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Investigation of the Relationship between Pre-service Music Teachers' Attitudes towards Teaching Profession and their Self-efficacy Beliefs

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Article Info	Abstract
Article History	This study aimed to examine the attitudes of pre-service music teachers towards
Received: 03 February 2020	teaching profession and their teaching self-efficacy beliefs. The attitudes and self-efficacy beliefs of pre-service music teachers towards teaching profession were compared based on the variables of gender and academic achievement. The
Accepted: 25 August 2020	research sample consists of 262 pre-service music teachers studying in the faculties of education in Turkey. Personal information form, attitude scale towards teaching profession and teacher self-efficacy beliefs scale were used in
Keywords	the research. The findings showed that the pre-service teachers" attitudes and self-efficacy beliefs towards teaching profession are high. In addition, pre-
Music teachers Self-efficacy Teaching profession Attitude	service teachers" attitudes and self-efficacy beliefs towards teaching profession differ according to their gender and level of academic achievement. A significant relation was found between pre-service teachers" self-efficacy beliefs and attitudes towards teaching profession.

Introduction

It is seen that the number of studies on teaching self-efficacy and attitude towards teaching profession has increased at a significant rate in recent years in Turkey. It can be stated that these studies are generally empirical studies aiming to reveal how teaching self-efficacy and attitude towards the profession change according to demographic characteristics. The findings obtained in these studies seem to be different and inconsistent with each other, so it becomes difficult to reach generalizable information. The aim of this study is to examine whether the pre-service music teachers" attitudes towards teaching self-efficacy and profession differ based on demographic characteristics.

Pre-service art teachers should have teaching competencies as well as leading personal and professional lives that are interested in and enriched with visual arts. In this regard, a successful art education student has competencies in art and art education, teamwork, actively dealing with children and young people, effective classroom and workshop management skills and student-centered teaching approaches. Pre-service art teachers try to realize teaching program acquisitions for students of all ages from preschool to secondary education (Kara, 2020a; Kara, 2020b; Ünlü, Aydos & Sünbül, 2008; Yates, 2007).

Music teaching is a unique profession. Music teacher education is the process of teaching individuals who are oriented towards this profession in the field of music. This process generally focuses on the competencies required by the music teaching profession. These are called music teaching self- efficacy. From this point of view, music teacher education is the process of gaining and developing music teacher competencies. The aim of music teacher education is to provide pre-service teachers with these competencies and to develop these competencies. Music teaching competencies are generally gained through pre-service training and developed through in-service training. This process is carried out with certain programs carried out under certain regulations in certain environments (Uçan, 2006).

Teaching is a profession that requires professional qualifications (field knowledge, general culture and professional knowledge) as well as personal qualities and requires a positive attitude and behavior in the professional sense at the same time (Abu Karsh, 2018; Alan, 2019; Erden, 1988; Mutlu, Polat, & Alan, 2019; Serhan, 2019; Sunbul 2003; Turunen, 2019). Thus, pre-service teachers" positive attitude towards the profession is as important as knowledge. It is an opinion adopted by all parties regarding education that teachers have some competencies that they should have in order to ensure that students, who are the target audience of education, reach the desired level (Şahin & Beydoğan, 2016; Ünlü, Sünbül & Aydos, 2009).

In the literature, it stated that the concept of teacher competence is considered as an important concept representing the professional identity of teachers and prospective teachers (Jung, Zhang, & Chiang, 2019; Sünbül & Arslan, 2006; Ulusoy, & Argun, 2019; Yeşilyurt, 2011). Bandura (1997) states that self-efficacy belief is fed from four basic sources: enactive mastery experience, verbal persuasion, vicarious experience, and physiological and affective state. Personal experiences are the most effective source that creates the self-efficacy belief. While successful experiences of the person provide the self-efficacy belief to be formed and strengthened, unsuccessful experiences cause the self-efficacy belief to weaken. A teacher can work on a specific teaching method, practice this method and gain successful experiences. In this regard, the development of a high self-efficacy belief in any field is directly related to the successful experience in that field (Kara, 2020; Yurt and Sünbül, 2014).

When the concept of self-efficacy is evaluated from the teacher's point of view, it emphasizes the knowledge, skills and attitudes required to fulfill the duties and responsibilities required by teaching profession (Goddard, Hoy & Woolfolk-Hoy, 2004; Hilton & Canciello, 2018; Laadem & Mallahi, 2019; Perdana, Jumadi, & Rosana, 2019; Woolfolk-Hoy & Spero, 2005). Based on the above information, it can be argued that the teacher's self-efficacy beliefs and expectations and judgments about the student, the teaching style, help provided to the student, feedback, teacher-student relationships have significant effects on students'' performance and motivation levels (McClure et al., 2011; Salanova, Martínez & Lorens, 2012). One of the basic elements of success in the teaching environment is the teacher's self-efficacy belief. This belief affects the quality of teaching, methods and techniques, student participation and success and therefore determines the success of students (Billheimer, 2006; Gunning & Mensah, 2011).

The fact that the individuals who will enter the professional life have the self-efficacy related to their own profession allows them to enter the business life with a high level of readiness related to that profession. The situation can be considered as an indicator of the individuals" achievement in their professional life. Teaching is also a profession that pre-service teachers should start their job with a lot of professional knowledge and equipment. For this reason, it is important for pre-service teachers to graduate from the institutions they study with the necessary knowledge and equipment in terms of their readiness for business life (Koçak Macun, B., Macun, B., & Safalı, 2019). Research that is based on the investigation of their beliefs and perceptions has revealed that teachers" professional competencies, attitudes and motivations are important in their teaching performance. Research has shown that positive teacher attitudes and perceptions are essential for effective teaching and that teachers" beliefs, perceptions and attitudes affect practices and student performance (Eggen & Kauchak, 2001; Sünbül, 1996).

In research on teacher and teacher candidates, it has been found that individuals who prefer teaching profession are closely related to their attitude towards this profession and have more positive attitudes and motivation in their profession (Kahramanoğlu et al., 2018; Pektaş & Kamer, 2011; Üstün, Erkan& Akman, 2007). Teachers" attitudes towards the profession are of great importance for them to love the teaching profession more, to be more successful in the profession affect the perception of professional competence and professional success (Durmuşoğlu, Yanık & Akkoyunlu, 2009; Terzi & Tezci, 2007; Ünlü, 2011). In addition, teachers with high self-efficacy beliefs are more motivated to develop effective teaching skills and encourage student learning (Miller, Ramirez & Murdock, 2017).

Teachers must have a positive attitude towards the profession and "self-efficacy" in order to play the role required by the profession effectively. Self-efficacy beliefs of pre-service teachers and teachers from different branches in Turkey were examined. However, it seems that most of these studies include science and computer teachers (Büyükkaragöz & Sünbül, 1996; Özdemir, 2008). For example, Ertan (2016) examined the self-efficacy beliefs of preschool teachers according to the type of graduation. Üstüner et al. (2017) conducted comparative research on secondary school teachers were examined by Ünlü, Kaşkaya and Kızılkaya (2017). The relationship between pedagogical formation students" self-efficacy attitudes and beliefs was examined by Bakaç and Özen (2017). Berke and Colwell (2004) reported an overall positive change in students self-reported musical ability, musical knowledge, and confidence in capability of teaching music as a result of participation in a music methods course. Further, Barry insisted that the elementary music methods class must not only address the basic skills of music, it must address "student attitudes and their perceived strengths and weaknesses.

Although, research exists that investigates the complexities of teacher training in music, relatively little research has explored the issue by examining students" self-efficacy beliefs regarding making and teaching music within the construct of teacher-efficacy. Specifically little research has attempted to identify the possible factors that

may affect self-efficacy beliefs. With so much existing research in the construct of self-efficacy and its related construct, teacher-efficacy, it seems reasonable that an examination of music teacher-efficacy beliefs among elementary education majors within the larger context of teacher-efficacy would help bring clarity to this complex research problem. It is seen that the studies on the pre-service music teachers" attitudes and self-efficacy towards the profession are limited. Therefore, it is thought that the findings obtained in this research will help music teacher candidates develop both professional competence and self-efficacy beliefs because music teachers have an important place in art education. Identifying their self-efficacy beliefs and professional attitudes and taking precautions according to the results achieved will strengthen their self-efficacy belief, and thus such teachers will have students with high self-efficacy perception, who are self-confident and enjoy music lessons. For this reason, in this study, we tried to examine teaching self-efficacy beliefs and attitudes of preservice music teachers in many ways. Therefore, the study sought to answer the following research questions:

- 1. What are the attitudes and self-efficacy beliefs of pre-service music teachers towards the teaching profession?
- 2. Is there a significant difference in pre-service music teachers" self-efficacy beliefs and attitudes towards teaching profession based on gender and academic achievement?
- 3. Is there a significant relationship between pre-service music teachers" attitudes towards teaching profession and self-efficacy beliefs?

Method

Comparative relational survey method was used to test the problems and sub-problems of this research, which explains the relationship between pre-service music teachers" teaching self-efficacy beliefs and teaching attitudes. This method enables to describe the current events, facts and variables as they are and to explain the relationship between the variables (Hess, 1990). The target population of this research consists of pre-service teachers who receive music education at the Education Faculties of Necmettin Erbakan University, Gazi University and Niğde Ömer Halis Demir University. The study used convenient sampling method and 262 preservice music teachers were randomly selected to participate in the research. Students were given brief information about the purpose of the study and it was stated that participation in the study was on a voluntary basis. 59.5% of the participants in the study are female and 40.5% are male. In terms of academic achievement, 46.6% of the participants have high levels, 38.5% of them have moderate level, and 14.9% of them have low levels. The average age of the pre-service music teachers in the research sample is 20.4 years.

Measuring Tools

Attitude Scale towards Teaching Profession

The attitude scale developed by Kahramanoğlu et al. (2018) was used to determine the attitudes of music teacher candidates towards the teaching profession. The scale consisting of 12 items has a single factor structure. The scale was prepared in 5-point Likert type (1-Strongly disagree, 5-Strongly agree). The scores from the Attitude Scale towards Teaching Profession vary between 12 and 60. In this study, the scores obtained from the measurement tool were divided into the number of items and scores ranging from 1 to 5 were given. The highest score 5 and the scores close to 5 indicate that there are more positive attitudes towards the teaching profession. The alpha coefficient calculated for the measuring tool in this study is 0.92. The value indicated that the reliability of the measurement tool related to internal consistency was high.

Teacher Self-Efficacy Belief Scale

"Individual Teacher Effectiveness" scale developed by Sünbül and Arslan (2006) was used to determine the preservice music teachers" self-efficacy beliefs. The scale consisting of 10 items has a single factor structure. The scale was prepared in 5-point Likert type (1-Strongly disagree, 5-Strongly agree). Exploratory factor analysis was performed to determine the construct validity of the measuring tool. A single factor structure consisting of 10 items was discovered as a result of factor analysis. The Cronbach Alpha coefficient calculated to determine the reliability of the measuring tool was reported as 0.74. The alpha coefficient calculated for the measuring tool in this study is 0.91.

Data Analysis

The scores obtained from the measurement tools were examined in the form of comparison based on faculty, gender, class and success variables. Parametric analysis techniques were used for comparisons. Independent sample t-test was applied to compare data according to faculty and gender. One-way analysis of variance was applied to compare the variables of class and levels of achievement.

Findings

This section includes the findings obtained by comparing the scores achieved by using measurement tools according to the variables of gender and academic achievement level, in accordance with the general purpose of the research. Table 1 shows that the average of self-efficacy scores was calculated as 36.35 ± 9.60 . Attitude score average was calculated as 44.38 ± 13.50 . Mean values show that the pre-service teachers" attitudes and self-efficacy towards teaching profession are high.

 Table 1. Descriptive Values of Pre-Service Music Teachers" Attitude Scale towards Teaching Profession and Teacher Self-Efficacy Belief Scale

Variable	Ν	Min.	Max.	\overline{X}	Ss	Level	
Self-efficacy	262	10	49	36.35	9.60	High	
Attitude	262	12	60	44.38	13.50	High	

Table 2 shows the results of the t-test regarding pre-service teachers" self-efficacy beliefs and professional attitudes by gender.

 Table 2. Comparison of Pre-Service Music Teachers" Scores Based on Scales of Attitude towards Teaching

 Profession and Teacher Self-Efficacy Belief by Gender

Variable	Gender	Ν	\overline{X}	Ss	Т	р
Self-efficacy	Female	156	34.56	1.01	2.52	0.012
	Male	106	3.81	0.84	-2.52	0.012
Attitude	Female	156	47.26	12.62	1 26	0.00
	Male	106	40.14	13.68	4.26	0.00

Table 2 shows that there is a significant difference in the self-efficacy and attitude scores of the pre-service music teacher based on the gender variable (p<0.05). While the self-efficacy beliefs of male pre-service teachers were found to be high, the female peers" attitude scores of towards teaching profession were significantly higher. One Way ANOVA (F Test) results related to self-efficacy beliefs and professional attitudes of pre-service teachers based on their levels of academic achievement are given in Table 3.

Table 3. Comparison of the Scores Based on Teacher Attitude Scale towards Teaching Profession and Teacher Self-Efficacy Belief Scale by Academic Achievement Level

Variable		Perceived academic achievement level	Ν	X	Ss	F	р	Post-Hoc
	1.	High	122	39.09	7.37			
Self-efficacy	2.	Moderate	101	34.73	10.36	12.14	0.00	1>2. 1>3.
	3.	Low	39	32.00	11.30			1 0.
	1.	High	122	46.11	11.94			
	2.	Moderate	101	43.39	14.16	2.87	0.047	1-3
	3.	Low	39	41.56	15.82			

Table 3 shows that there is a significant difference in self-efficacy and attitude scores according to the level of academic achievement variable (p < 0.05). According to the Tukey test results, pre-service teachers with high and

very high academic success have significantly higher teaching self-efficacy beliefs compared to their peers with low academic achievement. However, it is seen that pre-service music teachers with high academic achievement have more positive teaching attitudes compared to low achievers. In accordance with the purpose of the research, the findings of the correlation and regression analysis regarding the relationships between Pre-Service Music Teachers'' Attitude towards Teaching Profession and Teacher Self-Efficacy Belief are given in Table 4.

Table 4. Pearson Correlation Coefficient between Pre-Service Music Teachers" Attitude towards Teaching
Profession and Teacher Self-Efficacy Belief

Variables	Attitude			
	r	.561**		
Self-efficacy	р	0.000		
	Ν	262		

Table 4 shows that there is a moderately positive and statistically significant relationship between self-efficacy beliefs and attitude scores (p<0.01). As the pre-service teachers'' self-efficacy scores increase, their attitude scores towards the teaching profession also increase. Table 5 shows that the regression model developed to determine the effect of pre-service music teachers'' self-efficacy on teaching attitudes is statistically significant (F=111.08; p<0.01). Approximately 30% of the change in the attitudes of the participants towards the teaching profession could be explained by their self-efficacy. Self-efficacy belief has a positive effect on attitude towards teaching profession (β =0.55; p<0.01).

Table 5. Results of Regression Analysis to Determine the Effect of Self-Efficacy Belief on Attitude towards Teaching Profession

Variable	B Standard error β		error β t		р	
(Constant)	16.418	2.744		5.984	.000	
Self-efficacy	.769	.073	.547	10.540	.000	
R=0.547	R2=0.299		F=111.08		p<0.01	

Dependent variable = Attitude

Discussion

In this research, where the pre-service music teachers" attitudes and self-efficacy beliefs towards teaching profession are examined, it is found that the participants have high levels in the relevant variables. Another research finding is that pre-service music teachers" attitudes towards teaching profession differ according to gender. According to the analysis, pre-service female teachers" attitudes towards teaching profession were higher than their male peers. However, self-efficacy beliefs of pre-service male teachers were higher their female peers. These findings are similar to the findings of research conducted by Asimaki and Vergidis, (2013), Oral (2004), Özdemir (2008), Richardson and Watt (2006) and Şen (2006). All these studies revealed that women perceive themselves as more prone to teaching profession and have positive attitudes compared to men. The findings of self-efficacy beliefs are similar to those of Karadağ, Baloğlu and Çalışkan (2009), Morgil, Seçken and Yücel (2004). According to Karadağ, Baloğlu and Çalışkan (2009), pre-service male teachers perceive themselves as more efficient in terms of using classroom management, teaching methods and strategies. In the study conducted by Morgil, Seçken and Yücel (2004), it was found that the pre-service male chemistry teachers" self-efficacy beliefs were higher than the females participating in the study. Similarly, Akbulut (2006), Korkut and Babaoğlan (2012) found that male teachers have higher self-efficacy beliefs.

Another finding in the research is related to the comparison of attitudes towards teaching profession and selfefficacy belief according to level of academic achievement. The self-efficacy beliefs and attitudes of pre-service music teachers with high academic achievement towards teaching profession are high. In addition, it was found that pre-service music teachers, who have a high/positive attitude towards teaching profession, have a higher level of self-efficacy belief. There is strong evidence for positive correlation between self-efficacy belief, attitude towards teaching profession, and academic achievement (Çapri & Çelikkaleli, 2008; Kara, 2020; Galleguillos & Olmedo, 2017; Rimm-Kaufman & Sawyer, 2004). In this regard, Bassi et al. (2007), Guskey (1988), Oğuz and Topkaya (2008) and Stankov et al. (2012) argue that students with high self-efficacy beliefs exhibit higher academic expectations, attitudes and achievements. Many studies have found that self-efficacy is related to high levels of academic participation and has close and positive relationships with students" academic achievements. The research conducted by Poulou (2007) showed that self-efficacy is the strongest source of teaching. In addition, affective states from self-efficacy sources positively affect the attitude towards teaching profession. The perception of teaching profession as enjoyable, fun and respectable by pre-service music teachers can increase self-efficacy beliefs and attitudes towards teaching profession.

Conclusion

As a result, it was found that the pre-service music teachers" mean scores of attitude towards and self-efficacy beliefs in teaching profession were high, women had high attitudes towards teaching profession, and men had high self-efficacy beliefs. This research has determined that pre-service music teachers" positive self-efficacy beliefs in teaching profession and attitudes towards teaching profession are positively significant. Some suggestions for practitioners and researchers have been developed in the light of the findings. It was found that pre-service music teachers" self-efficacy beliefs and attitudes differ according to the variables of gender and academic achievement. Qualitative studies could be carried out in order to analyze the source of differentiation regarding pre-service teachers" self-efficacy beliefs. Similar research and comparisons could be made with prospective teachers studying in all teacher training programs.

References

- Abu Karsh, S. (2018). New technology adoption by business faculty in teaching: Analyzing faculty technology adoption patterns. *International Journal of Technology in Education and Science (IJTES)*, 2(1), 17-30.
- Akbulut, E. (2006). Müzik öğretmeni adaylarının mesleklerine ilişkin öz yeterlik inançları. Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi, 3(2), 24–33.
- Alan, S. (2019). Comparative investigation of entrepreneurship and innovation perceptions of preservice teachers. *International Journal of Education in Mathematics, Science and Technology (IJEMST)*, 7(4), 311-318.
- Asimaki, A., & Vergidis K. D. (2013). Detecting the gender dimension of the choice of the teaching profession prior to the economic crisis and IMF (International Monetary Fund) memorandum in Greece A case study. *International Educational Studies*, *6*(4), 140–153.
- Bakaç, E. ve Özen, R. (2017). Pedagojik formasyon öğrencilerinin öğretmenlik mesleğine yönelik öz-yeterlik inançları ile tutumları arasındaki ilişki. *Kastamonu Eğitim Dergisi*, 25(4), 1389-1404.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Bassi M., Steca P., Delle Fave A., Caprara G. V. (2007). Academic self-efficacy beliefs and quality of experience in learning. J. Youth Adolesc. 36, 301–312.
- Berke, M., & Colwell, C. M. (2004). Integration of music in the elementary curriculum: Perceptions of preservice elementary education majors. *Applications of Research in Music Education*, 23, 22-33.
- Billheimer, B. C. (2006). Perceived Teacher Self-Efficacy in Early Childhood Settings: Differences between Early Childhood and Elementary Education Candidates. Electronic Theses and Dissertations. Paper 2200. https://dc.etsu.edu/etd/2200
- Büyükkaragöz, S. ve Sünbül, A.M. (1996). Öğretmen adayı öğrencilerinin öğretmenlik yeterlik düzeyleri, başarı düzeyleri ve mesleki tutumları ile bunlar arasındaki ilişkiler. *Dokuz Eylül Üniversitesi Kongre Kitabı*.
- Çapri, B. & Çelikkaleli, Ö. (2008). Öğretmen adaylarının öğretmenlik mesleğine ilişkin tutum ve mesleki yeterlik inançlarının cinsiyet, programa ve fakültelere göre incelenmesi. İnönü Üniversitesi Eğitim Fakültesi Dergisi, 9(15), 33-53.
- Durmuşoğlu, M. C., Yanık, C. ve Akkoyunlu, B. (2009). Türk ve Azeri öğretmen adaylarının öğretmenlik mesleğine yönelik tutumları. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, *36*, 76-86.
- Eggen, P., Kauchak, D. (2002). *Strategies for teachers: Teaching content and thinking skills* (4th ed.). Needham Heights: M.A. Allyn and Bacon.
- Erden, M. (1998). Öğretmenlik mesleğine giris, İstanbul: Alkım Yayınevi.
- Ertan, C. (2016). Okul Öncesi Öğretmenlerinin Öz-Yeterlik İnançlarının Mezuniyet Türüne Göre İncelenmesi: Bir Nedensel Karşılaştırma Araştırması [An Investigation Of Self-Efficacy Beliefs Of Pre-School Teachers According To Graduation Types: A CausalComparative Research]. 21. Yüzyılda Eğitim Ve Toplum Eğitim Bilimleri Ve Sosyal Araştırmalar Dergisi, 5 (14), 1-10.
- Galleguillos P., Olmedo E. (2017). Autoeficacia académica y rendimiento escolar: un estudio metodológico y correlacional en escolares.[Academic self-efficacy and academic performance: a methodological and correlational study in students). *ReiDoCrea*, *6*, 156–169.

- Goddard, R. D., Hoy, W. K., & Woolfolk-Hoy, A. W. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher*, *33*(3), 3-13.
- Gunning, A. M. & Mensah, F. M. (2011). Preservice elementary teachers" development of self-efficacy and confidence to teach science: a case study. *Journal of Science Teacher Education*, 22(2), 171–185.
- Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education*, *4*, 63–69.
- Hess, I. (1990). History of the Section on Survey Research Methods. The American Statistician, 44(2), 98-100.
- Hilton, J.T. & Canciello, J. (2018). A five-year reflection on ways in which the integration of mobile computing technology influences classroom instruction. *International Journal of Technology in Education (IJTE)*, 1(1), 1-11.
- Jung, E., Zhang, Y., & Chiang, J. (2019). Teachers" mathematics education and readiness beliefs, and kindergarteners" mathematics learning. *International Journal of Education in Mathematics, Science and Technology (IJEMST)*, 7(2), 137-154.
- Kahramanoğlu, R., Yokuş, E., Cücük, E., Vural, S., & Şiraz, F. (2018). Öğretmenlik mesleğine yönelik tutum ölçeği (ÖMYTÖ) geçerlik ve güvenirlik çalışması. Electronic Turkish Studies, *13*(11), 1669-1686.
- Kara, S. (2020a). Investigation of job satisfaction and burnout of visual arts teachers. *International Journal of Research in Education and Science (IJRES)*, 6(1), 160-171.
- Kara, S. (2020b).. Prospective visual arts teachers" innovation skills and attitudes towards computer assisted instruction. *International Journal of Technology in Education and Science (IJTES)*, 4(2), 98-107.
- Karadağ, E., Baloğlu, N, & Çalışkan, N., (2009, May). Öğretmen adaylarının stresle başa çıkma yolları ve yetkinlik duygusu yönelimleri: Bir MANAVO analizi. Paper presented at the 1st International Congress of Educational Research. Çanakkale-Turkey
- Koçak Macun, B., Macun, B. ve Safalı, S. (2019). Öğretmen adaylarının öğretmen özyeterlik inanç düzeyleri ile iş hayatına hazırbulunuşluklarının incelenmesi. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi*, 8(1), 549-567
- Korkut, K. ve Babaoğlan, E. (2012). Sınıf öğretmenlerinin öz yeterlik inançları. Uluslararası Yönetim İktisat ve İşletme Dergisi. 8(16).
- Laadem, M., & Mallahi, H. (2019). Multimodal Pedagogies in Teaching English for Specific Purposes in Higher Education: Perceptions, Challenges and Strategies. *International Journal on Studies in Education*, 1(1), 33-38.
- McClure, J., Meyer, L.H., Garisch, J., Fischer, R., Weir, K. F.and Walkey, F. H. (2011). Students" attributions for their best and worst marks: Do they relate to achievement?, *Contemporary Educational Psychology*, 36,71–81.
- Miller, A. D., Ramirez, E. M., & Murdock, T. B. (2017). The influence of teachers" selfefficacy on perceptions: Percieved teacher competence and respect and student effort and achievement. *Teaching and Teacher Education*, 64, 260-269.
- Inci, Morgil & Seçken, Nilgün & Yücel, A.S.. (2004). Kimya öğretmen adaylarının öz-yeterlik inançlarının bazı değişkenler açından incelenmesi [Based on some investigation of self-efficacy beliefs of preservice chemistry teachers variables]. *Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi*, 6, 62-72.
- Mutlu, Y., Polat, S. & Alan, S. (2019). Development of preservice mathematics teachers" TPACK through micro teaching: Teaching the VuStat program. *International Journal of Technology in Education and Science (IJTES)*, 3(2), 107-118.
- Oğuz, A. ve Topkaya, N. (2008). Ortaöğretim Alan Öğretmenliği Öğrencilerinin Öğretmen Özyeterlik İnançları ile Öğretmenliğe İlişkin Tutumları. *Akademik Bakış*, 14, 23–36.
- Oral, B. (2004). Eğitim fakültesi öğrencilerinin öğretmenlik mesleğine ilişkin tutumları. Eurasian Journal of Educational Research, 15, 88–98.
- Özdemir, S. M. (2008). Sınıf Öğretmeni Adaylarının Öğretim Sürecine İlişkin Özyeterlik İnançlarının Çeşitli Değişkenler Açısından İncelenmesi. *Kuram ve Uygulamada Eğitim Yönetimi*, 14(54), 277-306
- Pektaş, M., & Kamer, S. T. (2011). Fen bilgisi öğretmen adaylarının öğretmenlik mesleğine yönelik tutumları. *Türk Eğitim Bilimleri Dergisi*, 9(4), 829-850.
- Perdana, R., Jumadi, J., & Rosana, D. (2019). Relationship between analytical thinking skill and scientific argumentation using PBL with interactive CK 12 simulation. *International Journal on Social and Education Sciences*, 1(1), 16-23.
- Poulou, M. (2007). Personal teaching efficacy and its sources: student teachers" perceptions. *Educational Psychology*, 27(2), 191-218.
- Richardson P. W. & Watt H. M. G. (2006). Who Chooses Teaching and Why? Profiling Characteristics and Motivations Across Three Australian Universities. Asia-Pacific Journal of Teacher Education, 34(1), 27–56.

- Rimm-Kaufman, S. E., & Sawyer, B. E. (2004). Primary-grade teachers, self-efficacy beliefs, attitudes toward teaching, and discipline and teaching practice priorities in relation to the responsive classroom" approach. *The Elementary School Journal*, 104(4), 321-341.
- Salanova, M., Martínez, I. M., and Lorens, S. (2012). Success breeds success, especially when selfefficacy is related with a cousality internal attribution. *Estudios de Psicologia*, 33, 151-165
- Serhan, D. (2019). Web-Based Homework Systems: Students" Perceptions of Course Interaction and Learning in Mathematics. *International Journal on Social and Education Sciences*, 1(2), 57-62.
- Stankov, L., Morony, S., Kleitman, S.& Lee, Y.P. (2012). Confidence, Self-efficacy, anxiety and Self-concept as Predictors of Achievement in Confucian and European Countries. Unpublished manuscript.
- Sünbül, A. M. (1996). Öğretmen niteliği ve geliştirilmesi. Eğitim Yönetimi Dergisi, 4, 597-608.
- Sunbul, A.Murat. (2003). An analysis of relations among locus of control, burnout and job satisfaction in Turkish high school teachers. *Australian Journal of Education*, 47 (1), 58-72.
- Sünbül, A. M., & Arslan, C. (2006). Öğretmen yeterlik ölçeğinin geliştirilmesi üzerine bir araştırma. *Eskişehir Osmangazi Üniversitesi Sosyal Bilimler Dergisi*, 7(2), 1-16.
- Sünbül, A.M. &. Arslan, C. (2006). Öğretmenlerin birlikte çalışma yeterlilikleri. Osmangazi Üniversitesi Sosyal Bilimler Dergisi, 7(1), 25-36
- Şahin, C. ve Beydoğan, H.Ö. (2016). Öğretmenlerin öğrencileri tanıma yeterliliği ölçeği. 21. Yüzyılda Eğitim ve Toplum-Eğitim Bilimleri ve Sosyal Araştırmalar Dergisi, 5(14), 177-198.
- Şen, B. (2006). Sınıf öğretmeni adaylarının öğretmenlik tutumları ile öğrenme ve ders çalışma stratejileri arasındaki ilişki. Yayımlanmamış Yüksek Lisans Tezi, Marmara Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Terzi, A. R. ve Tezci E. (2007). Necatibey Eğitim Fakültesi öğrencilerinin öğretmenlik mesleğine ilişkin tutumları. *Kuram ve Uygulamada Eğitim Yönetimi*, *52*, 593-614.
- Turunen, I. (2019). Computer-assisted use of reading-through-writing method in relation to technical literacy and reading motivation. *International Journal of Technology in Education (IJTE)*, 2(1), 42-59.
- Uçan, A. (2006). Müzik Öğretmenliği Yeterlikleri. Ulusal Müzik Eğitimi Sempozyumu Bildirisi, 26-28 Nisan, Pamukkale Ünv. Eğt. Fak. Denizli
- Ulusoy, F. & Argun, Z. (2019). Secondary school students" representations for solving geometric word problems in different clinical interviews. *International Journal of Education in Mathematics, Science* and Technology (IJEMST), 7(1), 73-92. DOI:10.18404/ijemst.328341
- Ünlü, H. Sünbül; A.M. ve Aydos. L. (2009). Beden eğitimi öğretmenlerinin birlikte çalışma yeterlilikleri, *Milli Eğitim Dergisi*, *37*, 195-203.
- Ünlü, H. (2011). Beden eğitimi öğretmenliği mesleğine yönelik tutum ölçeği (BEÖYTÖ) geliştirilmesi. *Kuram* ve Uygulamada Eğitim Bilimleri, 1(4), 2005-2020.
- Ünlü, H., Aydos, L. ve Sünbül, A.M. (2008). Beden eğitimi öğretmenleri yeterlilik ölçeği geçerlilik ve güvenirlik çalışması. *Kırşehir Eğitim Fakültesi Dergisi.* 9(2), 23-33.
- Ünlü, İ., Kaşkaya, A. ve Kızılkaya, M. F. (2017). Sosyal bilgiler öğretmen adaylarının öz-yeterlik inançlarının çeşitli değişkenler açısından incelenmesi. *Kırşehir Eğitim Fakültesi Dergisi*, 18(2), 651-667.
- Üstün, E., Erkan, S. & Akman, B. (2007). Türkiye''de okul öncesi öğretmenliği öğrencilerinin öğretmenlik mesleğine yönelik tutumlarının incelenmesi. *Manas Üniversitesi Sosyal Bilimler Dergisi*, 10, 129-136.
- Üstüner, M., Demirtaş, H., Cömert, M. ve Özer, N. (2009). Ortaöğretim öğretmenlerinin öz yeterlik algıları. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 9(17), 1-16.
- Woolfolk-Hoy, A. & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, 21, 343–356.
- Yates, S. M. (2007). Teachers" perceptions of their professional learning activities. *International Education Journal*, 8(2), 213-221.
- Yeşilyurt, E. (2011). Öğretmen adaylarının öğretmenlik mesleğinin genel yeterliklerine yönelik yeterlik algıları. *Türk Eğitim Bilimleri Dergisi, 9*(1), 71-100
- Yurt, E., & Sünbül, A. M. (2014). Matematik öz-yeterlik kaynakları ölçeğinin Türkçeye uyarlanması. *Eğitim ve Bilim*, 39(176), 145-157.

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