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An Analysis of Preschool Teachers' Sense of Efficacy: A Case of TRNC*

Mehmet Toran

Correspondence: Mehmet Toran, Faculty of Education, Istanbul Kultur University, Bakirkoy 34156 Istanbul, Turkey.

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Abstract

Determining the factors that affect teachers' competences has a decisive role in revealing the quality of teaching process. In this context, it is important to identify professional variables affecting the self-efficacy of preschool teachers. For this reason, it is aimed to investigate which professional variables influence preschool teachers' sense of efficacy. In the research, a descriptive research model was adopted. The working group of the study is composed of 191 preschool teachers participating in public nurseries and kindergartens in the TRNC, and also those participating to the research as a volunteer. The Professional Information Form and the Teacher's Sense of Efficacy Scale were used as data collection tools in the study. Statistical analyses suitable for the analysis of the data were applied by applying the normality tests to the collected data. According to the findings obtained from the analysis made, except for the school type the preschool teachers graduated and the number of children, factors such as the graduated department, the place of residence, the duration of professional experience, the economic competence, and the educational environment were found to affect the self-efficacy of preschool teachers. As a result, it can be said that preschool teachers' self-efficacy is influenced by professional variables.

Keywords: preschool, preschool teaching, self-efficacy, teaching strategies, classroom management, student participation

1. Introduction

The concept of teaching, one of the most important elements of the education process, is a long-term concept that is being debated, and today it has still been a much-debated issue. In this context, the role of the concept of teacher in the education process and the meaning that the education process attaches to the concept of teacher mutually nourishes and reproduces each other (Meijer and Foster, 1988). The concept of teaching, and its place and important role in children's academic life also affects the process of teaching (Guo, Justice, Sawyer and Tompkins, 2011). The experiences gained through the teaching process have an academic and psychological impact on the teacher. The studies carried out (Baltaoglu, Sucuoglu and Yurdabakan, 2015; Gomleksiz and Serhatlioglu, 2013; Guo, Piasta, Justice and Kaderavek, 2010; Morris, Usher and Chen, 2016) demonstrate that these effects influence teacher's self-efficacy.

Studies on the concept of self-efficacy are based on the social learning theory of Bandura (1977) and self-efficacy is defined as the individual judgment regarding his or her capacity to organize and apply the skills necessary to demonstrate his or her competence in that area (Bandura, 1997). In other words, the ability to cope with the situation that the individual encounters, and the individual's judgement / belief about himself / herself considering his or her ability is considered to be self-efficacy (Comrade, Yetim and Kucukoglu, 2016). In short, self-efficacy can be expressed as the belief that the individual has developed about what he can do.

Self-efficacy in the process of learning and teaching can determine the nature of the actual learning process (Swan, Wolf and Cano, 2011). In this context, it is of utmost importance that both the learners and the teachers can carry out the process effectively. The self-efficacy belief of the teacher, who conducts the learning process, determines the teacher's performance in the learning process (Pistav Akmese and Kayhan, 2016), the teaching methods and techniques he uses, classroom management (Kadim, 2012; Yilmaz, Tomris and Kurt, 2016), teacher interaction with students, relationship with colleagues as well as the families of the students in the institution teacher works for (Hoy and Spero, 2005; Kesicioglu and Guven, 2014; Siwatu, Chesnut, Alejandro and Young, 2016). The researches carried out indicate that the teachers' self-efficacy belief is affected by the teachers' amount of time spent in the teaching profession , economic

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satisfaction, level of education, number of students in the classroom, region where the school is located, socioeconomic status of the group they work in, educational equipment in classroom and social, cultural and economic conditions (Eells, 2011; Milner and Hoy, 2003; Ozder, 2011; Tschannen-Moran and Hoy, 2007; Tschannen-Moran and Gareis, 2004). When the factors that determined by self-efficacy belief is taken into account in terms of cause and effect relation, the self-efficacy belief is defined as the belief that the teacher develops to plan and implement the thoughts and actions related to the responsibility that he assumes (Tschannen-Moran and Hoy, 2001). However, Tschannen-Moran, Hoy and Hoy (1998) described that teacher self-efficacy as a belief that make the learning process successful, and it explains this belief as the effort, goal, and desire level for teaching. Teacher self-efficacy belief that is determinative in teacher's competence is of great importance in the teaching process especially for young children aged three to six years, the period often refered as preschool period when the developmental, academic and skill acquisition takes place the fastest (Ciyer, Nagasawa, Swadener and Patet, 2010; Fackler and Malmberg, 2016).

Studies on preschool education revealed that preschool teacher competence is important but the environment teacher works in also serves as one of the factors that effects the developmental needs of the children. The preschool teachers is expected to establish a setting in which he or she meets the needs of the students by providing the necessary equipment and strategies. The preschool teacher is supposed to develop his or her educational plans in line with the interests and needs of the children as well as using the appropriate teaching methods and techniques to facilitate the acquisition of the children and to bring the interaction between the child and the environment to the top level (Elaldi and Yerliyurt, 2016; Guo, Justice, Sawyer and Tompkins, 2011; Guo, Piasta, Justice and Kaderavek, 2010). Standards developed for professional qualifications of preschool teachers could be used as means to meet these competencies, which will eventually provide institutions with the resources for professional development and supervision.

The Ministry of National Education (MoNE), the Higher Education Council (HEC), the European Commission (EC) and National Association for The Education of Young Children (NAEYC), an International Educational Unity of Young Children with an internationally recognized standard for early childhood education are the organizations that set the competence principles that determine competence level of preschool teacher. In line with these principles, preschool teachers' competence levels can be evaluated in terms of teachers' field and professional qualifications, such as; cooperation with the society, planning education, applying education, evaluating education, meeting developmental needs of children with pedagogical tools, environmental regulation, parent education while teachers' cultural development that puts emphasis on importance of the life satisfaction level of teacher in the teaching process can also be evaluated within the framework of qualifications (Buchberger, Campos, Kallos and Stephenson, 2000; EC, 2006; Kavak, Aydin and Akbaba, 2007; MoNE, 2008; NAEYC, 2009). In this context, preschool teacher self-efficacy belief is expected to be at the ideal level in the entry phase of the teaching profession and continue throughout the profession. Therefore it is desired to be in the core of one's career both in the pre service and in service process.

Preschool teacher self-efficacy belief is of great importance, according to the results of the research and in the context of the developed policies because it helps to determine the professional performance of teacher. Preschool teacher self-efficacy belief is a significant indicator of the professional satisfaction of the teacher, and the studies on the subject of self-efficacy are equally important because it gives shape to the teacher proficiency policies that are developed. There are limited number of studies carried out in the Turkish Republic of Northern Cyprus [TRNC] on preschool education and there is scarcity of empirical evidence on the self-efficacy beliefs of preschool teachers. Therefore this study is expected to shed light to these limitations in the researches of early childhood education from the basis of preschool teacher self-efficacy. This study is also expected to provide policy makers and teacher training institutions with the scientific resources to determine factors that affect preschool teachers' self-efficacy beliefs in a way to provide better professional development opportunities in TRNC. Moreover, the lack of scientific studies on teacher quality due to the embargo on the TRNC also makes the study noteworthy. In this context, the main purpose of the research is to examine whether TRNC preschool teachers' self-efficacy beliefs are affected by professional variables.

In the research, graduates with a four-year pedagogical formation serving as teachers in preschool education institutions are presumed to be preschool teachers. Also, it is assumed that the measuring instrument used as the data collection tool for the research evaluates the self-efficacy beliefs of preschool teachers.

2. Method

2.1 Research Design

The study was designed with a descriptive research model in order to examine factors affecting self-efficacy beliefs of preschool teachers. The descriptive research model seeks to understand, describe and explain what events and situations are (De Vaus, 2013). The interaction between the descriptive research model and the current situation is determined and the answers are tried to be presented according to the obtained data (Neuman, 2011).

2.2 Research Group

The study group consists of preschool teachers working in the state preschool education institutions (nursery classes and kindergartens) in the districts of Lefkosa (Nicosia), Gazimagusa (Famagusta), Iskele (Trikomo), Girne (Kyrenia) and Guzelyurt (Morphou) in the TRNC. According to the Turkish Cypriot Teachers' Union (KTOS) data, the number of preschool teachers working in preschool education institutions in the country is 246 (KTOS, 2015).

An ethical consent was obtained from both the TRNC Ministry of Education and preschool teachers for the collection of the data of the study. In this direction, it was aimed to reach all the teachers with the aim of bringing out the country profile, but only 191 preschool teachers agreed to participate as volunteers to the research. The distribution of preschool teachers who agree to participate in the research according to their undergraduate programs is given in Table 1.

Table 1. Professional Demographic Distribution of the Study Group

The School Graduated	*f*	%
University	59	30.9
Ataturk Teacher Academy(ATA)	132	69.1
Total	191	100
The Undergraduate Program		
Child Development Teaching	8	4.2
Preschool Teaching	82	42.9
Primary Teaching	90	47.1
Field Teaching	11	5.8
Total	191	100.0
The Residential Area of Work		
Village	58	30.4
Municipality	74	38.7
County	59	30.9
Total	191	100.0
Perceived Economic Satisfaction		
Satisfied	110	57.6
Not Satisfied	81	42.4
Total	191	100.0
Perceived Educational Environment		
Adequate	91	47.6
Inadequate	100	52.4
Total	191	100.0

The table indicated that 30.9 % (*f* = 59) and 69.1 % *(f* = 132) of the preschool teachers working in the preschool education institutions, who accept to participate as volunteers to the research, are graduated from Ataturk Teacher Academy. 4.2 % (*f*= 8) of the preschool teachers are graduated from Child Development Teaching, 42.9 % (*f*=82) of the preschool teachers are graduated from Preschool Teaching; 47.1 % (*f*=90) of the preschool teachers are graduated from Primary teaching and 5.8 % (*f*=11) of the preschool teachers are graduated from Field teaching. It was determined that 30.4% (*f* = 58) of the teachers were in the villages, 38.7 % (*f* = 74) in the municipal centres, and 30.9% (*f* = 59) were working in the district centres according to the distribution of the preschool teachers. Also, when the preschool teachers' perceived economic satisfaction is considered, it was found out that 57.6 % (*f*= 110) were satisfied while 42.4 % (*f* = 81) were not satisfied economically. However, when we look at the distribution of teachers who see the perceived education environment as sufficient, it is determined that 47.6 % of the teachers (*f* = 91) think that the educational environment is sufficient and 52.4 % (*f* = 100) consider that it is insufficient. The preschool teachers in the study group were found to have professional experience years between 1 and 33, and the number of children they worked with varied between 5 and 19.

2.3 Data Collection Tools and Process

Professional Information Form and Teacher's Sense of Efficacy Scale were used as data collection tool in the study. The Professional Information Form is a form that includes inquiries by the researcher to determine variables such as the preschool teachers graduate from, the undergraduate programs they graduate, the professional years of experience, the number of children in the class, the district they work, and economic satisfaction. In the Professional Information Form, there is no question that can reveal the participant's identity for confidentiality of the identities of the participants, and all forms are coded separately.

Teacher's Sense of Efficiacy Scale was developed by Tschannen-Moran and Hoy in 2001 and adapted to Turkish in 2005 by Capa, Cakiroglu and Sarikaya. The scale consists of a total of 24 items consisting of three sub-dimensions: "self-efficacy towards student participation", "self-efficacy towards teaching strategies" and "self-efficacy towards classroom management". The validity of the scale was confirmed by confirmatory factor analysis for the construct

validity of the scale in scale adaptation study. In the reliability study of the scale's adaptation study, cronbach alpha reliability values were .82 for self-efficacy for student participation; for self-efficacy towards teaching strategies .86; and .84 for self-efficacy towards classroom management. The cronbach alpha value of the scale was found to be .93. Higher scores indicate higher self-efficacy, while lower scores indicate lower self-efficacy (Capa, Cakiroglu and Sarikaya, 2005).

The data of the study were collected by the researcher during the 2014-2015 academic year. The researcher, who agreed to voluntarily participate in the research during the data collection process, were provided with Professional Information Form and the Teacher's Sense of Efficacy Scale along with the application guide. The participants were given two weeks to fill out the form, and at the end of two weeks the researcher collected the data from the participants.

2.4 Data Analysis

Normality test, which was collected in the scope of the study, was applied since the data set is large, and while parametric tests were used for the analysis of normal distributed data, non-parametic tests were employed for the non-normal distributed data. One-way ANOVA and t test from parametric tests; Kruskal-Wallis H and Sperman Rho correlation tests were used for nonparametric tests. Tukey HSD test and Mann Whitney U test were applied as complementary statistics.

3. Results

In this section, the findings regarding preschool teachers working in preschool institutions in TRNC were presented to show whether the type of school and the undergraduate program preschool teachers graduate, the school district they work, the economic satisfaction they perceive and adequacy of educational environment, the duration of professional experience, and the number of the children at class have an influence on the preschool teacher's self-efficacy belief.

The teacher's self-efficacy belief according to the type of school graduated, belief in student engagement, belief in teaching strategies, and belief in classroom management was presented in the Table 2.

Table 2. T-Test Results of Teacher's Sense of Efficacy and Subscale Scores Related to Graduate School of Preschool Teachers

	Graduate School	N	X	sd	df	*t*	p
Efficacy in Student Engagement	University	59	27.73	8.93	189	1.065	.288
	Ataturk Teacher's Academy	132	26.36	7.84			
Efficacy in Teaching Strategies	University	59	28.25	9.19	189	1.268	.206
	Ataturk Teacher's Academy	132	26.58	8.04			
Efficacy in Classroom Management	University	59	27.88	9.55	189	.920	.358
	Ataturk Teacher's Academy	132	26.61	8.44			
Teachers' Sense of Efficacy	University	59	83.86	27.23	189	1.107	.270
	Ataturk Teacher's Academy	132	79.56	23.67			

Table 2 indicate that there is no statistically significant difference between the scores preschool teachers receive from subscale for self-efficacy in student engagement (t_{189}=1.065; p=.288;) according to the type of school preschool teachers graduate (University and Ataturk Teachers' Academy), subscale for self-efficacy in teaching strategies (t_{189}=1.268; p=.206), subscale for self-efficacy in classroom management (t_{189}=.920; p=.358), and teacher self-efficacy subscale (t_{189}=1.107; p=.270). In the light of these results, it could be concluded that teacher's sense of efficacy does not show difference according to type of school graduated.

In Table 3, it was examined whether preschool teachers differ in their teaching self-efficacy belief according to the undergraduate program they graduated. According to the results of analysis, subscale for self-efficacy in student engagement (H=141.801; p=.000), subscale for self-efficacy in teaching strategies (H=142.146; p=.000), subscale for self-efficacy in classroom management (H=143.165; p=.000), and teacher self-efficacy belief (H =142.622; p=.000) scale total scores showed statistically significant difference between preschool teachers' graduate programs. In the analysis to determine the difference between the groups, it can be said that the source of the difference in subscales and scale total score is child development and preschool teacher graduates, and this difference is in favour of child development and preschool teachers.

Table 3. Kruskal-Wallis H Test Results of Teacher's Sense of Efficacy and Subscale Scores Related to the Program Graduated

	Graduate Bachelor Degree Program	N	X	sd	Mean Rank	H	p	Differences
Efficacy in Student Engagement	Child Development	8	34.75	1.91	146.25	141.801	.000*	1>3
	Preschool Teaching	82	34.68	3.28	146.37			1>4
	Primary Teaching	90	19.86	3.39	51.99			2>3
	Field Teaching	11	18.82	4.38	44.00			2>4
Efficacy in Teaching Strategies	Child Development	8	35.63	2.93	147.69	142.146	.000*	1>3
	Preschool Teaching	82	35.18	3.82	146.19			1>4
	Primary Teaching	90	20.04	3.12	52.77			2>3
	Field Teaching	11	18.36	3.50	37.95			2>4
Efficacy in Classroom Management	Child Development	8	34.63	3.85	140.13	143.165	.000*	1>3
	Preschool Teaching	82	35.71	3.45	147.09			1>4
	Primary Teaching	90	19.56	2.98	52.73			2>3
	Field Teaching	11	17.55	4.16	37.14			2>4
Teachers' Sense of Efficacy	Child Development	8	105.38	6.80	142.88	142.622	.000*	1>3
	Preschool Teaching	82	106.12	8.78	146.85			1>4
	Primary Teaching	90	59.38	7.18	52.33			2>3
	Field Teaching	11	54.82	10.62	40.09			2>4

*p<0.001

Table 4. One-way ANOVA on Teacher's Sense of Efficacy and Subscale Scores Related to the Residential Area Preschool Teachers Work

		Sum of Square	df	Mean Square	F	p	Differences
Efficacy in Student Engagement	Between Groups	676.466	2	338.233	5.267	.006*	1<3
	In Group	12073.733	188	64.222			2<3
Efficacy in Teaching Strategies	Between Groups	433.630	2	216.815	3.123	.046*	2<3
	In Group	13053.480	188	69.433			
Efficacy in Classroom Management	Between Groups	439.617	2	219.808	2.901	.057	
	In Group	14243.378	188	75.763			
Teachers' Sense of Efficacy	Between Groups	6161.637	2	3080.819	5.160	.007*	1<3
	In Group	112237.054	188	597.006			2<3

*p<0.05

In Table 4, Sense of efficacy of preschool teachers was examined according to the residence area where they worked. According to the results of the analysis, it was found that there was a statistically significant difference between the scores received from subscale for self-efficacy in student engagement ($F_{2,188}$ =5.267; p=.006) based on the residential area preschool teachers work. In the analysis to determine the source of difference, it was found that the difference between the groups in scores received from subscale for self-efficacy in student engagement was statistically significant between the district center and the village and municipality center, and it was found that the difference was in favour of the district centres. There was a statistically significant difference between the preschool teachers' scores on the subscale for self-efficacy in teaching strategies based on the residential area they work ($F_{2, 188}$=3.123; p=.046). In the analysis to determine the source of difference, it was found that the difference between the groups in scores received from subscale for self-efficacy in teaching strategies was statistically significant between the district center and municipality center, and it was found that the difference was in favour of the district centres. There was no statistically significant difference between the preschool teachers' scores on subscale for self-efficacy in classroom management according to the residential area they work ($F_{2,188}$=2.901; p=.057). There was a statistically significant difference between the preschool teachers 'total scores of the teachers' self-efficacy scale according to the residential area they work ($F_{2,188}$=5.160; p=.007). In the analysis carried out to figure out the source of the difference, it was found that the difference between the groups in the total score of the teacher's sense of efficacy scale was statistically significant between the district center and the village and municipality center, and a significant difference was found to be in favour of the district centres. In the light of these results, it can be said that the residential area where preschool teachers work determines teacher self-efficacy belief.

Table 5. T-Test Results of Teacher's Sense of Efficacy and Subscale Scores Related to Preschool Teachers' Perceived Economic Satisfaction

	The Perceived Economic Satisfaction	N	X	sd	df	*t*	P
Efficacy in Student Engagement	Satisfied	110	27.67	8.06	189	1.754	.040*
	Not Satisfied	81	25.58	8.27			
Efficacy in Teaching Strategies	Satisfied	110	28.13	8.35	189	1.980	.032*
	Not Satisfied	81	25.70	8.38			
Efficacy in Classroom Management	Satisfied	110	28.00	8.99	189	1.834	.035*
	Not Satisfied	81	25.65	8.37			
Teachers' Sense of Efficacy	Satisfied	110	83.80	24.81	189	1.900	.044*
	Not Satisfied	81	76.94	24.46			

*p<0.05

Table 5 demonstrates that there is a statistically significant difference between the scores received from subscale for self-efficacy in student engagement based on the perceived economic satisfaction (t_{189} =1.754; p=.040), subscale for self-efficacy in teaching strategies (t_{189} =1.980; p=.032) and subscale for self-efficacy in classroom management (t_{189}= 1.834; p=.035) and teacher self-efficacy scale (t_{189} = 1.900; p=.044). In the light of this result, it can be said that economic factors determine teacher's sense of efficacy.

Table 6. T-Test Results of Teacher's Sense of Efficacy and Subscale Scores Related to the Preschool Teachers' Perception of the Educational Environment

	The Perceived Educational Environment	N	X	sd	df	*t*	p
Efficacy in Student Engagement	Adequate	91	33.13	5.61	189	18.944	.000*
	Inadequate	100	20.03	3.86			
Efficacy in Teaching Strategies	Adequate	91	33.57	6.10	189	19.007	.000*
	Inadequate	100	20.05	3.50			
Efficacy in Classroom Management	Adequate	91	33.87	6.20	189	19.873	.000*
	Inadequate	100	19.46	3.60			
Teachers' Sense of Efficacy	Adequate	91	100.24	16.98	189	21.023	.000*
	Inadequate	100	59.48	8.93			

*p<0.001

Table 6 shows that the scores received from subscale for self-efficacy in student engagement (t_{189} = 18.944; p = .000), subscale for self-efficacy in teaching strategies (t_{189} = 19.007; p = .000) and subscale for self-efficacy in classroom management (t_{189} = 19.873; p = .000) and teachers' self-efficacy scale (t_{189} = 21.023; p = .000) were found to be statistically significant according to teacher's perception of adequacy and inadequacy of the educational environment. In the light of this result, it can be said that the adequacy of the educational environment perceived by teachers have a decisive influence on self-efficacy belief.

Table 7. Results of Spearman Rho Correlation Analysis of Preschool Teachers' Professional Experiences and the Number of Children at their classes and Teacher's Sense of Efficacy Correlation and Subscale Scores

		Efficacy in Student Engagement	Efficacy in Teaching Strategies	Efficacy in Classroom Management	Teachers' Sense of Efficacy
Professional Experience	Spearman Rho	-.495	-.469	-.483	-.483
	p	.000*	.000*	.000*	.000*
	N	191	191	191	191
The Number of Children at class	Spearman Rho	-.063	-.060	-.032	-.040
	p	.390	.407	.662	.580
	N	191	191	191	191

*p<0.05

In Table 7, the relationship between the professional experience of preschool teachers and teacher's sense of efficacy scale and subscale scores, and the relationship between the number of children in the class of teachers and the scores of teachers' self-efficacy belief scale and subscales were examined.

It was found out that there were statistically significant negative correlations between the scores of preschool teachers' self - efficacy subscale for Professional experience and student engagement (r_s =-.495; p=.000), teacher subscale for self-efficacy in teaching strategies (r_s = -.469; p=000) and subscale for self-efficacy in classroom management (r_s = -. 483; p=.000) and teacher self-efficacy scale (r_s = -.483; p=.000). Hence, it can be said that teacher self-efficacy belief is negatively related to professional experience.

The number of children in the class of teachers and subscale for self-efficacy in student engagement (r_s = -.063; p=.390), subscale for self-efficacy in teaching strategies (r_s=-.060; p=.407), subscale for self-efficacy in classroom management (r_s = -.032; p=.662) and teacher self-efficacy scale (r_s = -.040; p=.580) scores were not found statistically significant. According to this result, it can be concluded that teacher self-efficacy belief is not related to the number of children in class.

4. Discussion

This study examined whether the TRNC preschool teacher's sense of efficacy beliefs are affected by professional variables and through the results derived from the study, the factors determining the teacher sense of efficacy belief were revealed.

As a result of the analysis of the collected data, it was seen that type of school preschool teachers graduated (University and Academy) had a similar role on the teachers' self-efficacy beliefs, and therefore these two school types affected teachers' sense of efficacy beliefs at a similar level.

This situation can be explained by the similarity of the characteristics of the pedagogical education given in both types of schools, and the studies (Pistav Akmese and Kayhan, 2016; Ozder, Isiktas, Iskifoglu and Erdogan, 2014; Toran and Gencgel, 2016; Yilmaz, Tomris and Kurt, 2016) revealed that the school types do not make any difference in the effectiveness of teachers' class management, teaching strategies and student engagement, and similarly, it was not found to be significant on the teacher's self-efficacy beliefs. Teacher self-efficacy beliefs change related to undergraduate programs, and the result was in favour of child development teacher and preschool teacher graduates.

The studies (Guo, Justice, Sawyer and Tompkins, 2011; Strohmer and Mischo 2016; Yoon, 2002) found out that the competence to work with preschool children is directly related to preschool children engagement level, and the professional competence to work with children affect self- efficacy belief for teaching strategies at a positive level (Epstein and Willhite, 2015). Teaching strategies given at undergraduate level affect preschool teachers' classroom management skills positively and also affect preschool teachers' self-efficacy beliefs at a high level (Burt and Sugawara, 1992; Kaya, 2010; Senol, and Ergun, 2015; Tabancali and Celik, 2013).

This study showed that the residential area where preschool teachers work has a significant influence on teacher self-efficacy beliefs. This could be interpreted with the limited resources found in the disadvantaged residential areas. Residential area worked could be a determinant factor in teachers' access to resources. In addition to lack of having infrastructure and teaching materials, cultural differences observed in the residential area could also influence teachers' self-efficacy beliefs. This finding seems to align with the studies on self-efficacy, which asserted that the fundamental teaching conditions and the opportunities provided in the educational environment could be effective on teacher self-efficacy beliefs whether positively or negatively (Goddard, Hoy and Hoy, 2000; Hoover-Dempsey, Bassler and Brissie, 1987).

The perceived economic satisfaction has a significant effect on teachers' professional performance (Clipa and Boghean, 2015). The perceived economic satisfaction enables teachers to use teaching strategies effectively, implement educational practices for classroom management by internalizing, and at the same time realize high level otudent engagement by creating positive interaction between teacher and child (Smith and Persson, 2016; Viel-Ruma, Houchins, Jolivette and Benson, 2010). According to the results obtained from the research, it was seen that the economic factors are significant factor for the self-efficacy of the preschool teachers and the economic satisfaction of the teaching profession also affected the self-efficacy positively. The adequacy of the educational environment is related to the practice beliefs of preschool teachers in the classroom environment (Sahin-Sak, Tantekin-Erden and Pollard-Durodola, 2016), the adequacy of the educational environment has a positive influence on classroom management, teaching strategies as well as active engagement of children (Burke, Aubusson, Schuck, Buchanan and Prescott, 2015; Friedman and Kass, 2002). According to the result of the research, preschool teachers who perceived the educational environment adequate had high self-efficacy beliefs, and this was proved to have a positive effect on the teachers' competency in teaching skills. It was found out that child-centred learning environments with child engagement paves the way for effective use of the teacher's professional competence, and the teacher also have a high sense of professional competence (Jennings, 2015; Perren, Herrmann, Iljuschin, Frei, Korner and Sticca, 2017).

It was found that there is a relationship between the duration of professional experience and teacher self-efficacy, and that this relationship also indicated that as the duration of professional experience increases, the teacher self-efficacy level decreases. The negative relationship between preschool teachers' professional experience and self-efficacy indicates that the occupation in the profession also causes exhaustion in teaching and negatively affects teacher self-efficacy (Bullock, Coplan and Bosacki, 2015; Toran and Gencgel, 2016). It was determined that the duration of professional experience of preschool teachers causes emotional exhaustion in the teachers and they become increasingly insensitive to the teaching process. Therefore, it would not be wrong to claim that the duration of professional

experience negatively affect preschool teachers' self-efficacy belief (Rentzou, 2015). However, Kotaman (2010) found that the duration of professional experience of preschool teachers also has a negative impact on classroom management, teaching strategies, student engagement areas, and this was directly related to teacher self-efficacy belief.

This study points out that there is no meaningful relation between the number of children preschool teachers work with and the self-efficacy of teachers, and hence the number of children is not indicative factor for competency of teachers' teaching skills and sufficiency of children engagement. This can be explained by the fact that the number of children in the teachers' class does not exceed the ideal level (between 5 and 19 children).

As a consequence, it was found that some of the professional variables related to the preschool teachers' sense of efficacy beliefs have an influence on student engagement, teaching strategies and classroom management skills. In this context, preschool teachers' sense of efficacy was found to be affected by duration of professional experience, graduated bachelor degree program, perceived economic satisfaction, perceived educational environment and residential area where preschool teachers work. It has been thought that the improvement of the disadvantages arising from these factors will affect the self-efficacy of preschool teachers positively. Therefore, research results can also be used during the development and review of education and teacher training policies. Besides, the results of the research can be used as scientific data on international platforms to highlight the situation of preschool teachers in a country (TRNC), which is under embargo. The research is based on descriptive research model and provided quantitative data collected from preschool teacher candidates. Further studies could be conducted to analyse the problem from many angles by using different research designs. For example, qualitative method could be used to analyse the perceptions of preschool teachers in an in depth manner. This is an interdisciplinary study which incorporates education, psychology and teacher education. Further studies could be developed in a way to reveal the multidisciplinary perspectives and cultural diversity. Experiences of pre-service preschool teachers and in service preschool teachers could also be examined comparatively in follow up studies. In this way preschool teacher self-efficacy could be investigated from multiple lenses and provide multiple resources for teachers, school administrators and policy makers.

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