession than did their male counterparts, but the differences were not statistically significant. In terms of grade level, while the senior and junior participants had higher level of self-efficacy beliefs and attitudes toward teaching profession than freshmen and sophomore participants, a meaningful difference was only observed in the subscale of Harmony between the1<sup>st</sup> and 3<sup>rd</sup> grades favoring 3<sup>rd</sup> grade. There was also a positive and small correlation between the participants' self-efficacy beliefs and their attitudes towards teaching profession. Qualitative results were obtained from 75 metaphors which were classified under nine categories. In line with the codes and their categories, it can be interpreted as the participants have positive attitudes toward teaching profession through metaphors. Therefore, qualitative part of this study supports the findings revealing the preservice preschool teachers' positive attitudes toward teaching profession.

**Key words:** Selfefficacy beliefs, attitude, teaching profession, preservice preschool teachers, metaphor.

## INTRODUCTION

Teachers regarded as the cornerstones of education have crucial and molding roles with regard to realizing

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specified aims and objectives of the system and promoting students' achievement (Demirtaş et al., 2011); thus, the impact of teachers on students and education programs is much more higher than any other components (that is, curriculum, physical sources, educational technology etc) (Şişman, 2004). Therefore, in order to improve quality of education delivered to students, one should be able to produce quality teachers (Darling-Hammond and Bransford, 2005).

Preservice teacher education in which preservice teachers undergo an "apprenticeship of learning" (Pendergast, Garvis, & Keogh, 2011, p.46) provides the first step in the professional development of teachers and prepares them in knowledge and skills (Wilke, 2004). Furthermore, preservice teacher education has an identity as an important channel for students' development in terms of cognitive, affective and psychomotor domains in an integrated manner (Yong et al., 2015). As for preschool education, it has positive impact on children's academic performance and social-emotional adaptation to formal schooling. According to Er-Sabuncuoğlu and Diken (2010), preschool education is the period where problems in development and learning are detected, and the preschool teachers are the ones who need the ability to observe and detect potential risks and development delays in children. Ministry of National Education [MoNE] (2012) defines purposes of preschool education in two categories: to fulfill the young children's child care needs and to provide early childhood education by equipping prospective teachers with necessary skills that help them become "a good teacher. However, increase in the number of newly opened universities in almost every city of Turkey eventually brings problems in the quality of teachers (Mother Child Education Foundation [MCEF], 2007). Therefore, preschool teacher education programs are advised to review their program outcomes to improve the quality of the preschool teacher education in Turkey.

## Pre-service teacher education in Turkey

Traditional teacher preparation, conducted at university level, was reorganized in Turkey in 1997 (Yüksel, 2012). Today, there are totally 72 education faculties under Higher Education Council (HEC) in Turkey together with the private ones. Of these faculties, 64 of them are state universities (Eret, 2013). Students are admitted to these teacher education programs through their scores from the nation-wide university entrance exam. However, some teacher education programs such as music, arts, and physical education apply additional ability tests while selecting their students (Eret, 2013). Preschool and elementary school teacher education lasts four years in faculties of education (Tok, 2011). Teacher candidates get their subject courses from the relevant faculties in their universities and teaching courses from the faculties

of education. Students commonly take teaching-related pedagogy courses including Methods of Teaching, Introduction to Educational Science, Educational Psychology, Curriculum Development and Instruction, Measurement and Evaluation, Turkish Education System and School Management, Classroom Management, Instructional Technologies and Materials Design, Psychological Counseling and Guidance, and Teaching Practice (Parylo et al., 2015).

On the other hand, there are opportunities for the ones who want to become a teacher but did not graduate from faculties of education in Turkey. The common path for graduates after the completion of Bachelor's degree in Science and Literature Faculties is to obtain a teaching certificate through completing a pedagogical formation program (non-thesis Master's degree). In addition, the second-shift education provided in the evening in some of the Faculties of Education and Open Education Teaching Programs for English Language and Preschool Teacher Education are another alternative teacher training programs. However, although pedagogic formation programs, second-shift evening programs, and Open Education are alternatives for the preparation of teachers in Turkey, no matter from which program they graduate, all teacher candidates are required to get a certain score from the state exam called KPSS (Exam for the Selection of Civil Servants) to be recruited as a teacher (Eret, 2013).

### LITERATURE REVIEW

Teachers are required to have not only qualifications of teaching profession but also beliefs to fulfill the responsibilities of this profession (Aslan et al., 2008) so that there is a strong relationship between selfefficacy beliefs and perceptions of competence on their job satisfaction (Bandura,1997). The beliefs that teachers have in their abilities organize and execute courses of action that are required to successfully accomplish a specific teaching task in a particular context (Tschannen-Moran et al., 1998).

The concept of self-efficacy based on the Social Learning Theory of Bandura (1986; 1989) includes one's beliefs, attitudes, behaviors and own abilities to complete tasks, reach goals and lead to better performance (Gürcan, 2005). Additionally, teacher self-efficacy refers to teachers' beliefs in their capabilities to positively affect students' learning and success (Denzine, Cooney, & McKenzie, 2005). Although teachers' sense of efficacy is a primary requirement for successful teaching and plays an important role in productive teaching practices (Goddard et al., 2004), teacher self-efficacy does not refer to productive teaching practices or successful teaching but is related to benefitting students' learning processes and outcomes (Woolfolk and Hoy, 1990).

Teacher efficacy influences teachers' behavior toward students. Teachers with high efficacy tend to accept their students' ideas easier than less efficacious teachers and use those ideas in decision-making process in the classroom (Ashton, 1984). Moreover, while teachers displaying high self-efficacy are more apt to offer creative solutions by investigating problems from alternative viewpoints (Giallo and Little; 2003; Gordon, Lim, McKinnon, & Nkala, 1998; Gurcay, 2015), teachers low in self-efficacy tend to employ reductive strategies, such as time out, warnings, and loss of privileges in classroom management (Barfield and Burlingame,1974; Emmer and Hickman, 1991; Henson, 2001), and therefore it can be concluded that high self-efficacy beliefs positively affect students' learning outcomes and quality of teaching.

Attitudes which are mental predispositions or tendencies to respond to an object, person, or event (McMillan, 2000) reflect evaluations ranging from positive to negative (Fabrigar et al., 2005).

Attitudes of teachers toward profession influence their professional competencies and success (Richardson and Watt, 2005) in their planning, decision making and classroom practices (Hooks et al., 2006; Semerci and 2004). Therefore, preservice education Semerci. programs aim to equip preservice teachers with the necessary skills and knowledge to become effective teachers (Darling-Hammond and Bransford, 2005) and to develop positive attitudes toward teaching (Jain, 2007). Since today's preservice teachers will be tomorrow's inservice teachers, displaying positive attitudes help them become successful and effective inservice teachers in the future (Hussain et al., 2011). However, many preservice education programs worldwide fail to achieve the aims of their own programs (Parylo et al., 2015).

In examining the literature, while there have been several research studies on preservice teachers' attitudes toward teaching profession (Aslan and Akyol, 2006; Bulut, 2009; Capa and Cil, 2000; Capri and Celikkaleli, 2008; Demirtaş et al., 2011; Eraslan and Çakıcı, 2011; Gökçe and Sezer, 2012; Gülşen, 2014; Güven and Kaya, 2013; Kızıltaş et al., 2012, Köksal, 2013, Pehlivan, 2008; Tunçeli, 2013), limited research on the relationship between the self-efficacy beliefs and attitudes toward teaching profession of preservice teachers is available. However, preservice teachers are expected to gain high self-efficacy beliefs and positive attitudes toward teaching profession during their training in Education Faculties. As Pehlivan (2008) emphasizes, it is difficult to train preservice teachers who chose teaching profession unwillingly, and do not have any efforts or enthusiasm to improve their performance. Therefore, it can be concluded that both high self-efficacy beliefs and positive attitudes toward teaching profession are prerequisites that a preservice teacher should have during preservice training, or otherwise, they may have discouraging experience in their future professions as teachers.

In this context, this study aimed to determine preservice preschool teachers' self-efficacy beliefs and their attitudes toward teaching profession in terms of gender and grade level, and also to reveal the relationships between preservice preschool teachers' self-efficacy beliefs and their attitudes towards teaching profession.

In accordance with the purpose, the following questions were addressed:

- 1. What level of self-efficacy beliefs and attitudes toward teaching profession do preservice preschool teachers have?
- 2. Do preservice preschool teachers' self-efficacy beliefs and attitudes toward teaching profession differ in terms of gender and grade level?
- 3. Are there any significant relationships between the self-efficacy beliefs and attitudes toward teaching profession of preservice preschool teachers?
- 4. What are the metaphorical images that reflect preservice preschool teachers' perceptions regarding the concept of teaching profession.

#### **MEDHODS**

### Research design

Mixed methods approach, the use of both quantitative and qualitative data in a single study (Creswell and Plano, 2011), was applied in two samples (n=407; and n=278). While the quantitative phase of the study involved a descriptive research design, the qualitative phase included a case study research method. Descriptive research is used to describe a current situation that existed in the past or exists now in the way it is (Karasar, 2009). Case studies inquire "a contemporary phenomenon within its real-life context when the boundaries between phenomenon and context are not clearly evident" (Yin, 1994, p. 13).

## Population and sample

The population of the present study consisted of 855(Female= 729, Male= 126) preservice preschool teachers studying in the Faculty of Education at Cumhuriyet University, Turkey in the fall semester of the 2015 – 2016 academic year. The sample of quantitative phase of the study comprised 407(Female= 333) preservice preschool teachers who voluntarily participated in the study. Of the participants, 23.6 % (n=96) were freshmen from 1<sup>st</sup> grade, 19.4% (n= 79) sophomores from 2<sup>nd</sup> grade, 20.9 % (n=85) juniors from 3<sup>rd</sup> grade and, 36.1 % (n= 147) seniors from 4<sup>th</sup> grade. However, the sample of the qualitative phase included 278 (Female = 232) preservice preschool teachers who completed the phrase taking part in the questionnaire through a certain metaphor and its reason. Of the participants in qualitative phase 77 were freshmen, 52 were sophomores, 61 were juniors and, 88 were seniors.

#### Instrument

The data were gathered via a questionnaire. The questionnaire included four major constructs: (1) demographic information including gender and grade, (2) Preschool Teachers' Self Efficacy

Beliefs Scale, (3) Profession of Teaching Attitude Scale, and (4) The phrase of 'Teaching Profession is like a/ an.....because..................' to determine preservice preschool teachers' mental images about the concept of teaching profession through metaphors.

### Preschool Teachers' Self Efficacy Beliefs Scale

The Preschool Teachers' Self Efficacy Beliefs Scale developed by Tepe and Demir (2012) is a 37 –item instrument for measuring the self-efficacy beliefs of preschool teachers and preservice preschool teachers. This 5- point Likert scale, ranging from 1 (Completely Disagree) to 5 (Completely Agree), and used as a one dimension or six dimension scale can be regarded as a valid and reliable instrument to measure self-efficacy beliefs of preschool and preservice preschool teachers (Tepe and Demir, 2012). In this study, one dimension form of the scale was used. The calculated mean scores of the scale are: 1 – 1.80 = Completely Disagree; 1.81 – 2.60 = Disagree; 2.61 – 3.40 = Neutral; 3.41 – 4.20 = Agree; 4.21 – 5.00 = Completely Agree. Additionally, Cronbach's alpha coefficient was .97 (Tepe and Demir, 2012), In addition, the Cronbach's Alpha for this measure in the present study was 0.91.

### The Teaching Profession Attitude Scale

The Teaching Profession Attitude Scale developed by Çetin (2006) is a 35 –item (15 reverse coded ) instrument with three subscales of *Love, Value* and, *Harmony* for measuring the attitude toward the teaching profession. The calculated mean scores of this 5-point Likert scale are: 1-1.79= Completely Disagree; 1.80-2.59= Disagree; 2.60-3.39= Neutral; 3.40-4.19= Agree; 4.20-5.00= Completely Agree (Çetin, 2006). Cronbach Alpha internal consistency coefficient of the Teaching Profession Attitude Scale was found to be .95 by Çetin (2006). The Cronbach's alpha showed an internal consistency of .83 for the sample of this study which composed of 407 participants.

# Data analyses

In the analysis of quantitative data, the SPSS 18.0 package program was used focusing on frequencies, percentages, arithmetic mean, standard deviation, independent sample t-test, Mann Whitney-U test, one-way ANOVA and Tukey test. Qualitative data were analyzed through the content analysis technique since metaphor analysis is essentially a qualitative research methodology related to content analysis (Moser, 2000). In this regard, the metaphors created by the participants were interpreted at five stages as (1) classification, (2) elimination and reorganization, (3) coding, (4) category development, and (5) ensuring validity and reliability (Yıldırım and Şimşek, 2008).

- **Stage 1. Classification:** In this stage, the participants' metaphors were listed and arranged in alphabetical order.
- Stage 2. Elimination and reorganization: The metaphors produced by the participants were reviewed individually and assessed whether each participant expressed a certain metaphor clearly according to three criteria: (a) relevancy (b) coherency and (c) meaningfulness (Eren and Tekinarslan, 2013). In line with these criteria, papers;
- -including a certain metaphor without giving any reason for the metaphor,
- -including a certain metaphor and its reason which are not compatible with each other
- -including metaphors that were illogical or had no contribution to a

better understanding.

-not including metaphors about the concept of teaching profession were eliminated. After the elimination process, seventy-five valid metaphors in 278 papers were included in the qualitative part of the study.

- **Stage 3. Coding:** Each metaphor was reviewed, and coded (i.e., bridge, motherhood, life, art, farming, etc.). In addition, the grades of the participants were coded as 1,2,3,4; Gender was coded as M and F.
- **Stage 4. Category development:** After the coding stage, the metaphors were grouped under nine conceptual categories as (1) a loved and respected career; (2) transmission of knowledge; (3) a guiding career; (4) an effective means of shaping society; (5) a necessary part of life process; (6) a demanding career; (7) a heart/cornerstone for the development of society (8) a sacred duty and; (9) fun.
- Stage 5. Ensuring validity and reliability: The data were analyzed separately by the researcher and a colleague (expert) from Education Faculty in order to ensure reliability and validity of the study findings. As a result of the calculation made using the formula:

[Consensus / (Consensus + Dissensus)  $\times$  100] (Miles and Huberman, 1994),

The cohesion between the coders was calculated as .98. According to Miles and Huberman (1994), an overall agreement rate of about 70% is acceptable among the researcher and the coders to assess the reliability and validity of the findings.

#### **FINDINGS**

Levels of pre-service preschool teachers' selfefficacy beliefs and attitudes toward teaching profession

The mean scores of the participants obtained from the scales and the standard deviations of the distribution are presented in Table 1.

The findings, given in Table 1, showed that while the self-efficacy beliefs of the participants was at the *Completely Agree Level* of 4.21 –5.00 (on the 5 –point Likert scale), with a mean of 4.25 (SD = .817), their teaching profession attitude was at the *Agree Level* on the 5 –point Likert scale, with a mean of 4.02 (SD = 1.167). Additionally, the mean scores of the sub-scales of the Teaching Profession Attitude Scale ranged from 3.74 (SD=1.29) to 4.48 (SD=.852) at the level of *Agree and Completely Agree*. In line with these findings, it can be interpreted that the participants have high levels of self-efficacy beliefs and positive teaching profession attitudes.

# Pre-service preschool teachers' self-efficacy beliefs and attitudes toward teaching profession in terms of gender

Mean, standard deviation and independent t test scores

**Table 1.** The levels of self-efficacy beliefs and attitudes toward teaching profession of the participants.

Profession	Mean	SD	Degree of Agreement
Preschool Teachers' Self Efficacy Beliefs Scale	4.25	.817	Completely Agree
Teaching Profession Attitude Scale (Overall Scale)	4.02	1.167	Agree
1 <sup>st</sup> Sub- scale: Love	3.92	1.19	Agree
2 <sup>nd</sup> Sub- scale: Value	4.48	.852	Completely Agree
3 <sup>rd</sup> Sub- scale: Harmony	3.74	1.29	Agree

Number of participants = 47

Table 2. Independent group t-test and Mann Whitney U test scores of the participants in terms of gender.

Variable	Male (n= 74; 18.2 %)		(n=	Female 333; 81.8 %)	T &P Values	Levene's Test		
	Mean	SD	Mean	SD	t	Р	F	Р
Preschool Teachers' Self Efficacy Beliefs Scale	4.12	.906	4.22	.837	.893	.327	.295	.588
Teaching Profession Attitude Scale (Overall Scale)	4.07	4.07 .998		.938	1.391	.165	.044	.833
1 <sup>st</sup> Sub- scale: Love	4.06	.997	4.23	.938	1.391	.165	.044	.833
2 <sup>nd</sup> Sub- scale: Value	4.19 .886 4.4		4.44	.898	2.138	.033	.171	.680
Mann Whitney U								
3 <sup>rd</sup> Sub- scale: Harmony	N	Mean	Rank Sum of Ranks		U	Z	Р	
Male	74	167	7.87 70605.50		0047.500		0.000*	
Female	333	212.03		12422.50	9647.500	-3.156	0.002*	

Levene's Test: F=1.909; P<0.05.

of the participants and Mann Whitney U test score for the subscale of *Harmony* in terms of the gender are presented in Table 2.

As shown in Table 2, although female participants had higher mean scores obtained from the both scales and the subscales of the Teaching Profession Attitude Scale than male participants, there were no statistically significant gender differences [p>.05], except for the sub-scale of *Harmony* in which there was a statistically significant gender difference favoring female participants.

# Pre-service preschool teachers' self-efficacy beliefs and their attitudes toward teaching profession in terms of grade level

The distributions of the mean scores with standard deviations obtained from the both scales in terms of their grade levels are presented in Table 3.

# Level of attitudes toward teaching profession

Variance analysis was done to determine whether

the difference observed in the mean scores of the participants, as shown in Table 3, was significant or not. According to the one-way ANOVA results, the significant difference was observed in the Harmony subscale of the Teaching Profession Attitude Scale and given in Table 4.

As illustrated in Table 4, there was a statistically significant difference between the groups in terms of the scores of the subscale Harmony at the level of 0.05. Therefore, the Turkey technique was used as a multi-comparison technique to determine

**Table 3.** The descriptive statistical results demonstrating self-efficacy beliefs and attitudes toward teaching profession of the participants in terms of grade level.

Grade	1 <sup>st</sup> Grade (n= 96; 23.6 %)		2 <sup>nd</sup> Grade (n= 79; 19.4%)		3 <sup>rd</sup> Grade (n= 85; 20.9 %)		4 <sup>th</sup> Grade (n= 147; 36.1 %)	
N=407	Mean SD		Mean	SD	Mean	SD	Mean	SD
Preschool Teachers' Self Efficacy Beliefs Scale	4.11	.814	4.13	.952	4.26	.901	4.27	.781
Teaching Profession Attitude Scale (Overall Scale)	4.15	1.04	4.18	1.04	4.21	.939	4.28	.847
1st Sub-scale: Love	4.14	1.03	4.18	1.04	4.20	.939	4.26	.846
2 <sup>nd</sup> Sub-scale: Value	4.37	.886	4.39	.869	4.39	.999	4.40	.865
3 <sup>rd</sup> Sub-scale: Harmony	3.74	1.36	4.15	1.12	4.28	1.09	4.15	1.24

**Table 4.** One-Way ANOVA results of the Harmony subscale in terms of grade level.

		Total of Squares	Mean of Squares	Std. deviation	F	Sig. (p)	Group Difference
ord Out	Between groups	20.746	.6.915	3	4.489	.004*	1.2
3 <sup>rd</sup> Sub- scale Harmony	Within groups	620.772	1.540	403			1-3
- Hairiony	Total	641.518		406			

<sup>\*</sup>p<.005.

**Table 5.** Pearson correlation results between self-efficacy beliefs and attitude toward teaching profession of the participants.

Preschool Teachers' Self Efficacy Beliefs Scale	N	r	Р
Teaching Profession Attitude Scale (Overall Scale)	407	0.126	.000*
1 <sup>st</sup> Sub- scale: Love		0.132	.000**
2 <sup>nd</sup> Sub- scale: Value		0.154	.000**
3 <sup>rd</sup> Sub- scale: Harmony		0.056	.001

determine which group the difference favored. According to the results, a significant difference was found between the 1<sup>st</sup> and 3<sup>rd</sup> grades in favor of the 3<sup>rd</sup> grade (Mean =4.28) regarding attitudes toward teaching profession [F(3-406)=4.489; p<0,05].

# Findings on the relationship between self-efficacy beliefs and attitudes toward teaching profession of the participants

In order to find out whether there was a significant relationship between self-efficacy beliefs and attitudes toward teaching profession of the participants, Pearson correlation analysis was performed and given in Table 5. The output shows that there is a positive and small correlation between the preservice preschool teachers' self-efficacy beliefs and teaching profession attitude scores with a coefficient of r =0.12, which is also significant at p < 0.00. The absolute value of the correlation coefficient can be interpreted as; nonexistent

or trivial (absolute value of r = 0.00 - 0.09); small (absolute value of r = 0.10 - 0.29); moderate or medium (absolute value of r = 0.30 - 0.49); large (absolute value of r = 0.40 - 0.69); and very large (absolute value of r = 0.60 - 1.00) (Matthews et al., 2012).

The relationships between the participants' self-efficacy beliefs and the subscales *Love* and *Value* of the Teaching Profession Attitude scale range from moderate correlation with a coefficient of r = 0.13 to large correlation with a coefficient of r = 0.15 respectively. However, there were no relationships between the preservice preschool teachers' self-efficacy beliefs and the subscale of *Harmony*.

# Findings on the metaphorical images that reflect the participants' perceptions regarding the concept of teaching profession

Metaphors created by the participants regarding the concept of teaching profession are presented in Table 6.

As seen in Table 6, seventy-five valid metaphors were

**Table 6.** Metaphors created by the participants with loadings.

Metaphor	f	Metaphor	f	Metaphor	f	Metaphor	f	Metaphor	f
Acting	3	Opening up a door everyday	1	Gardening	9	Medicine	4	Running a marathon	1
Architecture	2	Dough	2	Glasses	1	Mining	1	Sailing open sea	1
Art	15	Eating	1	Guidance	6	Mirror	4	Sculpting	1
Ballpoint Pen	1	Embassy	1	Happiness	6	Modeling	2	Shepherding	1
Book	1	Experiment	1	Heart	1	Motherhood	17	Social Media	1
Bread and Water	9	Exploring new horizons	1	Heroism	1	Navigating a Ship	1	Soil	2
Breathing	5	Family	3	House	1	Nothingness	1	Singing into the night	1
Bridge	1	Farming	4	Jug	1	Organ	1	Sun	19
Caterpillar	1	Field	3	Labyrinth	1	Organizing something	1	The first link in the chain	1
Candle	7	Flag	1	Lantern	4	Parenthood	8	Treasure	2
Coaching	1	Flying to unknown places	1	Light	8	Passion	13	Tree	9
Column	1	Food	2	Life	27	Planting	6	Vehicle	1
Compass	1	Friendship	4	Love	21	Profession of Prophets	1	Warrior	1
Conducting an Orchestra	1	Future	3	Machine	3	Raising a child	1	Weaving	1
Constructing a building Total=278	1	Game	1	Magic wand	1	Road Map	3	Writing Poetry	2

created by 278 participants and explained under nine categories. Each category, except for 7<sup>th</sup> and 8<sup>th</sup> categories, was represented by five metaphors describing the nature of the category well.

# Category 1. Teaching profession as a loved and respected career

Under this conceptual category, 63 participants used six different metaphors. The most frequent metaphors used in this category are motherhood, passion, love, heroism, family and, parenthood.

"Teaching profession is like *passion*, because it includes patience, dedication and love"

"Teaching profession is like *parenthood*, because it represents confidence, patience and, protection" "Teaching profession is like *love*, because it requires loyalty, passion and, devotion"

"Teaching profession is like *heroism*, because it constructs a family from a person and then a society from a family"

# Category 2. Teaching profession as transmission of knowledge

For this category, 52 participants produced nine metaphors which are book, ballpoint, candle, lantern, light, opening up a door, sun, treasure and, tree.

"Teaching profession is like a book, because it

informs students"

"Teaching profession is like a *tree*, because its fruits are students"

"Teaching profession is like *a candle*, because it consumes itself to light for students"

"Teaching profession is like *opening up a door*, because it requires new doors which are full of knowledge to open everyday"

"Teaching profession is like the sun, because it illuminates students"

# Category 3. Teaching profession as a guiding career

Under this category 22 participants used 11 metaphors such as compass, conducting an

<sup>&</sup>quot;Teaching profession is like *motherhood*, because it requires compassion"

orchestra, navigating a ship, road map, guidance, shepherding, coaching, modeling, vehicle, organizing something, friendship.

"Teaching profession is like *conducting an orchestra*, because every student has a different character and it is not an easy process"

"Teaching profession is like a *road map*, because it is inevitable for students to reach their goals"

"Teaching profession is like *shepherding*, because it leads to students"

"Teaching profession is like coaching, because it motivates students to learn"

"Teaching profession is like a compass, because it shows the right direction to students"

# Category 4. Teaching profession as an effective means of shaping society

This category consists of 16 metaphors created by 38 participants. The most frequent metaphors used in this category are architecture, bridge, caterpillar, constructing a building, dough, flag, jug, warrior, sculpting, weaving, mining, medicine, mirror, magic wand and, social media, art.

"Teaching profession is like *weaving*, because it requires great effort, challenging and creativeness"

"Teaching profession is like *social media*, because it needs sharing"

"Teaching profession is like a bridge, because it connects students to real life"

"Teaching profession is like *dough*, because it kneads and shapes students"

"Teaching profession is like a *warrior*, because it fights ignorance"

"Teaching profession is like mining, because it brings precious stones to light"

# Category 5. Teaching profession as a necessary part of life process

This category contains seven metaphors produced by 48 participants such as bread & water, breathing, life, eating, food, future and, glasses.

"Teaching profession is like *bread and water*, because it is basic necessity for survival of a society"

"Teaching profession is like *breathing*, because it is inevitable to maintain life"

"Teaching profession is like *glasses*, because it enables students to see better"

"Teaching profession is like *life*, because it aims to gain experiences"

"Teaching profession is like *future*, because it prepares students for their future"

# Category 6. Teaching profession as a demanding career

In this category, 37 participants produced 15 metaphors which are farming, field, gardening, nothingness, soil, planting, raising a child, writing poetry, flying to unknown places, singing into the night, acting, experiment, exploring new horizons and, running a marathon, sailing open sea.

"Teaching profession is like *acting*, because it needs preparing well before exhibiting performance otherwise, failure is inevitable"

"Teaching profession is like *experiment*, because you cannot guess the outcome"

"Teaching profession is like *running a marathon*, because it requires dedication and hard work without minding weather conditions"

"Teaching profession is like *nothingness*, because it always starts with zero"

"Teaching profession is like *writing poetry*, because it requires a special ability"

# Category 7. Teaching profession as a heart/cornerstone for the development of society

Eight participants produced six metaphors related to this category. They are column, heart, machine, organ, house and, the first link in the chain.

"Teaching profession is like a column, because it keeps a society standing"

"Teaching profession is like an organ, because its most important function is education"

"Teaching profession is like a heart, because a society doesn't exist without it"

"Teaching profession is like *a house*, because it requires building on a solid foundation"

"Teaching profession is like the first link in the chain, because it constructs societies"

## Category 8. Teaching profession as a sacred duty

In this category, two participants produced two metaphors which are profession of prophets, embassy.

"Teaching profession is like *profession of prophets*, because it leads to humanity"

"Teaching profession is like *embassy*, because it mediates students in learning process"

# Category 9. Teaching profession as fun

This category consists of three metaphors which are game, labyrinth and, happiness produced by eight participants.

"Teaching profession is like a game, because it is an enjoyable process"

"Teaching profession is like a labyrinth, because it contains many ways full of joys"

"Teaching profession is like happiness, because the more you share teaching the more you enjoy it"

### **DISCUSSION**

This study was conducted to determine preservice preschool teachers' self-efficacy beliefs and their attitudes toward teaching profession in terms of gender and grade level, and also to reveal the relationships between preservice preschool teachers' self-efficacy beliefs and their attitudes towards teaching profession.

The findings revealed that preservice preschool teachers self-efficacy beliefs were at the Completely Agree Level (4.21 – 5.00) on the 5 –point Likert scale, with a mean of 4.25 (SD = .817). This result, which implies high level of self-efficacy beliefs, is consistent with the results of other studies in relevant literature (Akkuş, 2013; Gençtürk, 2008; Girgin et al., 2010; Gömleksiz and Serhatlıoğlu, 2013; Keskin, 2006). Furthermore, preservice preschool teachers attitudes toward teaching profession was at the Agree Level(3.40 - 4.19) on the 5 -point Likert scale, with a mean of 4.02 (SD = 1.167). This result implies that preservice preschool teachers have moderate positive attitudes toward teaching profession. Similarly, Argun and İkiz (2003), Başbay et al. (2009), Korkmaz and Usta (2010), Köksal (2013), Üstün et al. (2004), Oral (2004) and Yılmaz (2009) found positive attitudes displayed by preservice teachers toward teaching profession.

With regard to the gender differences, the analyses indicated that females had more self-efficacy beliefs and positive attitudes toward teaching profession Completely Agree Levels) than did their counterparts (at Agree Levels), but the differences were not statistically significant, except for the sub-scale of Harmony which indicated a statistically significant gender difference favoring female participants. This finding was consistent with those in the previous studies that found no gender differences in terms of self-efficacy beliefs of preservice teachers (Cevik, 2010; Demirtas et al., 2009; Gençtürk, 2008; Gömleksiz and Serhatlıoğlu, 2013; Gür, 2008; Koparan et al., 2011; Korkmaz and Usta, 2010; Senol, 2012; Ülper and Bağcı, 2012; Yaman et al., 2004) and their attitudes toward teaching profession (i.e., Başbay et al., 2009; Bulut & Doğar, 2006; Bulut, 2009; Demirtas et al., 2011; Gülsen, 2014; Gömleksiz, Oral & Bulut, 2006; Gürbüztürk & Genç, 2004; Sürücü, 1997). However, there was a meaningful difference in the scores obtained from the subscale of *Harmony* in favor of female participants. This subscale has five reverse coded items related to professional harmony which are: (1) Teaching profession is the endmost career for me to perform since

I'm tired of the lessons and teachers. (2) I'm afraid of starting such an enduring profession. (3) The idea of renewing yourself continuously preoccupies me to perform this profession (4). Teaching profession is a backbreaking work that never improves. (5) Constantly being trapped in a classroom makes me angry. In line with this result, it may be implied that female preservice preschool teachers have more positive attitudes to overcome negative aspects of teaching profession. Furthermore, preschool teaching is generally much more preferred by female students than males in Turkey (Argun and İkiz, 2003; Kızıltaş et al., 2012). In this vein, Guarino et al., 2006) emphasize that females form greater proportions of new teachers than males as males have historically a wider choice of jobs than women. According to Kızıltaş et al. (2012), without expecting employment opportunities, female preservice preschool teachers choose this department more consciously and willingly than do their counterparts. In this context, Aydın and Sağlam (2012) imply that since teaching profession requires dedication and loving children like motherhood, it may be viewed as a woman's profession.

With regard to grade level differences, this study revealed that while the senior and junior participants had Completely Agree Level of self-efficacy beliefs and attitudes toward teaching profession, freshmen and sophomore participants had Agree Level. A meaningful difference was only observed in the subscale of Harmony between the1st and 3rd grades favoring 3rd grade according the result of Tukey test. Similarly, the results of the studies conducted by Akkoyunlu and Orhan (2003) and Kiremit (2006) indicated that self-efficacy beliefs of senior and junior preservice teachers had higher than that of freshmen and sophomore preservice teachers. They explained the results of increasing self-efficacy beliefs in upper grades as gaining much more experience, preparing themselves for graduation and almost being ready for teaching profession. Since, the numbers of years of a teacher's schooling are generally positively correlated with student's performance (Farrel, 1995). Additionally, Doğan (2002) and Karahan (2003), who studied on preservice teachers' attitudes toward teaching profession in terms of grade level, found that senior preservice teachers had more positive attitudes toward teaching profession than those who were freshmen. They imply that long term education cause an increase in preservice teachers' attitudes toward teaching profession.

A positive and small meaningful correlation between the preservice preschool teachers' self-efficacy beliefs and their attitudes toward teaching profession, with a coefficient of r = 0.12 was found in the present study. Some studies (i.e., Çakır, 2005; Çakır et al., 2004; Çapri and Çelikkaleli, 2008; Demirtaş et al., 2011; Oğuz and Topkaya, 2008) indicated a positive and meaningful relationship between pre-service teachers' self-efficacy beliefs and their attitudes toward teaching profession.

While there were no relationships between the preservice preschool teachers' self-efficacy beliefs and the subscale of *Harmony*, there was a positive and moderate correlation between the subscale of *Love*; a positive and large correlation between the subscale of *Value* and attitudes toward teaching profession.

It was also aimed to reveal preservice preschool teachers' perceptions regarding the concept of teaching profession in the light of metaphors. As Haggis (2004) indicates, metaphors can be used to shape thoughts, but also to shape the nature and scope of action, in both creative and restrictive ways. Preservice teachers may examine their current views and consider carefully the type of teachers they wish to be and become through developing metaphors (Wright et al., 2013) represent beliefs regarding the various teacher roles (Hasim et al., 2013) and therefore, the use of metaphors can enable preschool teachers to represent their personal understanding of the teaching profession, themselves as learners and as teachers in a way that can be beneficial in exploring the complexity of teaching (Earle, 1995). In this context, 75 valid metaphors were created by 278 participants. For example, teaching profession was defined by the participants as "parenthood", "love", "column", "heart", and "dough", as well as "weaving", "acting", "running a marathon", "writing a poetry", "breathing", and "conducting an orchestra". These metaphors were grouped under nine conceptual categories as (1) a loved and respected career; (2) transmission of knowledge; (3) a guiding career; (4) an effective means of shaping society; (5) a necessary part of life process; (6) a demanding career; (7) a heart/ cornerstone for the development of society (8) a sacred duty and; (9) fun.

While the most loaded category with 63 participants was teaching profession as a loved and respected career category, the least loaded one with two participants was teaching profession as a sacred duty category. In line with the codes and their categories, it can be interpreted as the participants have positive attitudes toward teaching profession through metaphors. Therefore, qualitative part of this study supports the findings obtained from the Teaching Profession Attitude Scale and revealing the pre-service preschool teachers' positive attitudes toward teaching profession. Similarly, a large number of studies have examined the metaphors based on preservice teachers' metaphorical representations regarding the concept of teacher, teaching profession, teaching and learning process (Black and Halliwell, 2000; Chen, 2003; Hasim et al., 2013; Küçükoğlu et al., 2014; Mouraz et al., 2013; Saban et al., 2007; Yung, 2001) and revealed much more positive attitudes and beliefs rather than negative ones. In this context, positive attitudes towards teaching profession are among the most essential properties that prospective teachers have in order to attain teacher training process (Güven and Kaya, 2013). However, as Tobin (1990) has remarked,

prospective teachers' beliefs can change significantly in the process of becoming a teacher and that metaphors can be used to examine these changes as well.

#### Conclusion

The findings reveal that preservice preschool teachers have high level of self-efficacy beliefs and moderate level positive attitudes toward teaching profession. There is also a positive and small meaningful correlation between the preservice preschool teachers' self-efficacy beliefs and their attitudes toward teaching profession. None of 278 participants developed negative metaphors regarding teaching profession and therefore, the positive attitudes of the participants toward teaching profession have also been supported by metaphors. As noted by Knowles (1994), the metaphors of preservice teachers can provide a glimpse to the developing conceptions of teaching and related concepts. These glimpses should not be ignored, but examined closely, in order to help teacher education programs discover students' beliefs earlier in a program (Wright et al., 2013).

Yet, the study had its limitations. The most important limitation of the study was the sample size, and therefore, it is suggested studies combining qualitative and quantitative approaches in a large sample size through reaching out and keeping in touch with other universities. It is also suggested perform longitudinal studies to observe the differences occurring in the self-efficacy beliefs and attitudes of preservice teachers at specific time intervals.

Although the findings of this study can only be generalized in the context wherein the study was conducted, it can have important implication and insights on preservice preschool teachers' self-efficacy beliefs and their attitudes toward profession in Turkey and in other countries as well.

# **Conflict of Interests**

The authors have not declared any conflicts of interest.

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