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Mehrossâdat Vosough Matin 💷 Necmettin Erbakan University, Turkey

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Investigation of Self-Efficacy Perceptions and Professional Attitudes of Teachers Working in Special Education Schools

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Info Abstract
The study aims to determine the differentiation status of teachers working in
private education institutions towards the teaching profession and their self- efficacy levels according to gender and professional seniority. For this purpose,
236 teachers working in private education institutions in Ankara, Mersin, and
Konya provinces were randomly assigned to the study group. A comparative correlational design was used in the study. As a data collection tool; In order to
measure the attitude towards the teaching profession, the "Attitude Scale" developed by Aşkar and Erdem in 1987 and the "Teaching Competence Scale" developed by Sünbül and Arslan (2006) were used. In the study, teacher candidates' perceptions of teaching efficacy were found to be medium, whereas their professional attitudes were found to be high. It has been understood that the attitudes and self-efficacy perceptions of the participant special education teachers towards the teaching profession differ according to their gender and professional seniority. Finally, significant relationships were found between special education teachers' attitudes toward the teaching profession and their self-efficacy
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Introduction

Please Education system; consists of students, teachers, administrators, education program, other personnel, building, equipment, and environment. The teacher is one of the essential elements of this system (Kaleli, 2021; Tanguay & Many, 2022). The good functioning of the education system and the training of individuals with desired characteristics through this system depend on teachers and their qualifications (Ellett & Teddlie, 2003). The qualification of the teacher can be expressed in general with the experience of the teacher, the teacher training program and (education) level, the status of having a certificate and the field of the certificate, the homework he prepared, and the test scores (Akdeniz et al., 2016; Rice, 2003). Teachers and the teaching profession are directly related to providing trained human resources. Some of the most critical tasks of countries in the field of education are as follows; It is to have teachers who have been trained in line with the needs of the age, who can train their students according to the characteristics of the time, and who will use information technologies. The reason for this is that the teachers responsible for the education and training work eventually undergo training.

Joseph (2013) states that the effectiveness of an education system is primarily determined by the quality of

teachers who pass on knowledge and intellectual traditions from generation to generation. Individuals who will practice the teaching profession, which is considered a sacred profession, must be competent in applying the knowledge and skills they have gained. To be able to follow the literature related to a teacher's field, to participate in conferences, seminars, symposiums, and in-service training activities, to be aware of new developments in education and training legislation, to cooperate with professional organizations and managers regarding professional products, to participate in and organize social and cultural events, Being able to improve himself by getting feedback about himself from his colleagues and students shows that he is well trained in the field of general culture. However, understanding the basic information about the field, understanding the ways to handle this information, raising the knowledge in the field to higher levels, and having knowledge about the curriculum related to the subject area means that the teacher has field knowledge (Joldanova et al., 2022; Yüksel, 2022). With the belief of self-efficacy, which has an essential effect on individuals' taking action, if people do not believe that they will achieve the results they want, they will not be motivated enough even if there are other factors to take action (Bandura, 1994). It is stated that positive self-efficacy in individuals enables them to struggle to cope with new and challenging tasks and commit to them. In contrast, negative self-efficacy beliefs prevent motivation and cause them to leave a job without completing it (Jerusalem, 2002; Kibici, 2022; Koyuncuoğlu, 2021).

According to Kobalia and Garakanidze (2010), teachers should continually develop valuable professional competencies and know that their knowledge determines teacher competence. The development of competencies in teacher education requires special attention. As Bruner puts it, "A teacher must also be an effective model of competence." When the literature is examined, teachers (Aigerim, Aida & Tulebike, 2022; Kobalia & Garakanidze, 2010; Lawrence & Veena, 2012; Pantić & Wubbels, 2010; Capraro, Capraro, & Helfeldt, 2010; Fraefel, Bäuerlein & Barabasch, 2017; Kaleli, 2020); Preuss et al., 2020) examined general teacher competencies in their studies.

According to Pajares and Schunk (2004), the greater the sense of efficacy, the greater the individual's effort and resistance to obstacles. From this point of view, professional attitudes and self-efficacy gain more importance in teachers working with disabled children, whose education requires more patience and dedication than their typical peers and can be more challenging. Having a positive attitude towards teaching and students and feeling more competent, that is, having a high perception of self-efficacy, play an essential role in the performance of their profession (Sürgevil, 2006). This research examines the professional attitudes and self-efficacy perceptions of educators working in private education institutions regarding various variables and evaluates the relationship between professional attitudes and self-efficacy concepts.

When considered from a professional point of view, self-efficacy can be defined as a tendency to work with a team, be planned, believe in a skill-based assessment system, and apply it. Professionally, teachers' self-efficacy level is associated with being open to development, working with a team, and having a more flexible perspective about their students and themselves (Bandura, 1991, 1994). It is stated that as teachers' self-efficacy levels increase, they care about their personal and professional development, spend more time planning to teach, and their motivation for their work increases (Caprara, Barbaranelli, Steca, & Malone, 2006; Doğru, 2020; Sünbül, 1996).

Developing programs for the training of teachers, who play the most critical role in teaching processes, as in every field and at every level of education; It is also essential in special education, where the use of correct and effective methods and early education is essential. Special education teachers must have teaching skills and be competent in assessment, managing cognitive and affective processes, preparing programs based on student's needs and performance, and effective teaching methods (Özen, Ergenekon, & Batu, 2009). Especially if special education is mentioned, the teacher's importance will be understood again. In this sense, some researchers have emphasized the importance of teachers in special education if the education offered to disabled children and in allowing them to socialize. Therefore, it can be said that the most critical factor in the success of particular education practices is undoubtedly teachers and their adequate education. The personal and professional qualities of the teacher play an essential role in the fulfillment of the learning-teaching process in special education to a large extent. The special education teacher's personal qualities affect the student's attitude towards school, lessons, and activities (Sarı, 2004). Studies show that the student is affected by the behavior of the teacher (Guo, et al., 2014; Mc Evoy, Nordquist, & Cunningham, 1984).

For this reason, it is possible to say that an important variable affecting teachers' fulfillment of the roles expected from them is the attitudes that include loving, respecting, and adopting teaching (Pehlivan, 2008). When a positive attitude towards the teaching profession is developed, behaviors such as being interested in the profession, loving children, seeing the importance of education and training, etc., while negative attitudes are not loving students, not developing themselves, not being excited and eager, etc. can be expressed in behavior. Naturally, positive attitudes always increase success by facilitating learning and teaching. Therefore, those with positive attitudes should tend towards this profession, choose it consciously, and do their duties fondly (Semerci & Semerci, 2004). Special education teachers, who start their career at the end of their four-year university education, maintain their lives by working solution-oriented in intense interaction with individuals with special needs, their families, and their colleagues within the scope of teamwork in order to maximize the possibility of independent living for students with special education needs. In addition, it can be said that they face many problems, such as psychological problems and indifference of the target group they work with, whether they are sufficiently motivated by their superiors, and the insensitivity of the people working in the stakeholder institutions in solving the problems. These teachers, who progress very slowly in the context of special education, may think that they feel lonely, fail to meet expectations, and sometimes cannot reach achievements due to their constant emotional interaction and having to deal with problems alone. It can be said that such situations affect the professional attitudes, motivations, and job satisfaction of education workers who perform their jobs in special education schools and institutions (Celebi, 2013; Karahan & Balat, 2011; Sarı, 2004). Teachers with positive attitudes can only achieve effective and productive learning for students. Therefore, teachers' attitude towards their profession is vital for students learning (Pancholi & Bharwad, 2015).

Compared to other teachers, special education teachers need to spend more time and energy to reach learning goals (Jennett, Harris, and Mesibov 2003). In particular, it is stated that special education teachers are more likely to experience negative professional attitudes than other teachers, depending on the intensity of direct contact with

students (Embich, 2001; Lazuras, 2006; Gürsel, Sünbül & Sarı, 2003). Campbell-Whatley, Obiakor, & Algozzine (1995) state that although general education teachers have more professional experience working with children with special needs, their appropriate working time does not positively affect their teaching experience for children with special needs. In this context, the professional self-efficacy and attitudes of special education teachers were examined with a relational approach in this study. Within the framework of this problem, answers to the following questions were sought in the study:

- 1- What are special education teachers' attitudes and self-efficacy perceptions towards the teaching profession?
- 2- Do the self-efficacy perceptions of the participants towards the teaching profession show a significant difference according to gender?
- 3- Do the participants' attitudes towards the teaching profession significantly differ according to gender?
- 4- Do the self-efficacy perceptions of the participants towards the teaching profession show a significant difference according to their professional seniority?
- 5- Do the participants' attitudes towards the teaching profession significantly differ according to their professional seniority?
- 6- Is there a significant relationship between the self-efficacy perceptions of the participants towards the teaching profession and their professional attitudes?

Method

This chapter discusses explanations of the research model, research group, data collection, data collection tools, data analysis, and data analysis. This research is a quantitative study to determine the self-efficacy and professional attitude levels of teachers working in private education institutions in the Ankara, Mersin, and Konya provinces of the Ministry of National Education in terms of some variables. The research was designed with the comparative relational survey model, one of the descriptive research methods (Karasar, 2012). Survey models are research approaches that aim to describe a past or present situation as it exists. In the comparative relational survey model, the event, individual, or object that is the subject of the research is tried to be explained in its conditions and as it exists with a comparative approach ((Karasar, 2012).

The study group of this research consists of teachers, administrators, and other employees working in private and state private education institutions in Konya. In the study, the easy sampling method was used based on experts' opinions in the field of measurement and evaluation. In this respect, the personal information form, job satisfaction, professional burnout, and professional respect scales were applied to the participants in Konya based on affordability, application permissions, and easy accessibility. In this context, 236 special education teachers working in different particular education institutions were included in the research. According to frequency analysis, 15 of the teachers were Science, and Art Centers, 28 of them were General Education (Full-Time Inclusion), 12 of them were Schools for the Visually Impaired, 9 of them were Schools for the Hearing Impaired, 26 them were Special Education Business Application Centers, and 18 of them were Special Education Centers, 26 Special Education Rehabilitation Centers, and 22 Guidance and Research Centers.

Data Collection Tools

Teacher Self-Efficacy Scale

Within the scope of the research, the individual teacher effectiveness scale developed by Sünbül and Arslan (2006) was used to determine the teacher self-efficacy perceptions of special education teachers. There are ten expressions in the one-dimensional measurement tool. The scale is a 5-point Likert type. The statements on the scale are scored between 1 (Strongly Disagree) and 5 (Strongly Agree). The construct validity of the scale was examined by applying exploratory factor analysis. As a result of factor analysis, a single factor structure consisting of 10 items was revealed. The reliability of the measurement tool was examined by using the Cronbach Alpha coefficient. The alpha coefficient on the sample of this study was calculated as 0.81. This value showed that the reliability of the measurement tool related to internal consistency was high. The teacher self-efficacy belief scale scores range from 10 to 50. High scores indicate a high perception of teacher self-efficacy.

Attitude Scale Towards Teaching Profession

The "Attitude Scale Towards the Teaching Profession" developed by Aşkar and Erdem (1987) was used in this study. This scale is a five-point Likert type and consists of ten items. The related scale is one-dimensional and aims to measure teachers' attitudes toward the teaching profession. The scale included six positive and four negative items about the teaching profession. The internal consistency Cronbach Alpha reliability coefficient of the measurement tool was determined as 0.82. In this study, the Cronbach Alpha reliability coefficient of internal consistency of the scale was found to be 0.84, based on the data obtained from special education teachers.

Data Analysis

This study tested the data distribution before analyzing special education teachers' professional attitudes and selfefficacy perception scores. In determining the distribution, skewness, kurtosis values, and Kolmogorov-Smirnov test results were used. According to Jarque and Bera (1987), the fact that these values are in the range of ± 1 indicates that the data do not deviate excessively from the normal distribution. The values calculated in this study indicated that special education teachers' attitudes and self-efficacy scores were very close to the normal distribution. In this context, parametric tests were used to analyze special education teachers' attitudes and selfefficacy scores.

Results

This section presents the findings obtained as a result of the research. The descriptive analysis results of special education teachers' scores on teacher competency and attitudes towards their profession are given in Table 1. Table 1 shows that the average scores of special education teachers for teacher proficiency and profession are calculated as 34.74 (Sd=10.18) and 3.74 (Sd=1.04), respectively. According to these findings, it was found that the professional efficacy perceptions of special education teachers were at a moderate level, while their attitudes towards the profession were at a high level.

	Ν	Minimum	Maximum	Mean	Std. Deviation
Self-efficacy	236	10	47	34.74	10.167
Professional Attitudes	236	1.10	5.00	3.74	1.04
Valid N (listwise)	236				

Table 1. Special Education Teachers' Teacher Competence and Professional Attitudes

In order to determine whether the teacher proficiency scores of special education teachers differ significantly according to the gender variable, a t-test was performed, and the statistical results are given in Table 2. When Table 2 is examined, the average score of male special education teachers is 32.60, while the average score of female teachers is 36.13. Whether there is a significant difference between these mean scores was tested with the t-test. As a result of the statistical analysis, it was determined that there was a significant difference between the teacher proficiency point averages of female teachers and male teachers. According to the group averages, it was found that female teachers in the field of special education have a higher perception of teaching efficacy compared to their male colleagues.

Table 2. t-Test Results of Special Education Teachers' Teacher Efficiency Scores by Gender

	Gender	Ν	Mean	Std. Deviation	t	р
Self-Efficacy	Male	93	32.60	10.78	-2.640	0.009
	Female	143	36.13	9.53		

In order to determine whether the scores of special education teachers' attitudes towards the teaching profession differ significantly according to the gender variable, a t-test was conducted. Statistical results are given in Table 3. When Table 3 is examined, the mean score of male special education teachers is 3.38, while the mean score of female teachers is calculated as 3.98. As a result of the t-test analyses, it was determined that there was a significant difference between the mean scores of female and male teachers in the teaching profession. According to the group averages, it was found that female teachers had higher and more positive attitudes toward the teaching profession compared to their male colleagues.

	Gender	Ν	Mean	Std. Deviation	t	р
Professional	Male	93	3.38	1.08	-4.539	0.000
Attitudes	Female	143	3.98	0.94		

Table 3. t-Test Results of Special Education Teachers' Professional Attitude Scores by Gender

The results of the F test, which was conducted to test whether there is a significant difference between the teaching proficiency point averages of the teachers according to the variable of professional seniority, are given in Table 4. According to the analysis results, a 3.678 F value was calculated among the teaching proficiency scores of special education teachers in terms of professional seniority. This value shows that special education teachers' perceptions of teaching competence differ significantly according to their professional seniority. According to the further analyzes carried out with the Tukey test, it was found that the teachers with more seniority had a high level of teaching proficiency compared to their colleagues with medium or low professional seniority.

	Professional seniority	Ν	Mean	Std. Deviation	F	Sig.
Self-efficacy	Low	84	33.08	10.84	3.678	0.027
	Medium	87	33.64	10.69		
	High	65	37.05	8.73		
	Total	236	34.74	10.17		

Table 4. Teaching Proficiency F Test Results of Special Education Teachers by Vocational Seniority Variable

The results of the F test, which was conducted to test whether there is a significant difference between the professional attitude point averages of special education teachers according to the variable of professional seniority, are given in Table 5. According to the analysis results, an 8.125 F value was calculated among the teaching attitude scores of special education teachers in terms of professional seniority. This value shows that special education teachers' attitudes towards the teaching profession differ significantly according to their professional seniority. According to the further analyzes performed with the Tukey test, it was found that teachers with low professional seniority had a high and positive attitude towards the teaching profession compared to their colleagues with medium and high professional seniority.

 Table 5. Attitudes of Special Education Teachers Towards Teaching Profession According to the Variable of

 Professional Seniority F Test Results

	Professional seniority	Ν	Mean	Std. Deviation	F	Sig.
Professional	Low	84	3.98	0.92	8.125	< 0.001
Attitudes	Medium	87	3.70	0.90		
	High	65	3.59	1.17		
	Total	236	3.74	1.04		

In order to determine whether the teaching proficiency scores of special education teachers differ significantly according to the type of institution they work in, a t-test was conducted. Statistical results are given in Table 6. When Table 6 is examined, it is calculated that while the average score of special education teachers working in public schools is 36.74, the average score of teachers working in the private sector is 33.62. As a result of the t-test analyses, it was determined that there was a significant difference between the teaching proficiency attitude point averages of the special education teachers according to the variable of the institution they work for. According to the group averages, it was found that teachers working in public schools and educational institutions had higher perceptions of teaching proficiency compared to their colleagues working in the private sector.

Table 6. t-Test Results of Special Education Teachers' Teaching Proficiency Scores According to the

	Educational Institution					
	Branch	Ν	Mean	Std. Deviation	t	Р
Self-Efficacy	Public	105	36.74	8.92	2.239	0.026
	Private	92	33.62	10.66		

In order to determine whether the scores of special education teachers for the teaching profession differ

significantly according to the type of institution they work in, a t-test was conducted. Statistical results are given in Table 7. When Table 7 is examined, it is calculated that the average score of the special education teachers working in public schools is 3.96, while the average score of the teachers working in the private sector is 3.68. As a result of the t-test analyses carried out, it was determined that there was a significant difference between the mean scores of special education teachers' attitudes towards the teaching profession according to the variable of the institution they work for. According to the group averages, it was found that teachers working in public schools and educational institutions have a higher and more positive attitude towards the teaching profession compared to their colleagues working in the private sector.

 Table 7. t-Test Results of Special Education Teachers' Attitudes Towards Teaching Profession According to the

 Educational Institution

	Educational Institution	Ν	Mean	Std. Deviation	t	р
Professional	Public	105	3.96	0.76	2.062	0.041
Attitudes	Private	92	3.68	1.10		

The results of the statistical analysis conducted to determine the relationship between special education teachers' teaching competencies and their attitudes toward the teaching profession are given in the table. In the table, the Pearson Product Moments Correlation coefficient results between teacher competencies and teaching professional attitude scores of special education teachers are given. As a result of the analysis, the value between the two variables (r=.535, p<0.05) was calculated. According to this finding, there is a significant and positive relationship between special education teachers' teaching competencies and their attitude scores toward the teaching profession.

 Table 8. The Relationship between Special Education Teachers' Teaching Competencies and Their Attitudes toward the Teaching Profession

		Professional Attitudes
	Pearson Correlation	.535**
Self-Efficacy	N	236
	Sig. (2-tailed)	0.000

**. Correlation is significant at the 0.01 level (2-tailed)

Discussion and Conclusion

This study aims to evaluate the teacher efficacy and professional attitudes of special education teachers and to determine the relationship between their views on teacher efficacy and their expectations and perceptions about their attitudes. According to the research findings, it has been determined that special education teachers have a moderate perception of competence in all of the competencies that a teacher should have, and they see themselves as "partially sufficient." The research results are similar to the previous studies (Kaleli, 2020; Kaleli, 2021; Kara, 2020; Kara, 2021). When the research results are evaluated, it cannot be interpreted as an outstanding level for a profession such as special education teaching, which is the essential cornerstone of education, to have a medium

level of proficiency because special education teachers are present at all stages of formal and informal education for many individuals with special needs. Special education teachers guide both the fundamental learning processes of the educational lives of individuals with special needs, and these students spend more time with their teachers than with other teachers. This naturally means that they share more. Therefore, it is expected that the proficiency levels of special education teachers will be higher. According to Sarı, professional self-efficacy of special education teachers; Classroom management skills are closely related to the ability to choose effective methods and techniques, the learning performance of students, the time allocated for teaching, the effort spent on students' learning, and the level of motivating students. Partial problems are observed in the self-efficacy of special education teachers in the use of all these learning-teaching processes with a holistic approach.

In another study finding, the relationships between special education teachers' self-efficacy and their gender and professional seniority were discussed. According to the analyzes carried out, it was found that female teachers had higher perceptions of teaching efficacy compared to their male colleagues. Similar to these findings, many research results determine that teachers' efficacy beliefs differ according to gender (Hartnett, 1995; Kaleli, 2021; Kara, 2020; Kurz, 2001). Kurz (2001) determined that female teachers have firmer efficacy beliefs than male teachers. In many studies, the efficacy perceptions of female teachers were found to be higher than male teachers. Concerning this situation, Çapri and Çelikkaleli (2008) state that primarily girls are associated with the teaching profession more and are inculcated in this direction is why the positive attitudes of female teacher candidates towards teaching are higher than male teacher candidates. Again, as the professional seniority of particular education teachers increases, their self-efficacy perceptions also increase. These findings are similar to those of studies conducted by Egger (2006), Hoy and Woolfolk (1993), Kaleli (2020), and Wu (2005). According to Hoy and Woolfolk (1993), teachers' age and professional seniority partially affect their efficacy beliefs. Different studies obtained similar results (Egger, 2006; Wu, 2005).

The other variable discussed in the study is the professional attitudes of special education teachers. In general, it was observed that the participants had attitudes toward the teaching profession. In addition, the participant's attitudes towards the teaching profession differ according to their gender and professional seniority. According to the analysis, the professional attitudes of female teachers were found to be high. However, as the professional seniority of the participants increased, it was observed that their attitudes toward the teaching profession increased. These findings were found in Asimaki and Vergidis (2013), Çapa and Çil (2000), Çapri and Çelikkaleli (2008), Kara (2020), Kaleli (2021), Oral (2004), Richardson and Watt (2006), and Şen (2006). similar to the findings of the studies carried out, it is stated that women perceive themselves to be more inclined to the teaching profession compared to men and exhibit positive attitudes (Richardson & Watt, 2006).

According to the research results, special education teachers' views on teacher competencies significantly correlate with their teaching attitudes. It can be thought that this result is a significant finding for limited research in the literature on the subject. These findings are similar to the findings of studies conducted by Baumert & Kunter (2013), Blomeke (2017), Brick et al. (2021), Kaleli (2021), Osher et al. (2021), Sonmark et al. (2017). According to Brick et al. (2021), teachers' self-efficacy highly affects their attitudes and beliefs about teaching strategies, classroom management, and student participation. Similarly, it is seen that the attitudes of teachers with

high efficacy perception towards their profession are more optimistic and at a higher level (Goddard, Hoy & Woolfolk Hoy, 2004). Again, according to Kara (2020), teachers' positive perception of their abilities affects their motivation and attitudes positively.

As a result, this research tried to determine the efficacy beliefs and attitudes of special education teachers and to compare them in terms of different variables. In future research, mixed-model research can be carried out to improve special education teachers' professional competencies. In addition, the relationships between the efficacy beliefs of special education teachers and the learning performance of students with special needs can be investigated.

References

- Aigerim, B., Aida, S., & Tulebike, K. (2022). Investigating of Information and Communication Technology (ICT) Skills and Professionally-based Competencies of Translator Candidates. *International Journal of Education in Mathematics, Science, and Technology (IJEMST), 10*(4), 894-917. https://doi.org/10.46328/ijemst.2647
- Akdeniz, C., Bacanlı, H., Baysen, E., Çakmak, M., Doğruer, N., Erişti, B., Eyyam, R., Gündoğdu, K., Karataş,
 E., Kayabaşı, Y., Kurnaz, A., Sünbül, A.M. & Tok, H. (2016). *Learning and Teaching*. Ankara: Cozum Eğitim Yayıncılık
- Asimaki, A., & Vergidis, K. D. (2013). Detecting the gender dimension of the choice of the teaching profession prior to the economic crisis and IMF Memorandum in Greece. *International Educational Studies*, *6*(4), 140–153.
- Aşkar, P., & Erdem, M. (1987). Öğretmenlik mesleğine yönelik tutum ölçeği. Çağdaş Eğitim, 121,ss:8-11.
- Bandura, A. (1991). Self-efficacy mechanism in physiological activation and health-promoting behavior. In J. Madden (Eds.), *Neurobiology of learning, emotion and affect* (pp. 229-270). New York: Raven.
- Bandura, A. (1994). Self-efficacy. I. V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior*, 4 (71–81). New York: Academic Press.
- Baumert, J., & Kunter, M. (2013). "The COACTIV model of teachers' professional competence," in Cognitive Activation in the Mathematics Classroom and Professional Competence of Teachers. *Mathematics Teacher Education*, Eds Kunter M., Baumert W., Blum U., Klusmann S., Krauss M. N. (New York, NY: Springer Science+Business Media;). 10.1007/978-1-4614-5149-5_1
- Blomeke, S. (2017). Modelling teachers' professional competence as a multi-dimensional construct. in *Pedagogical Knowledge and the Changing Nature of the Teaching Profession*, ed. Guerriero S. (Paris: OECD Publishing;), 119–172. 10.1787/9789264270695-7-en
- Brick, K., Cooper, J. L., Mason, L., Faeflen, S., Monmia, J., & Dubinsky, J. M. (2021). Tiered Neuroscience and Mental Health Professional Development in Liberia Improves Teacher Self-Efficacy, Self-Responsibility, and Motivation. *Frontiers in Human Neuroscience*, 15, 664730. https://doi.org/10.3389/fnhum.2021.664730
- Cambell-Whatley, Obiakor, & Algozzine (1995). Perceptions of competencies for including students with disabilities in elementary and secondary school classrooms. *Special Services in the Schools*, 10, 1-12.

- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. Journal of School Psychology, 44, 473-490.
- Çapri, B., & Çelikkaleli, Ö. (2008). Öğretmen Adaylarının Öğretmenliğe İlişkin Tutum ve Mesleki Yeterlik İnançlarının Cinsiyet, Program ve Fakültelerine Göre İncelenmesi. İnönü Üniversitesi Eğitim Fakültesi Dergisi, 9(15), 33-53.
- Çelebi, E. (2013). Elâzığ Ve Malatya İl Merkezinde Bulunan Özel Eğitim Kurumlarında Çalışan Öğretmenlerin Tükenmişlik Düzeyleri ve İlgili Faktörler. Doktora Tezi, Firat Üniversitesi Sağlık Bilimleri Enstitüsü, Elâzığ.
- Doğru, O. (2020). An Investigation of Pre-service Visual Arts Teachers' Perceptions of Computer Self-Efficacy and Attitudes Towards Web-based Instruction. *International Journal of Research in Education and Science (IJRES), 6*(4), 629-637.
- Ellett, C. D., & Teddlie, C. (2003). Teacher evaluation, teacher effectiveness and school effectiveness: perspectives from the USA. *Journal of Personnel Evaluation in Education*, 17(1), 101-128.
- Embich, J. L. (2001). The relationship of secondary special education teachers' roles and factors that lead to professional burnout. Teacher Education and Special Education, 24(1), 58-69.
- Goddard, R. G., Hoy, W. K., & Woolfolk Hoy, A. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher*, *33*(3), 3-13.
- Guo, Y., Dynia, J. M., Pelatti, C. Y., & Justice, L. M. (2014). Self-efficacy of early childhood special education teachers: Links to classroom quality and children's learning for children with language impairment. *Teaching and Teacher Education*, 39, 12-21. doi:10.1016/j.tate.2013.11.005
- Hartnett, M. J. (1995). The relationship between principal and teacher efficacy in middle level schools in Missouri. The University of Nebraska. http://proquest.umi.com.
- Jarque, C. M., & Bera, A. K. (1987). A test for normality of observations and regression residuals. *International Statistical Review*, 55(2), 163-172.
- Jennett, H. K., Harris, S.L. & Mesibov. G.B. (2003). Commitment to Philosophy, Teacher Efficacy, and Burnout among Teachers of Children with Autism. *Journal of Autism and Developmental Disorders*, 33, 583–593.
- Joldanova, D., Tleuzhanova, G., Kitibayeva, A., Smanova, G., & Mirza, N. (2022). Formation of TPACK and Acmeological Competency of Future Teachers in Foreign Language Education. *International Journal of Education in Mathematics, Science, and Technology (IJEMST), 10*(4), 935-954. https://doi.org/10.46328/ijemst.2717
- Joseph, B. (2013). Teacher effectiveness and professional competency among higher secondary school teachers in Kottayam district, Kerala. PhD Dissertation, Andhra University, Visakhapatnam, Chapter 1 (17-52)
- Kaleli, Y. S. (2020). Investigation of the Relationship between Pre-service Music Teachers' Attitudes towards Teaching Profession and their Self-efficacy Beliefs. *International Journal of Research in Education and Science (IJRES)*, 6(4), 580-587.
- Kaleli, Y. S. (2021). The Effect of Individualized Online Instruction on TPACK Skills and Achievement in Piano Lessons. International Journal of Technology in Education (IJTE), 4(3), 399-412. https://doi.org/10.46328/ijte.143

- Kara, S. (2020). Görsel sanatlar öğretmen adaylarının öğretmenlik mesleğine yönelik tutumları ve öğretmenlik öz yeterlik inançlarının incelenmesi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 1(54), 49 -73. 10.21764/maeuefd.651393
- Kara, S. (2021). An Investigation of Technological Pedagogical and Content Knowledge (TPACK) Competencies of Pre-Service Visual Arts Teachers. *International Journal of Technology in Education (IJTE)*, 4(3), 527-541. https://doi.org/10.46328/ijte.184
- Karahan, Ş., & Balat, G.U. (2011). Özel Eğitim Okullarında Çalışan Eğitimcilerin ÖzYeterlik Algılarının ve Tükenmişlik Düzeylerinin İncelenmesi. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 29*(1), 1-14
- Karasar, N. (2012). Bilimsel Araştırma Yöntemleri. Ankara: Nobel.
- Kibici, V. B. (2022). An Investigation into Music Teachers' Perceptions of Technological Competencies. International Journal of Technology in Education and Science (IJTES), 6(1), 111-123. https://doi.org/10.46328/ijtes.344
- Kurz, T. B. (2001). An exploration of the relationship among teacher efficacy, collective teacher efficacy, and goal consensus. Dissertation Abstracts International: A. *The Humanities and Social Sciences*, 62(07), 1-13.
- Koyuncuoglu, O. (2021). An Investigation of Graduate Students' Technological Pedagogical and Content Knowledge (TPACK). International Journal of Education in Mathematics, Science, and Technology (IJEMST), 9(2), 299-313. https://doi.org/10.46328/ijemst.1446
- Lazuras, L. (2006). Occupational stress, negative affectivity and physical health in special and general education teachers in Greece. *British Journal of Special Education*, *33*(4), 204-209.
- Mc Evoy, M.A., Nordquist, V.M., & Cunningham, J.L. (1984). Regular and special education teachers' judgements about mentally retarded children in an integrated setting. *American Journal of Mental Deficiency*, 89(2), 167-173.
- Oral, B. (2004). Eğitim fakültesi öğrencilerinin öğretmenlik mesleğine ilişkin tutumları. Eurasian Journal of Educational Research, 15, 88–98.
- Osher, D., Coggshall, J., Colombi, G., Woodruff, D., Francois, S., & Osher, T. (2012). Building school and teacher capacity to eliminate the school-to-prison pipeline. *Teacher Education and Special Education*, 35(4), 284-295.
- Özen, A., Ergenekon, Y. ve Batu, E.S. (2009). Zihin Engelliler Öğretmenliği Adaylarının Uygulama Okulları ve Uygulama Sınıf Öğretmenleri Hakkındaki Görüşleri. *Anadolu Üniversitesi Sosyal Bilimler Dergisi.* 9(1), 185-200
- Pancholi, A., & Bharwad, A.B.J. (2015). Student-teachers' attitude towards teaching profession. *International Journal of Research in Humanities and Social Sciences*, *3*(8), 40-43.
- Pehlivan, K. B. (2008). Sınıf Öğretmeni Adaylarının Sosyo-Kültürel Özellikleri Ve Öğretmenlik Mesleğine Yönelik Tutumları Üzerine Bir Çalışma. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 4(2), 151-168.
- Preuss, M., Sosa, E., Rodin, J., Ramos, J., Dorsett, C., & Burleson, C. (2020). Competence of Faculty, Staff, and Administrators in Hispanic Culture: Evidence from Three Surveys of Personnel and Students at Hispanic-Serving Institutions. *International Journal of Research in Education and Science (IJRES)*, 6(2), 202-230.
- Rice, J. K. (2003). Teacher quality: understanding the effectiveness of teacher attributes. Washington, DC:

Economic Policy Institute.

- 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
- Rizzo, T. I. (1985). Attributes related to Teacher' Attitudes. Perceptual and Motor Skills, 60(3), 739-742.
- Sarı, H. (2004). An Analysis of Burnout and Job Satisfaction Among Turkish Special School Head teachers and Teachers, and The Factors Effecting Their Burnout and Job Satisfaction. *Educational Studies*, 30(3), 291-306.
- Semerci, N., & Semerci, Ç. (2004). Türkiye'de Öğretmenlik Tutumları. *Fırat Üniversitesi Sosyal Bilimler Dergisi,* 14(1), 137-146.
- Sonmark, K., Révai, N., Gottschalk, F., Deligiannidi, K., & Burns, T. (2017). Understanding teachers' pedagogical knowledge: report on an international pilot study.
- 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.(1996). Öğretmen niteliği ve geliştirilmesi. Eğitim Yönetimi Dergisi, 4, 597-608.
- Tanguay, C.L., & Many, J. E. (2022). New Teachers' Perceptions of Their Impact on Student Learning While Developing Knowledge and Skills to Teach Online. *International Journal of Technology in Education* (*IJTE*), 5(4), 637-653. https://doi.org/10.46328/ijte.309
- Uğurlu, C. T., & Polat, S. (2011). Sınıf Öğretmenliği Öğrencilerinin Öğretmenlik Mesleğine İlişkin Tutumları. *Cumhuriyet Üniversitesi Sosyal Bilimler Dergisi, 35*(1), 68-74.
- Yuksel, I. (2022). The Effect of Moodle-Integrated Learning Platform on ELT Pre-service Teachers' General Pedagogical Knowledge. International Journal of Technology in Education (IJTE), 5(2), 235-248. https://doi.org/10.46328/ijte.283

Author Information

Mehrossâdat Vosough Matin

https://orcid.org/ 0000-0001-7082-1275 Necmettin Erbakan University Institute of Educational Sciences Meram, Konya Turkey

Contact e-mail: mehri_vusugh@yahoo.com