



The Predictive Relationship between Lifelong Learning Tendency and Occupational Efficacy Sense of Pre-Service Teachers

Bertan AKYOL⁵

⁵ Assist. Prof. Dr., Adnan Menderes University, Faculty of Education, Turkey

Abstract

Lifelong learning is the habit of learning for both personal and professional issues and being aware of the developments in these both areas. On the other side, occupational self-efficacy means the sense of capacity of a person for his/her readiness to perform the required duties related to a certain occupation. These two concepts, lifelong learning and the sense of occupational self-efficacy, are significant factors for both teachers and pre-service teachers in order to carry the teaching profession accurately. For this reason, the purpose of this study is to investigate the relationship between lifelong learning tendency and occupational self-efficacy of pre-service teachers. The sample of the study which was conducted in survey model consists of 407 pre-service teachers who studies in different disciplines at Faculty of Education, Çanakkale Onsekiz Mart University, Turkey. The data of the study was gathered through Lifelong Learning Tendency Scale which was developed by Diker Coşkun (2009) and Teacher Self-Efficacy Scale which was developed by Tschannen-Moran and Hoy (2001) and translated into Turkish by Çapa Aydın, Çakıroğlu, & Sarıkaya (2005). As the results of the study, it was found that pre-service teachers studying at different departments of faculty of education perceive both occupational self-efficacy and lifelong learning on high level. As another finding of the study, there is a significant correlation between the occupational self-efficacy perceptions and lifelong learning tendencies of pre-service teachers. As the last part of the results of the study, motivation is a significant predictor for teacher self-efficacy, efficacy in student engagement and efficacy in classroom management and furthermore, learning deprivation is a significant predictor for teacher self-efficacy, efficacy in instructional strategies and efficacy in classroom management.

Keywords: Lifelong Learning Tendency, Teacher Self- Efficacy, Pre-Service Teachers

Introduction

As lifetime is so longer when compared to the past, today's human being feels the urgent need of integrating itself to the high developing scientific, technological and cultural aspects of the world. This vital need requires education not to be limited in periods of people's lives and gives direction to the countries to develop their education systems continuously. This fact has enabled the term "lifelong learning" to emerge which creates the chance of learning the required information and skills in every period of life (Diker Coşkun and Demirel, 2012).

Lifelong learning is a general regulation that restructures the present system and develops the whole potential out of formal education system. It also includes both formal and informal educational activities (Güleç et al, 2012). Lifelong learning is not an alternative to formal education but a way to complete the left sides of formal education system of a nation. Through lifelong learning, it is so accessible to invest on information, support the basic skills including the computer literacy, enrich the opportunities for innovation and reveal the more flexible forms of learning (Berberoğlu, 2010 cited from Turan, 2005). The underlying philosophy of lifelong learning is that learning is so crucial not to be carried out only in schools and universities and individuals are responsible for experiencing the life and learning by themselves. In this frame, the mission of formal education institutions is to support people to be sustainable learners and develop their skills (Karakuş, 2013). Moreover, according to the official document published by General Directorate of Lifelong Learning of Turkey, lifelong learning includes formal and informal education; it does not limit the learning with age, socio-economic status and education level; it depends on the fact that learning process is not only based on schools but also the social, political and cultural aspects of people's lives; and it continues during the lifetime (<http://hbogm.meb.gov.tr/>).

Lifelong learning is a concept that is significant for people's both private and professional lives. The development in occupational fields, new technology use in every aspect of services and people's expectations from these services require employees to be capable of their duties and satisfied with their own performances. A vital way of accomplishing a job is being aware of the trends and innovations related to the occupational field. At this point, lifelong learning creates the suitable psychological atmosphere for employees to force them to catch the developments. For this reason, individuals following and learning the trends and developments related to their occupations are one step ahead. This professional privilege contributes one another concept to emerge as a critical factor for occupational life, which is occupational self-efficacy.

Occupational self-efficacy is generally defined as how an individual considers himself or herself capable about his or her job or the perception of accomplishment level about the task worked on. This term is directly related to the inner answer given by the individual for the question "To what extent can manage this job?". This perception motivates people to make self-evaluation comprehensively about the level of managing the task given in work life. As individuals in professional life are required to examine many factors related to the expectations of others and needs of the services given, they are in need of meeting requirements of occupational efficacy (Ülper and Bağcı, 2012).

As the sense of efficacy in all types of professions is so crucial, teachers, one of the most significant shareholders of teaching and the focus group of this study, carry the mission of directing students according to their skills and qualifications. Their tendency for learning for all aspects of life and being model for the students increases the importance of their duties. As they insistently acquire and update all kinds of abilities, interests, knowledge and qualifications for themselves, the perception of efficacy for their jobs also rise.

In addition to the feeling of efficacy in the teaching profession, high level of occupational self-efficacy for teachers enable them to affect the students' level of success and motivation positively, handle the classroom and time management accomplishedly, prevent the undesired students' behaviours in the classroom, find the ways of applying new teaching methods for students and increase their level commitment for teaching profession. Additionally, teachers with high occupational self-efficacy spend most of their times in school for the learning benefits of their students, show tendency to take the responsibility of being interested in the learning and behavioural handicaps of the students, creates a positive classroom atmosphere for both themselves and their students, consider ethical attitudes towards students as custom and tend to determine the necessities of their students. On the other hand, teachers with low level of occupational self-efficacy spend more time for unacademical issues, criticize the students on the occasions of failures, do not show tendency to benefit from different types of materials in the classroom to help students learn better, and use more teacher-oriented methods on teaching practices (Ülper and Bağcı, 2012)

As an addition to the benefit of occupational self-efficacy for teaching practices, Ross (1998) gives the list of the advantages of this concept for teachers as;

1. Learning and using new techniques and approaches in teaching practices,
2. Increasing the self-control of students in classroom management and decreasing the way of direct observation of students,
3. Special tendency for students who have low level of success,
4. Increasing the concept of self for students' academic efficacy
5. Determining accessible aims,
6. Tendency to behave persistently for students' failures and unsuccessful attempts.

Therefore, self-efficacy is a factor affecting the way the people function. Bandura (1997) states that they tend to behave in the same direction of their beliefs, tasks and activities they trust in their trueness. In occupational life, people show tendency to play active roles on the duties which make them feel competent and confident. This feeling increases on the occasions that these people learn the new issues related to their jobs, which is directly related to the habits of lifelong learning (Kurbanoğlu, 2004) As a result, the pre-service teachers tendency in lifelong learning has a vital effect on the sense of occupational efficacy. So the purpose of this study is to investigate the relationship between lifelong learning tendency and occupational self-efficacy of pre-service teachers.

Method

Method of Research

The research was conducted in survey model which is depicted as “the approach of examining a situation that occurred in the past or still takes place, by determining the situation, event, individuals or objects within their own conditions” by Karasar (2007) purporting to identify the predictive relations between lifelong learning tendency and occupational efficacy sense of pre-service teachers. For this purpose, following questions were answered in the study:

1. What is the level of lifelong learning tendency and occupational efficacy sense of pre-service teachers?
2. Are there any significant relationship among occupational efficacy sense, lifelong learning tendency and some features of pre-service teachers?
3. Are there any significant predictors among some features and lifelong learning tendency of pre-service teachers for their occupational efficacy sense?

Population and Sampling

The study’s sample consists of 407 pre-service teachers who studies in different disciplines at Faculty of Education, Çanakkale Onsekiz Mart University, Turkey. The distribution of these pre-service teachers according to some features is in Table 1.

Table 1. *Distribution of Pre-Service Teachers according to their Features*

Features		1	2	3	4	5	6	7	8	Total
		1. Grd.	2. Grd.	3. Grd.	4. Grd.					
Grade Level	N	109	86	120	91					406
	%	26.8	21.1	29.5	22.4					99.8
Place of High School		District	City							
	N	204	197							401
	%	50.1	48.4							98.5
Place of Elementary School		Village	District	City						
	N	50	184	167						401
	%	12.3	45.2	41						98.5
Mothers’ Education Level		Illiterate	Literate	Primary Sch.	Middle Sch.	High Sch.	Bachelor	Master	PhD	
	N	18	22	216	49	72	21	4	1	403
	%	4.4	5.4	53.1	12	17.7	5.2	1	.2	99
Fathers’ Education Level		Illiterate	Literate	Primary Sch.	Middle Sch.	High Sch.	Bachelor	Master	PhD	
	N	5	10	131	63	122	62	9		402
	%	1.2	2.5	32.2	15.5	30	15.2	2.2		98.8

Note: Some variables such as GPA, monthly family income and monthly expense were stated as numbers directly, not categorically, by pre-service teachers thus they did not place in Table 1.

Data Collection Methods and Analyses

As data collection tool, a questionnaire consisted of personal information form, Lifelong Learning Tendency Scale and Occupational Efficacy Sense Scale was used in the research.

Lifelong Learning Tendency Scale: LLTS, a five-point Likert type scale, was developed by Diker Coşkun (2009). According to validity and reliability analyses performed by Diker Coşkun (2009), LLTS is composed of 4 dimensions as Motivation (LLT 1), Persistence (LLT 2), Learning Deprivation (LLT 3) and Curiosity Deprivation (LLT 4), and the reliability coefficient was $\alpha=.89$. Moreover, Table 2 contains LLTS and its dimensions' reliability coefficients found in this research.

Teacher Self-Efficacy Scale: TSES is a five-point Likert type scale and it was developed by Tschannen-Moran, & Hoy (2001). Çapa Aydın, Çakıroğlu, & Sarıkaya (2005) translated TSES into Turkish and checked out reliability and validity of TSES Turkish version. They obtained $\alpha=.93$ which indicates the scales is highly reliable (Hair, Black, Babin, Anderson & Tahtam, 2006) and also found that OESS consists 3 dimensions; Efficacy in Student Engagement (OES 1), Efficacy in Instructional Strategies (OES 2) and Efficacy in Classroom Management (OES 3). In addition, reliability coefficients of OESS and its dimensions attained in the research are presented in Table 2. In the development of data collection tools used in this research the master thesis "Evaluation of the Abilities of Classroom Teachers and Branch Teachers on integrated Education" by Battal (2007) was made use of. The reliability and validity of the survey was verified by experts and hereby "Integrated Education Survey" was developed and used. In the analyses of the collected data, variables of classroom teachers' seniorities, education levels, gender, attended classes and in-service training were used.

Table 2. Descriptive Statistics about LLTS and TSES with Sub-Dimensions

LLTS and OESS	Number of Items	Cronbach Alpha	n	\bar{X}	s.d.	Kurtosis	Skewness
Motivation (LLT 1)	6	.87	407	3.91	.79	.62	-.79
Persistence (LLT 2)	6	.83	407	3.41	.81	-.28	-.30
Learning Deprivation (LLT 3)	6	.83	407	3.83	.95	-.51	-.67
Curiosity Deprivation (LLT 4)	9	.90	407	3.68	.94	-.40	-.53
Lifelong Learning Tendency (LLT)	27	.91	407	3.70	.65	-.65	-.25
Efficacy in Student Engagement (TSE 1)	8	.78	407	3.85	.58	.71	-.76
Efficacy in Instructional Strategies (TSE 2)	8	.82	407	3.89	.61	.93	-.74
Efficacy in Classroom Management (TSE 3)	8	.84	407	3.89	.65	.76	-.78
Teachers Self-Efficacy (TSE)	24	.92	407	3.88	.56	.79	-.76

Data Analysis

At first, distributions of LLTS, TSES and their sub-dimensions were examined to see if they fit normal distribution using Kurtosis and Skewness Coefficients which were between -2 and +2. Thus, researcher determined that LLTS and TSES with sub-dimensions have normal distributions. Then, Pearson Product Moment Correlation Analyze; to determine the relationship among variables, lifelong learning tendency and teacher self-efficacy sense, and Linear Stepwise Regression Analysis; to decide the predictive variables of teacher self-efficacy, were performed besides descriptive statistics like frequencies, percentages, means and standard deviations. Additionally, evaluation ranges such as 1.00-1.79=Very Low, 1.80-2.59=Low, 2.60-3.39=Medium, 3.40-4.19=High and 4.20-5.00=Very High [1 → 4/5 + 4/5 + 4/5 + 4/5 → 5] were used to decide levels of pre-service teachers' lifelong learning tendency and occupational efficacy sense.

Findings

The data related to the study's first question "What is the level of lifelong learning tendency and occupational efficacy sense of pre-service teachers?" is given Table 2. It has been found out that pre-service teachers' Life Long Learning Tendency level (\bar{X} =3.70; s.d.=.65) and Teachers' Self-Efficacy level (\bar{X} =3.88; s.d.=.56) are high.

Table 3 includes the data for the study's second question "Are there any significant relationship among occupational efficacy sense, lifelong learning tendency and some features of pre-service teachers?".

Table 3. Correlation Coefficients between Variables and TSE

Variables and TSE	Grade Lev.	GPA	Study Time	Place of HS	Place of ES	Mother Ed. Lev.	Father Ed. Lev.	Family Income	Monthly Expense	LLT 1	LLT 2	LLT 3	LLT 4	LLT
<i>TSE 1</i>	-.01	.11	-.09	.06	.09	-.01	.02	-.06	-.02	.46**	.32**	.25**	.21**	.40**
<i>TSE 2</i>	-.05	.09	-.03	.09	.15**	.04	.05	-.02	.01	.47**	.32**	.25**	.20**	.39**
<i>TSE 3</i>	-.03	.02	-.08	.07	.10*	.00	.03	.01	-.02	.36**	.16**	.23**	.13**	.29**
TSE	-.03	.08	-.07	.08	.13*	.01	.04	-.03	-.01	.47**	.29**	.27**	.20**	.39**

* $p \leq .05$; ** $p \leq .01$

According to Table 3, correlation analysis shows that there is positive and significant relationship between TSE1 and LLT1 ($r=0.46$, $p \leq 0.01$), TSE1 and LLT2 ($r=0.32$, $p \leq 0.01$), TSE 1 and LLT 3 ($r=0.25$, $p \leq 0.01$), TSE1 and LLT4 ($r=0.21$, $p \leq 0.01$), TSE1 and LLT ($r=0.40$, $p \leq 0.01$). On the other hand, there is no significant relationship between TSE1 and Grade level, GPA, study time, place of high school place of elementary school, mother educational level, father educational level, family income, and monthly expense ($p > 0.05$). Moreover, a positive significant relationship between TSE2 and place of elementary school ($r=0.15$, $p \leq 0.01$), TSE 2 and LLT1 ($r=0.47$, $p \leq 0.01$), TSE 2 and LLT 2 ($r=0.32$, $p \leq 0.01$), TSE 2 and LLT 3 ($r=0.25$, $p \leq 0.01$), TSE 2 and LLT 4 ($r=0.20$, $p \leq 0.01$), TSE 2 and LLT ($r=0.39$, $p \leq 0.01$) have been found after the correlation analysis. However, this analysis shows no significant relationship between TSE 2 and Grade level, GPA, study time, place of high school, mother educational level, father educational level, family income, monthly expense.

Correlation analysis in Table 3 also displays the significant relationship between TSE 3 and place of elementary school ($r=0.10$, $p \leq 0.05$), TSE 3 and LLT 1 ($r=0.36$, $p \leq 0.01$), TSE 3 and LLT 2 ($r=0.16$, $p \leq 0.01$), TSE 3 and LLT 3 ($r=0.23$, $p \leq 0.01$), TSE 3 and LLT 4 ($r=0.13$, $p \leq 0.01$) and TSE 3 and LLT ($r=0.29$, $p \leq 0.01$), but this analysis puts forward no significant relation between TSE 3 and Grade level, GPA, study time, place of high school, mother educational level, father educational level, family income, monthly expense ($p > 0.05$). Finally, for correlation analysis in Table 3., there is a significant relation between TSE and place of elementary ($r=0.13$, $p \leq 0.05$), TSE and LLT 1 ($r=0.47$, $p \leq 0.01$), TSE and LLT 2 ($r=0.29$, $p \leq 0.01$), TSE and LLT 3 ($r=0.27$, $p \leq 0.01$), TSE and LLT 4 ($r=0.20$, $p \leq 0.01$) and TSE and LLT ($r=0.39$, $p \leq 0.01$). According to the findings given in Table 3, there is no significant relationship between OES and Grade level, GPA, study time, place of high school, mother educational level, father educational level, family income, monthly expense ($p > 0.05$).

Table 4 and Table 5 shows the data for the study's third question "Are there any significant predictors among some features and lifelong learning tendency of pre-service teachers for their occupational efficacy sense?".

Table 4. *First Step Regression Model's Coefficients for TSE of Pre-Service Teachers*

Variables and TSE		Grade Lev.	GPA	Study Time	Place of HS	Place of ES	Mother Ed. Lev.	Father Ed. Lev.	Family Income	Monthly Expense	LLT 1	LLT 2	LLT 3	LLT
<i>TSE</i> (Constant=2.12) [R=.57; R ² =.33] F ₍₁₃₋₂₁₄₎ =8.03; p=.00	β	-.03	.02	-.00	-.06	.08	-.03	.01	-.01	-.01	.41	.04	.28	-.28
	<i>t</i>	-.62	.23	-.23	-.74	1.36	-.79	.33	-1.06	-.14	5.82	.62	3.62	-1.82
	<i>p</i>	.54	.82	.82	.46	.17	.43	.74	.29	.89	.00*	.54	.00*	.07
<i>TSE 1</i> (Constant=2.06) [R=.52; R ² =.27] F ₍₁₃₋₂₁₄₎ =6.16; p=.00	β	.01	.07	-.01	-.04	.05	-.02	-.00	-.01	-.01	.30	.09	.23	-.18
	<i>t</i>	.20	.89	-1.33	-.54	.86	-.45	-.05	-1.43	-.02	4.05	1.16	2.77	-1.11
	<i>p</i>	.84	.38	.18	.59	.39	.65	.96	.15	.99	.00*	.25	.01*	.27
<i>TSE 2</i> (Constant=2.09) [R=.57; R ² =.33] F ₍₁₃₋₂₁₄₎ =7.91; p=.00	β	-.06	-.03	.00	-.10	.10	-.02	.01	-.01	-.01	.44	.03	.26	-.23
	<i>t</i>	-1.16	-.41	1	-1.18	1.69	-.66	.22	-.77	-.05	5.79	.45	3.03	-1.34
	<i>p</i>	.25	.68	.32	.24	.09	.51	.83	.44	.96	.00*	.66	.00*	.18
<i>TSE 3</i> (Constant=2.21) [R=.51; R ² =.26] F ₍₁₃₋₂₁₄₎ =5.80; p=.00	β	-.04	.02	-.00	-.03	.07	-.04	.03	-.01	-.01	.48	.01	.36	-.43
	<i>t</i>	-.65	.16	-.28	-.30	1.08	-.96	.66	-.65	-.28	5.55	.11	3.74	-2.27
	<i>p</i>	.52	.87	.78	.76	.28	.34	.51	.52	.78	.00*	.91	.00*	.02*

*p \leq .05; LLT 4 was excluded because tolerance was reached to limit for the regression model (Tolerance=.00).

The results of regression analysis in Table 4 gives data related to 4 separate models to find out variables affecting TSE, TSE 1, TSE 2, TSE 3. It has been found out that LLT 1 and LLT 3 are significant predictors for TSE, TSE 1, TSE 2, TSE 3 variables. Regression analysis also shows that LLT is also significant TSE 3.

Table 5. *Last Step Regression Model's Coefficients for TSE of Pre-Service Teachers*

Variables and TSE		LLT 1	LLT 3
<i>TSE</i> (Constant=2.01) [R=.55; R ² =.30] F ₍₂₋₂₂₅₎ =48.97; p=.00	β	.32	.16
	<i>t</i>	7.20	4.46
	<i>p</i>	.00*	.00*
<i>TSE 1</i> (Constant=2.13) [R=.50; R ² =.25] F ₍₂₋₂₂₅₎ =37.10; p=.00	β	.29	.16
	<i>t</i>	6.11	4.08
	<i>p</i>	.00*	.00*
<i>TSE 2</i> (Constant=1.90) [R=.55; R ² =.30] F ₍₂₋₂₂₅₎ =48.33; p=.00	β	.36	.14
	<i>t</i>	7.65	3.74
	<i>p</i>	.00*	.00*
<i>TSE 3</i> (Constant=2.17) [R=.50; R ² =.25] F ₍₃₋₂₂₄₎ =24.58; p=.00	β	.48	.34
	<i>t</i>	5.85	4.80
	<i>p</i>	.00*	.00*

*p \leq .05

The regression model in Table 5 shows that LLT 1 is a significant predictor for TSE (β =.32; *t*=7.20; *p* \leq .05), TSE 1 (β =.29; *t*=6.11; *p* \leq .05), TSE 2 (β =.36; *t*=7.65; *p* \leq .05) and TSE

3 ($\beta=.48$; $t=5.85$; $p\leq.05$). It can also be seen in the same model that that LLT 3 is a significant predictor for TSE ($\beta=.16$; $t=4.46$; $p\leq.05$), TSE 1 ($\beta=.16$; $t=4.48$; $p\leq.05$), TSE 2 ($\beta=.14$; $t=3.74$; $p\leq.05$) and TSE 3 ($\beta=.34$ $t=4.80$; $p\leq.05$).

Discussion and Conclusion

In this study, the purpose is to investigate the relationship between lifelong learning tendency and occupational self-efficacy of pre-service teachers. In order to discuss the findings of the study, it is important to search the relevant studies. However, there is a limited number of studies showing the relationship between occupational self-efficacy and lifelong learning tendency of pre-service teachers (Kurbanoğlu, 2003; Garipağaoğlu, 2013). The studies on these two concepts analyze them singly or aim to reveal the relationship between different concepts. However, this study is an indicator the relationship between these concepts which have important roles separately on the effectiveness of both teachers and pre-service teachers.

The findings of the study indicate that pre-service teachers studying at different departments of faculty of education perceive both occupational self-efficacy and lifelong learning on high level. As another finding of the study, there is a significant correlation between the occupational self-efficacy perceptions and lifelong learning tendencies of pre-service teachers. As the last part of the results of the study, motivation is a significant predictor for teacher self-efficacy, efficacy in student engagement and efficacy in classroom management and furthermore, learning deprivation is a significant predictor for teacher self-efficacy, efficacy in instructional strategies and efficacy in classroom management. Similarly, Taşgın and Sönmez (2013) states related to the findings of his study that both teachers and pre-service teachers perceive their efficacy for teaching occupation at a high level. Another study carried by Kahyaoglu and Yangin (2007) also indicates that pre-service teachers consider themselves efficient to profess teaching in the near future. Demirtaş, Cömert and Özer (2011) has also contributed to the literature with the findings of their study aiming to reveal the relationship between occupational self-efficacy perceptions of pre-service teachers and their attitudes towards teaching profession. The findings of this study indicate that there is a positive relationship between these two concepts and pre-service teachers perceived high efficacy for teaching profession. One other study in the self-efficacy perception of pre-service teachers carried by Ekici (2008) aiming to identify the effect of classroom management course on pre-service teachers' perceptions of occupational self-efficacy, reveals that pre-service teachers show readiness in terms of self-efficacy to perform teaching profession.

As the other point of the study, in some studies (Diker Coşkun and Demirel, 2012; Kılıç, 2014) focusing the lifelong learning tendencies of pre-service teachers, the findings do not show similarity with the findings of this study and they state that the pre-service teachers in these studies display low lifelong learning tendency. On the other hand, there are several studies aiming to find out the lifelong learning tendencies of pre-service teachers and reveal the same findings, which is parallel with this study. Gencel (2013) aims to investigate the pre-service teachers' perceptions towards their lifelong learning competencies. According the findings of this study, pre-service teachers feel themselves competent in lifelong learning tendency. In another study, İzci and Koç (2012) has carried out a study of which purpose is to evaluate the views of pre-service teachers on lifelong learning. As the result of this study, it is stated that pre-service teachers in the departments of primary school teaching, mathematics teaching and teaching of Turkish displayed high agreement on lifelong learning tendency.

As a result, lifelong learning is a concept that can be considered as a requirement for both teachers and pre-service teachers. In this regard, the mission of universities and faculties

of education should be to create the suitable atmosphere for pre-service students in which they can develop themselves on personal, social and cultural aspects, which lead them to be lifelong learners. Their tendency to learn the various dimensions of life continuously surely affect their efficacy perceptions on the teaching occupation. The efficacy perceived during the process of training gained in the faculties of education is directly going to be the determinant factor of being a model teacher for their students in the near future.

References

- Bandura, A. (1997), *Self-efficacy: The Exercise of Control*. W.H. Freeman and Company, New York, NY.
- Berberoğlu, B. (2010). Yaşam Boyu Öğrenme İle Bilgi Ve İletişim Teknolojilerin Açısından Türkiye'nin Avrupa Birliği'ndeki Konumu (The Position of Turkey In European Union in Terms of Lifelong Learning and Information and Communication Technology). *Bilgi, Ekonomi ve Yönetimi Dergisi (Journal of Knowledge Economy & Knowledge Economy)*, 5(2), 113-126.
- Çapa Aydın, Y., Çakıroğlu, J., & Sarıkaya, H. (2005). The development and validation of a Turkish version of the teachers' sense of efficacy scale. *Education and Science*, 30(137), 74-81.
- Demirtaş, H.; Cömert, M. & Özer, N. (2011). Pre-Service Teachers' Self-Efficacy Beliefs and Attitudes towards Profession. *Education and Science*, 36(159), 96-111.
- Diker Coşkun, Y. (2009). *Üniversite öğrencilerinin yaşam boyu öğrenme eğilimlerinin bazı değişkenler açısından incelenmesi [Investigation of lifelong learning tendency of undergraduate students' in terms of some variables]*. Unpublished Doctoral Dissertation, Hacettepe University Graduate School of Social Science, Ankara, Turkey.
- Diker Coşkun, Y & Demirel, M. (2012). Üniversite Öğrencilerinin Yaşam Boyu Öğrenme Eğilimleri (Lifelong Learning Tendency of University Students). *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi (Hacettepe University Journal of Education)*, 42, 108-120.
- Ekici, G. (2008). Sınıf Yönetimi Dersinin Öğretmen Adaylarının Öğretmen Öz-Yeterlik Algı Düzeyine Etkisi (The Effects of the Classroom Management Lesson On Preservice Teachers' Teacher Sense Of Self-Efficacy). *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi (Hacettepe University Journal of Education)*, 35, 98-110.
- Garıpağaoğlu, B., Ç. (2013). The effect of self-efficacy on the lifelong learning tendencies of Computer Education and Instructional Technologies pre-service teachers: A case study. *International Journal of Human Sciences*, 10(1), 224-236.
- Gencel, İ., E. (2013). Prospective Teachers' Perceptions towards Lifelong Learning Competencies. *Education and Science*, 38(170), 237-252.
- Güleç, İ; Çelik, S. & Demirhan B. (2012). Yaşam Boyu Öğrenme Nedir? Tanım Ve Kapsam Üzerine Bir Değerlendirme (What Is Lifelong Learning? An Evaluation on Definition and Scope. *Sakarya University Journal of Education*, 2(3), 34-48.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tahtam, R. L. (2006). *Multivariate data analysis*. New Jersey, USA: Pearson Education LTD.

- İzci, E. & Koç, S. (2012). Öğretmen Adaylarının Yaşam Boyu Öğrenmeye İlişkin Görüşlerinin Değerlendirilmesi (The Evaluation Of The Teacher Candidates' Views On The Life Long Learning). *Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi (Adıyaman University Journal of Social Sciences Institute)*, 5(9), 101-114.
- Kahyaoğlu, M. & Yangın, S. (2007). İlköğretim Öğretmen Adaylarının Mesleki Özyeterliklerine İlişkin Görüşleri (Views Of Prospective Teachers In Elementary School Teaching Departments About Professional Self-Efficacy). *Kastamonu Eğitim Dergisi (Kastamonu Education Journal)*, 15(1), 73-84.
- Karakuş, C. (2013). Meslek Yüksek Okulu Öğrencilerinin Yaşam Boyu Öğrenme Yeterlikleri (Lifelong Learning Competences Of Vocational School Students). *Eğitim ve Öğretim Araştırmaları Dergisi (Journal of Research in Education and Teaching)*, 3(4), 26-35.
- Karasar, N. (2007). *Bilimsel araştırma yöntemi [Scientific research method]* (17. Ed.). Ankara, Turkey: Nobel Yayınevi.
- Kılıç, Ç. (2014). Öğretmen Adaylarının Yaşam Boyu Öğrenmeye Yönelik Algıları (Pre-Service Teachers' Perceptions Towards Lifelong Learning). *Eğitim ve Öğretim Araştırmaları Dergisi (Journal of Research in Education and Teaching)*, 3(4), 79-87.
- Kurbanoglu, S. (2003). Self-efficacy: a concept closely linked to information literacy and lifelong learning. *Journal of Documentation* 59 (6), 635-646.
- Kurbanoglu, S. (2004). Öz-yeterlik inancı ve bilgi profesyonelleri için önemi (Self-Efficacy Belief and Its Importance for Information Professionals), *Bilgi Dünyası (Information World)*, 5 (2), 137-152.
- Ross, J. A. (1998): The antecedents and consequences of teacher efficacy. In J. Brophy (Ed.), *Advances in research on teaching*, Vol. 7 (pp. 49–73). Greenwich, CT: JAI Press.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783-805.
- Taşgın, A. & Sönmez, S. (2013). Öğretmenlik Mesleği Genel Yeterliklerinin Sınıf Öğretmenleri ve Sınıf Öğretmeni Adaylarının Görüşlerine Göre Değerlendirilmesi (Öğretme ve Öğrenme Süreci Yeterlikleri-Öğrenmeyi, Gelişimi İzleme ve Değerlendirme Yeterlikleri) (Assessment of General Teacher Proficiencies According to the Views of Classroom Teachers and Pre-service Classroom Teachers (Proficiencies of Teaching-Learning Process-Proficiencies of Monitoring and Evaluating Learning and Development). *Middle Eastern & African Journal of Educational Research*, 3, 80-90.
- Turan, S. (2005). Öğrenen Toplumlara Doğru Avrupa Birliği Eğitim Politikalarında Yaşam Boyu Öğrenme (Lifelong Learning in Educational Policies of European Union towards Learning Societies), *Ankara Avrupa Çalışmaları Dergisi (Ankara Review of European Studies)*, Cilt:5, No:1, Güz 2005, s.87–98.
- Ülper, H. & Bağcı, H. (2012). Türkçe Öğretmeni Adaylarının Öğretmenlik Mesleğine Dönük Öz Yeterlik Algıları (Self Efficacy Perceptions Of Turkish Teacher Candidate). *Turkish Studies - International Periodical For The Languages, Literature and History of Turkish or Turkic*, 7(2), 1115-1131.