

**A STUDY OF SELF-EFFICACY LEVELS OF TEACHER CANDIDATES IN TERMS
OF SEVERAL**

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Abstract: The goal of this study is to evaluate self-efficacy levels of last grade students studying Mentally Handicapped Teaching and Computer and Instructional Technologies Teaching Departments at Trakya University Education Faculty in 2016-2017 academic year according to their gender, department and intention to work as teacher after graduation. The study involved 109 teacher candidates. Screening model was used for the study. No significant difference was observed in study results according to gender, department and professional goals after graduation.

Keywords: Teacher Candidate, Self-Efficacy

INTRODUCTION

Teacher candidates' self-perception and self-judgment of their own knowledge, skills and experience play a key role for effective teaching and solution of pedagogical problems during their professional careers. Self-efficacy feeling of teachers and candidate teachers in professional terms has recently been a very popular issue. Self-efficacy feeling of teachers and teacher candidates is defined with "self-efficacy belief" or "self-efficacy perception" concepts (Özdemir, 2008).

Self-efficacy concept is based on Bandura's (1997) social learning theory and defined as one's belief that he can organize and realize necessary actions to achieve a certain goal. Zimmerman (1995) defines self-efficacy as one's belief that he has the necessary skills to complete a task. Individuals with stronger self-efficacy belief try harder to succeed at a task than those with lower self-efficacy belief who surrender very easily when they face work-related problems (Bandura, 1994).

Teacher self-efficacy is a teacher's judgment of his capabilities to bring about desired learning outcomes for his students (Tschannen-Moran and Woolfolk-Hoy 2001). According to Guskey and Passaro (1994), teacher self-efficacy is a teacher's self-confidence to give his students the most appropriate and effective education. Teachers with strong self-efficacy belief can educate even the hardest students when they use proper techniques and make an extra effort. Teachers with higher level of self-efficacy spare more time for academic

activities in class, support and reward success of weaker students, design and apply more effective lesson plans and are better at involving their students in discussing (Bandura, 1997; Glickman and Tamashiro, 1982; Guskey, 1984).

Personal judgments, self-efficacy beliefs and perceptions of teachers and teacher candidates on their own skills play a key role for effective teaching and solution of pedagogical problems during teaching process (Özdemir, 2008). One of the most important requisites of professional success for teacher candidates is a strong perception of professional self-efficacy. An individual with no self-efficacy perception is unlikely to achieve success. From this point of view, strong self-efficacy perception of teacher candidates is of great importance for students who they will educate in the future (Aydın, Ömür and Argon, 2014).

There are studies in literature on self-efficacy levels of candidate teachers from various departments. For example; study of Yeşilyurt (2013) with teacher candidates from Mathematics, Physics, Chemistry, Biology, Turkish Language and Literature, Philosophy and Foreign Language (English, French, German) departments, studies of Akbaş and Çelikkaleri (2006), Ekici (2008), Özdemir (2008), Yılmaz and Bökeoğlu (2008) with teacher candidates from Primary School Teaching department, study of Altunçekiç, Yaman and Koray (2005) with teacher candidates from Science teaching department, study of Çubukçu (2008) with students from English Language Teaching department, study of Vural and Hamurcu (2008) with teacher candidates from Preschool Teaching department, Akbulut (2006) with Music teacher candidates and Coşkun (2007) with teacher candidates from Social Sciences department. There are limited number of studies with teacher candidates from Mentally Handicapped Teaching department in our country (Bayrakdar, Batık and Barut, 2016). Similarly, there are few studies with teacher candidates from Computer and Instructional Technologies Teaching department (Akkoyunlu and Orhan, 2003; Aydın and Sağlam, 2012; Akkoyunlu and Orhan, 2003). From this point of view, more studies are needed with teacher candidates studying at both Mentally Handicapped Teaching and Computer and Instructional Technologies Teaching departments.

The goal of this study is to evaluate self-efficacy levels of last grade students studying Mentally Handicapped Teaching and Computer and Instructional Technologies Teaching Departments at Trakya University Education Faculty in 2016-2017 academic year according to several variables. For this purpose, responses were sought for the following questions:

1. Is teachers' self-efficacy level significantly related to their gender?
2. Is teachers' self-efficacy level significantly related to their department?

3. Is teachers' self-efficacy level significantly related to their intention of working as teacher after graduation?

METHOD

This study includes the examination of self-efficacy level of students from Mentally Handicapped Teaching and Computer and Instructional Technologies Teaching Departments at Trakya University Education Faculty in 2016-2017 academic year according to their gender, department and intention to work as teacher after graduation. Therefore, general screening model was used for the study. General screening model is used for having a general judgment on a population with numerous elements by screening the whole population or a sample of the population (Karasar, 2005).

Sample

Study sample comprises 109 last grade students studying at Mentally Handicapped Teaching and Computer and Instructional Technologies Teaching Departments at Trakya University Education Faculty in 2016-2017 academic year.

Data Collection Tools

Study data was collected by means of "Personal Information Form" and "Self-efficacy Scale".

Personal Information Form

Personal information form was designed by authors and includes information on teacher candidates' gender, department and intention to work as teacher after graduation.

Interpersonal self-efficacy scale

"Teacher Self-efficacy Scale" used in the study was designed by Tschannen-Moran and Hoy (2001) and adapted to Turkish language by Çapa, Çakıroğlu and Sarıkaya (2005). The scale involves 24 items and three sub-scales of "student participation", "teaching strategies" and "class management". Cronbach alpha reliability values of sub-scales are 82, 86 and 84.

Data Collection and Analysis

The scale was applied to teacher candidates on voluntary basis. Teacher candidates were first informed on the goal of study and content of scale. Then, they were given forms to fill in. SPSS 22 version was used for data analysis. Before analysis, accuracy of data input and relevance of variable distribution was tested. Data analysis was made for 109 teacher candidates. Normal distribution was checked with Kolmogorov-Smirnov testing, yielding a

result that shows data distribution is normal. Descriptive statistics and independent sample t-test was used for data analysis.

FINDINGS

This section includes demographic data of teacher candidates and statistical findings of the study.

Table 1.

Demographic findings of teacher candidates

		N	%
Gender	Female	52	47,7
	Man	57	52,3
Department	Special Education	78	71,6
	CITT	31	28,4
Duty as Teacher	Yes	94	86,2
	No	15	13,8

Table 2.

Independent sample t-test results of teacher candidates’ self-efficacy level according to gender

		<i>N</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>T</i>	<i>df</i>	<i>p</i>
Gender	Female	52	6,71	,90	,775	107	,44
	Male	57	6,84	,75			

Independent sample t-test was used for studying teacher candidates’ self-efficacy according to age variable. According to Table 2, teacher candidates’ self-efficacy level is not significantly related to age variable ($t=1,775$; $p>0.05$). According to these findings, age variable has no impact on self-efficacy belief.

Table 3.

Independent sample t-test results of teacher candidates’ self-efficacy level according to department

		<i>N</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>t</i>	<i>df</i>	<i>p</i>
Department	Special Education	78	6,76	,82	,351	107	,72
	CITT	31	6,82	,85			

Independent sample t-test was used for studying teacher candidates' self-efficacy according to department. According to Table 3, teacher candidates' self-efficacy level is not significantly related to age variable ($t=1,351; p>0.05$). These findings show that age variable has no impact on self-efficacy belief.

Table 4.

Independent sample t-test results of teacher candidates' self-efficacy level according to their intention to work as a teacher after graduation

		<i>N</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>t</i>	<i>df</i>	<i>p</i>
Intention	Yes	94	6,80	.77	.631	107	,53
	No	15	6,65	1.17			

Independent sample t-test was used for studying teacher candidates' self-efficacy according to their intention to work as teacher after graduation. According to Table 4, teacher candidates' self-efficacy level is not significantly related to age variable ($t=1,631; p>0.05$). These findings show that teacher candidates' intention to work as teachers after graduation has no impact on self-efficacy belief.

Discussion

Study results yielded no significant difference in terms of gender variable. There are various studies that support these findings (Bayrakdar, Batık and Barut, 2016; Berkan and Ekici, 2007; Çakıroğlu, Çakıroğlu and Bone, 2005; Yaman, Koray and Altunçekiç, 2004; Gençtürk and Memiş, 2010). However, there also studies that conflict with the findings of our study. Yeşilyurt (2013) found that self-efficacy belief of male teacher candidates is stronger than that of female teacher candidates. On the other hand, Aydın, Ömür and Argon (2014), Başer, Günhan and Yavuz (2005), Kiremit (2006) and Özdemir (2008) found in their studies that self-efficacy belief of female teacher candidates is stronger than male teacher candidates.

Study results yielded no significant difference in terms of department variable. There are various studies in literature that support these findings (Aydın and Sağlam, 2012; Bayrakdar, Batık and Barut, 2016; Çapri and Çelikkaleli, 2008; Oral, 2014; Tanrıöğen, 1997). However, there also studies in literature showing significant difference between self-efficacy levels of students from various departments (Kahyaoğlu and Yangın, 2007; Çakır and Şenler, 2007). According to Aydın and Sağlam (2012), lack of significant difference between self-efficacy of students from various departments may be explained by the fact that these students

are taught pedagogy by the same instructors.

Study results yielded no significant difference in terms of teacher candidates' intention to work as teacher after graduation. No data was found in literature related to this variable. However, Taşğın (2007) found no significant difference between self-efficacy levels of teacher candidates in terms of P.E. department preference. Pehlivan (2009) reported that students who study at departments they do not want are less likely to do well at teaching profession. In other words, teachers who do not adapt to their jobs are less likely to educate well-quality students. According to these results, there is not a significant difference between self-efficacy levels of students studying Mentally Handicapped Teaching and Computer and Instructional Technologies Teaching Departments (CITT) at Trakya University Education Faculty in 2016-2017 academic year according to their gender, department and intention to work as teacher after graduation.

Limitations

This study has several limitations. It is limited with students from Mentally Handicapped Teaching and Computer and Instructional Technologies Teaching Departments (CITT) at Trakya University Education Faculty in 2016-2017 academic year and the sample is limited with 109 teacher candidates.

REFERENCES

1. Akbaş, A. & Çelikkaleli, Ö. (2006). Sınıf öğretmeni adaylarının fen öğretimi öz-yeterlik inançlarının cinsiyet, öğrenim türü ve üniversitelerine göre incelenmesi. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 2(1), 98-110.
2. Akbulut, E. (2006). Müzik öğretmeni adaylarının mesleklerine ilişkin öz yeterlik inançları. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 3(2), 24-33.
3. Akkoyunlu, B. & Orhan, F. (2003). Bilgisayar ve öğretim teknolojileri bölümü (böte) bölümü öğrencilerinin bilgisayar kullanma öz-yeterlik inancı ile demografik özellikleri arasındaki ilişki. *The Turkish Online Journal of Educational Technology- TOJET*. 2(3), 86-93.
4. Akkoyunlu, B. & Orhan, F. (2003). Bilgisayar ve öğretim teknolojileri eğitimi (böte) bölümü öğrencilerinin bilgisayar kullanma öz yeterlik inancı ile demografik özellikleri arasındaki ilişki. *The Turkish Online Journal of Educational Technology*, 2(3), [Online]: <http://www.tojet.net/articles/2311.htm>. adresinden 20 ağustos 2017 tarihinde indirilmiştir.
5. Altunçekiç, A., Yaman, S. & Koray, Ö. (2005). Öğretmen adaylarının öz-yeterlik inanç

- düzeyleri ve problem çözme becerileri üzerine bir araştırma (kastamonu ili örneği). *Kastamonu Eğitim Dergisi*, 13(1), 93-102.
6. Aydın, R. & Sağlam, G. (2012). Öğretmen adaylarının öğretmenlik mesleğine yönelik tutumlarının belirlenmesi (Mehmet Akif Ersoy Üniversitesi örneği). *Türk Eğitim Bilimleri Dergisi*, 10(2), 257-294.
 7. Aydın, R., Ömür, Y. E., & Argon, T. (2014). Öğretmen adaylarının öz yeterlik algıları ile akademik alanda arzularını erteleme düzeylerine yönelik görüşleri. *Marmara Üniversitesi Eğitim Bilimleri Dergisi*, 40(40), 1-12.
 8. Bandura, A. (1994). Self-efficacy. In V. S. Ramachandran (Ed.). *Encyclopedia of human behavior* (4, 71-81). New York: Academic Press.
 9. Başer, N., Günhan, B.C. & Yavuz G. (2005). İlköğretim öğretmen adaylarının ve öğretmenlerin öğretmen yeterlik algılarının karşılaştırılması üzerine bir araştırma. *XIV. Ulusal Eğitim Bilimleri Kongresi. 28-30 Eylül 2005* (515- 521). Denizli: Pamukkale Üniversitesi.
 10. Bayrakdar, U. Batık, M. V. & Barut, V. (2016). Özel eğitim öğretmen adaylarının öğretmen öz-yeterlik düzeyleri ve öğretmenlik mesleğine yönelik tutumları. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD)*, 17(2), 133-149.
 11. Berkant, H. G. & Ekici, G. (2007). Sınıf öğretmeni adaylarının fen öğretiminde öğretmen öz-yeterlik inanç düzeyleri ile zekâ türleri arasındaki ilişkinin değerlendirilmesi. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 16(1), 113-132.
 12. Coşkun, O. (2007). Erzurum'daki sosyal bilgiler öğretmen adaylarının coğrafya alanına yönelik öz yeterlik seviyeleri üzerine bir inceleme. *K. Karabekir Eğitim Fakültesi Dergisi*, 15, 201-221.
 13. Çakıroğlu, J., Çakıroğlu, E. & Bone, W. J. (2005). Pre-service teacher self-efficacy beliefs regarding science teaching: A comparison of pre-service teachers in Turkey and the USA. *Science Educator*, 14(1), 31-40.
 14. Çapri, B. & Çelikkaleli, Ö. (2008). Öğretmen adaylarının öğretmenliğe ilişkin tutum ve mesleki yeterlik inançlarının cinsiyet, program ve fakültelerine göre incelenmesi. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 9(15), 33-53.
 15. Demirtaş, H. Cömert, M. & Özer, N. (2001). Öğretmen Adaylarının Öz-yeterlik İnançları ve Öğretmenlik Mesleğine İlişkin Tutumları. *Eğitim ve Bilim* 36, 96-111
 16. Ekici, G. (2008). Sınıf yönetimi dersinin öğretmen adaylarının öğretmen öz-yeterlik algı düzeyine etkisi, *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 35, 98-110.

17. Gençtürk, A. & Memiş, A. (2010). İlköğretim okulu öğretmenlerinin öz-yeterlik algıları ve iş doyumlarının demografik faktörler açısından incelenmesi. *Elementary Education Online*, 9(3), 1037-1054.
18. Glickman, C., & Tamashiro, R. (1982). A comparison of first-year, fifth-year, and former teachers on efficacy, ego development, and problem solving. *Psychology in Schools*, 19, 558-562.
19. Guskey, T. (1984). The influence of change in instructional effectiveness upon the affective characteristics of teachers. *American Educational Research Journal*, 21, 245–259.
20. Kahyaoğlu, M. & Yangın, S. (2007). İlköğretim öğretmen adaylarının mesleki öz-yeterliklerine ilişkin görüşleri. *Kastamonu Eğitim Dergisi*, 15(1), 73-84.
21. Kiremit, H. Ö. (2006). *Fen bilgisi öğretmenliği öğrencilerinin biyoloji ile ilgili özyeterlik inançlarının karşılaştırılması*. Yayımlanmamış doktora tezi. İzmir: Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü.
22. Kozcu-Çakır, N. & Şenler, B. (2007). Fen bilgisi ve sınıf öğretmenliği anabilim dalında öğrenim gören öğretmen adaylarının öz-yeterlik inançlarının belirlenmesi (Muğla Üniversitesi Örneği). *16. Ulusal Eğitim Bilimleri Kongresi. 5-7 Eylül 2007*, Gaziosmanpaşa Üniversitesi, Eğitim Fakültesi.
23. Kozcu-Çakır, N. & Şenler, B. (2007). Fen bilgisi ve sınıf öğretmenliği anabilim dalında öğrenim gören öğretmen adaylarının öz-yeterlik inançlarının belirlenmesi (Muğla Üniversitesi Örneği). *16. Ulusal Eğitim Bilimleri Kongresi. 5-7 Eylül 2007*, Gaziosmanpaşa Üniversitesi, Eğitim Fakültesi.
24. Özdemir, S. M. (2008). Sınıf Öğretmeni Adaylarının Öğretim Sürecine İlişkin Öz-Yeterlik İnançlarının Çeşitli Değişkenler Açısından İncelenmesi. *Kuram ve Uygulamada Eğitim Yönetimi*, 54, (277-306).
25. Özdemir, S. M. (2008). Sınıf öğretmeni adaylarının öğretim sürecine ilişkin özyeterlik inançlarının çeşitli değişkenler açısından incelenmesi. *Theory and Practice*, Sayı 54, ss: 277-306.
26. Pehlivan, H. (2009, 1-3 Mayıs). Ortaöğretim Kurumlarında Görev Yapan Öğretmenlerin Öğretmenlik Mesleğine Yönelik Tutumlarının Bazı Değişkenler Açısından İncelenmesi. *Paper presented at the 1st International Congress of Educational Research*. Çanakkale-Turkey.
27. Taşgın, Ö. (2006). Beden eğitimi ve spor yüksekokulunda okuyan öğretmen adaylarının

- mesleki kaygı düzeylerinin bazı değişkenler açısından incelenmesi. *Kastamonu Eğitim Dergisi*, 14(2), 679-686.
28. Vural, D.E. & Hamurcu, H. (2008). Okul Öncesi Öğretmen Adaylarının Fen Öğretimi Dersine Yönelik Öz-yeterlik İnançları ve Görüşleri, *Elementary Education Online*, 7(2), [Online]: <http://ilkogretim-online.org.tr> adresinden 20 ağustos 2017 tarihinde indirilmiştir.
29. Yaman, S., Koray, Ö.C. ve Altunçekiç, A. (2004). Fen bilgisi öğretmen adaylarının öz-yeterlik inanç düzeylerinin incelenmesi üzerine bir araştırma. *Türk Eğitim bilimleri Dergisi*, 2(3), 355-364.
30. Yeşilyurt, E. (2013).öğretmen adaylarının öğretmen öz-yeterlik algıları. *Elektronik Sosyal Bilimler Dergisi*, 2(45), 88-104.
31. Yılmaz, K. & Bökeoğlu, Ö. (2008). İlköğretim Okulu Öğretmenlerinin Yeterlik İnançları, *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 41(2), 143-167.
32. Zimmerman, B. J. (1995). Self-efficacy and educational development. In A. Bandura (Ed.). *Self-efficacy in changing societies*. New York: Cambridge University Press (s. 202-231).

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