

Research Article**Examination of the Relationship between Competencies of Candidate Teachers in Classroom Management and Teacher Efficacy ***Asuman Seda SARACALOĞLU¹  Mehmet ALTIN² **Abstract**

The aim of this study is to examine the relationship between competencies of candidate teachers in classroom management and teacher efficacy. This descriptive research is in correlational survey model. The study group consists of a total of 368 students studying in the pedagogical formation program at Aydın Adnan Menderes University. In order to collect the data, Competencies of Candidate Teachers in Classroom Management Scale and Ohio Teacher Efficacy Scale were used. Normality tests, correlation coefficient, regression analysis, independent sample t-test and ANOVA were used in data analysis. As results, a significant difference was not found between competencies of teacher candidates in classroom management and teacher efficacy mean scores according to their gender. While the mean scores competencies in classroom management differ significantly in favor of teacher candidates with teaching experience; there was no significant effect of teaching experience on teacher efficacy mean scores. There is a significant positive relationship between the participants' competencies in classroom management and teacher efficacy mean scores, and teacher candidates' competencies in classroom management are a significant predictor of teacher efficacy. In addition, there is a significant difference in the competencies in classroom management and teacher efficacy mean scores of the teacher candidates according to their age between aged 25 and under and aged 31 and over, in favor of the participants aged 31 and over.

Keywords: Teacher candidates, teacher efficacy, competencies in classroom management.

1. INTRODUCTION

Questions such as who is an effective teacher, how to be a good teacher, how to gain efficacy in teaching are among the questions that educational researchers have long sought answers (Richardson & Thomas, 1989). Efficacy is the totality of belief judgments about how well a person is able to do the necessary actions about the ability to cope with possible situations and to perform a job (Bandura, 1977). Teacher efficacy, on the other hand, is the whole of beliefs that teachers can produce the desired teaching results by affecting the learning processes of students even in cases of potential problems or low motivation (Tschannen-Moran & Woolfolk-Hoy, 2001).

In order to be efficient in teaching, teachers must have efficacies in some areas (Kuran, 2002). One of them is competence in classroom management. The first step in the success of a school's educational administration is a well-managed classroom. The classroom is actually a place where students spend a certain amount of time together to equip them. In the classroom, the teacher is in the position of a director who guides and directs, knowing that one of the leading conditions of quality education is qualified classroom management (Yılmaz & Aydın, 2015). Classroom management, according to Slavin (2003), includes activities such as using time efficiently, creating a classroom environment that can meet the interests and needs of students, and presenting activities that will engage students mentally and creatively. Woolfolk (2004) defines aims of effective classroom management as providing enough time to learn, increasing the quality of time by actively engaging

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students, structuring information for students in a clear, honest and perceivable way and encourage students about self-management, self-control and responsibilities.

The aim of this study is to examine the relationship between competencies of candidate teachers in classroom management and teacher efficacy. For this purpose, the questions to be answered are given below:

- Do the teacher efficacy and the competencies in classroom management differ significantly according to the demographic information of the participants?
- Are the competencies in classroom management a significant predictor of the teacher efficacy?

As the literature on the relationship between the competencies in classroom management and teacher efficacy was examined, it was seen that Çoban and Cizrelioğulları (2021), Gordon (2001), Gynne and Persson (2018), Tschannen-Moran and Hoy (2002), Wolters and Daugherty (2007) and Aksu (2009) examined the relationship between teachers' efficacy perceptions and classroom management skills. Also, Henson (2001) and Hicks (2012) investigated the relationship between my teachers' classroom management skills and self-efficacy beliefs.

2. METHOD

2.1. Research Model

This descriptive research is in correlational survey model. Correlational survey models are research models that aim to determine the presence and / or degree of change between two or more variables (Karasar, 2014). In this research, the relationship between two variables, classroom management and teacher efficacy, were examined.

2.2. Study Group

The research group consists of 368 students studying in the pedagogical formation program in Aydın Adnan Menderes University Faculty of Education. The study group was determined through appropriate sampling. The demographic information of the participants is given in Table 1.

Table 1. Demographic information of the participants

Gender	F	%
Male	140	38,0
Female	225	61,1
Total	365	99,2
Marital status		
Married	74	20,1
Single	290	78,8
Total	364	98,9
Age		
Aged 25 and under	206	56,0
Aged between 26-30	98	26,6
Aged 31 and over	64	17,4
Total	368	100,0
Teaching experience		
Yes	115	31,3
No	253	68,8
Total	368	100,0
Faculty		
Faculties of literature	156	42,4
Physical education and sports schools	66	17,9
Faculties of science	62	16,8
Tourism faculties	24	6,5
Faculties of economics and administrative sciences	24	6,5
Engineering faculties	21	5,7
Other faculties	15	4,1
Total	368	100,0

When Table 1 is examined, it is seen that 140 of the participants are male (38%) and 225 of them are female (61.1%). 74 participants are married (20.1%), and 290 participants are single (78.8%). More than half of the participants (56%) are aged 25 and under. While there are 98 participants (26.6%) aged between 26 and 30, the number of participants aged 31 and over (17.4). While 115 participants (31.1%) had teaching experience, 253 participants (68.8%) did not teach at any educational institution. 156 participants (42.4%) are from faculty of literature, 66 participants (17.9%) are from physical education and sports school, 62 participants (16.8%) are from faculty of science, 24 participants (6.5%) are from tourism faculty, 24 participants (6.5%) are from faculty of economics and administrative sciences, 21 participants (5.7%) are from graduates of engineering faculties.

2.3. Data Collection Tools

In the study, personal information form, Competencies of Candidate Teachers in Classroom Management Scale developed by Gökyer and Özer (2014) and Ohio Teacher Efficacy Scale developed by Tschannen-Moran and Woolfolk-Hoy (2001) and adapted to Turkish by Baloğlu and Karadağ (2008) were used for data collection purposes.

2.3.1. Competencies of Candidate Teachers in Classroom Management Scale

Competencies of Candidate Teachers in Classroom Management Scale, developed by Gökyer and Özer (2014), is a five-point Likert type scale. The scale, which has a three-factor structure, has a total of 16 items; "relationship management in the classroom" (items 1-6), "teaching management" (items 7-12) and "recognizing the student/environment" (items 12-13). For this research, the internal consistency coefficient of the scale was found to be .88. Internal consistency coefficients in the sub-dimensions were obtained as .73 for "relationship management in the classroom", .83 for "management of teaching" and .7 for "recognizing the student/environment". George and Mallery (2003) defined a value of reliability above .9 as excellent, a value of reliability above .8 as good, and a value of reliability above .7 as acceptable.

2.3.2. Ohio Teacher Efficacy Scale

Developed by Tschannen-Moran and Woolfolk-Hoy (2001), the Ohio Teacher Efficacy Scale is a nine-point Likert-type scale. The original consists of 24 items in three dimensions: Efficacy in Student Obligation (8 items), Efficacy in Teaching Practices (8 items) and Efficacy in Classroom Management (8 items). The scale, adapted to Turkish by Baloğlu and Karadağ (2008), is a five-point Likert type. The adapted scale consists of a total of 24 items in five dimensions; guidance (6 items), behavior management (5 items), motivation (6 items), teaching skills (5 items) and measurement and assessment (2 items). For this research, the internal consistency coefficient of the scale was found to be .93. Internal consistency coefficients in the sub-dimensions were obtained as .7 for guidance, .7 for behavior management, .78 for motivation, .73 for teaching skills, and .63 for measurement and assessment.

2.4. Data Analysis

SPSS 21.00 program was used to analyze the data of the study. Independent sample t-test, one-way analysis of variance, correlation coefficient and simple linear regression techniques were used for data analysis.

3. FINDINGS

Before starting the analysis, the graph, average, median and mod values of measures of central tendency showing the normal distribution characteristics of the data were examined. At the end of the analysis, it was concluded that the data values were in the form of a coincident symmetrical bell curve, which meant the normality assumption was met.

3.1. Findings Regarding the First Sub-Problem

The first sub-problem of the study, "Do the teacher efficacy and the competencies in classroom management differ significantly according to the demographic information of the participants?". The findings regarding the sub-problem are given in Tables 2, 3 and 4.

The difference between the teacher efficacy and the competencies in classroom management mean scores according to their gender is shown in Table 2.

Table 2. Difference between the teacher efficacy and the competencies in classroom management scores according to their gender

Difference between the competencies in classroom management scores according to their gender						
Groups	N	X	S	sd	t	P
Male	129	63.94	8.14	336	.462	.645
Female	209	63.56	6.75			
Difference between the teacher efficacy scores according to their gender						
Groups	N	X	S	sd	t	P
Male	125	95.67	11.86	224.07	.345	.730
Female	199	95.24	9.64			

When Table 2 is examined, it is seen that there are no significant differences between the competencies in classroom management mean scores of male ($X = 63.94$) and female ($X = 63.56$) participants ($t(336) = .462, P > .05$). Again, it is seen that there is no significant difference between the teacher efficacy mean scores of the male ($X = 95.67$) and female ($X = 95.24$) participants according to the gender of the teacher candidates ($t(224.07) = .345, P > .05$). It can be commented that the gender of the teacher candidates has no effect on their competencies in classroom management and teacher efficacy mean scores.

Table 3 shows the difference between the classroom management competency teacher competency scores according to the teacher candidates' teaching experience.

Table 3. Difference between the teacher efficacy and the competencies in classroom management mean scores according to their teaching experience

Difference between the competencies in classroom management mean scores according to their teaching experience						
Groups	N	X	S	sd	t	P
Yes	104	65.11	7.88	178.5	2.230	.027
No	237	63.1	7.06			
Difference between the teacher efficacy mean scores according to their teaching experience						
Groups	N	X	S	sd	t	P
Yes	102	96.89	10.99	325	1.732	.084
No	225	94.72	10.27			

When Table 3 is examined, it seen that there is a significant difference between competencies in the classroom management mean scores of the participants with teaching experience ($X=65.11$) and

without teaching experience ($X=63.1$) teaching experience in favor of the participants with teaching experience ($t(178.5)=2.230, P<.05$); no significant difference was found between the teacher efficacy mean scores of the participants who had teaching experience ($X=96.89$) and those who did not (94.72) according to their teaching experience ($t(325)=1.732, P>.05$). It can be commented that teaching experience is an important factor in gaining competencies in classroom management, but it does not significantly contribute to teacher efficacy.

The variances of the groups were compared, and it was concluded that there was no significant difference between the variances. Therefore, the differences between competencies in classroom management and teacher efficacy mean scores according to their ages were analyzed with one-way analysis of variance. The findings obtained after the analysis are shown in Table 4.

Table 4. Difference between competencies in class management and teacher efficacy mean scores according to their ages

Difference between competencies in class management mean scores according to their ages						
	Sum of squares	df	Mean squares	F	Sig.	Significant difference
Between groups	643.768	2	321.884	6.11	.002	Aged 25 and under Aged 31 and over
Within groups	17796.068	338	52.651			
Total	18439.836	340				
Difference between teacher efficacy mean scores according to their ages						
	Sum of squares	df	Mean squares	F	Sig.	Significant difference
Between groups	939.381	2	469.690	4.32	.014	Aged 25 and under Aged 31 and over
Within groups	35252.937	324	108.805			
Total	36192.318	326				

Table 4 shows whether there is a significant difference between the competencies in classroom management and teacher efficacy mean scores of the teacher candidates according to their ages. A significant difference was found between the participants aged 25 and under years of age ($X=62.59$) and participants aged 31 and over ($X=66.15$) in favor of participants aged 31 and over in terms of competencies in classroom management mean scores ($F(2-338)=6.11, P<.05$). In addition, in terms of teacher efficacy scores, a significant difference was found in favor of participants aged 31 and over ($F(2-324)=4.32, P<.05$) between participants aged 25 and under ($X=94.11$) and participants aged 31 and over ($X=98.71$).

3.2. Findings Regarding the Second Sub-Problem

The findings regarding the second sub-problem of the study, "Are the competencies in classroom management a significant predictor of the teacher efficacy?" were obtained by the simple linear regression technique. Before applying the regression, the relationship between the competencies in classroom management and teacher efficacy scores was analyzed with the Pearson correlation coefficient. The findings obtained from the correlation analysis are shown in Table 5.

Table 5. Relationship between competencies in classroom management and teacher competencies

	Competencies in classroom management	Relationship management in the classroom	Teaching management	Recognizing the student/environment	Teacher efficacy	Guidance	Behavior management	Motivation	Teaching skills	Measurement and assessment
Competencies in classroom management	1									
Relationship management in the classroom	.85**	1								
Teaching management	.91**	.64**	1							
Recognizing the student/environment	.81**	.5**	.65**	1						
Teacher efficacy	.7**	.49**	.67**	.6**	1					
Guidance	.64**	.46**	.60**	.57**	.86**	1				
Behavior management	.63**	.43**	.60**	.54**	.89**	.77**	1			
Motivation	.6**	.45**	.58**	.51**	.89**	.71**	.73**	1		
Teaching skills	.65**	.45**	.62**	.56**	.9**	.74**	.74**	.71**	1	
Measurement and assessment	.56**	.37**	.57**	.5**	.74**	.56**	.57**	.58**	.69**	1

When Table 5 is examined, it is seen that there is a highly positive and significant relationship between the participants' competencies in classroom management and teacher efficacy scores ($R=.702$, $p<$). It can be commented that increasing the competencies in classroom management of the teacher candidates will also increase the teacher efficacy of the participants.

By the simple linear regression analysis, a significant relationship was observed between competencies in classroom management and teacher efficacy ($R=.702$, $R^2=.493$), it was observed that competencies in classroom management were a significant predictor of teacher competencies ($F(1-304)=295.158$). Competencies in classroom management explain 49% of the change in teacher efficacy. The significance test of the coefficient ($\beta=.485$) of the main predictor variable in the regression equation also shows that it is a significant predictor of competencies in classroom management ($p<.01$).

According to the regression analysis results, the regression equation that predicts teacher efficacy is as follows; $\text{Teacher efficacy}=(0.485 \times \text{Competencies of candidate teachers in classroom management}) +17.833$

4. CONCLUSION, DISCUSSION and SUGGESTIONS

The results obtained from the research findings are given below:

A significant difference was not found between competencies teacher candidates in classroom management and teacher efficacy mean scores according to their gender. [Özdemir \(2015\)](#) stated in his study that the gender of teachers does not have a significant effect on teacher efficacies. While the mean scores competencies in classroom management differ significantly in favor of teacher candidates with teaching experience; there was no significant effect of teaching experience on teacher efficacy mean scores. [Şahin \(2010\)](#) concluded in his study that seniority does not have a significant effect on teacher efficacy. In addition, there is a significant difference in the competencies in classroom management and teacher efficacy mean scores of the teacher candidates according to their age between aged 25 and under and aged 31 and over, in favor of the participants aged 31 and over. However, [Şahin \(2010\)](#) stated that age does not have a significant effect on teacher efficacy. [Erol](#)

(2014) stated in his study that the variables of gender, age and seniority have a significant effect on competencies in classroom management.

There is a significant positive relationship between the participants' competencies in classroom management and teacher efficacy mean scores, and teacher candidates' competencies in classroom management are a significant predictor of teacher efficacy. Similarly, Aksu (2009) found that teacher efficacy varies according to their classroom management skills. Gordon (2001), Tschannen-Moran and Hoy (2002), and Wolters and Daugherty (2007) stated in their studies that there was a significant relationship between teacher efficacy and competencies in classroom management. Henson (2001) and Korkut (2009) found a significant relationship between teachers' self-efficacy beliefs and classroom management skills. Albayrak (2015) found a positive significant relationship between primary school teachers' teacher efficacies and professional values. Similarly, Şahin (2010) concluded that there is a significant relationship between perceptions on teacher efficacy and attitudes towards the teaching profession.

From the conclusions of the study, several suggestions can be made:

- Teacher candidates' teacher efficacy can be improved by making activities that will improve their competencies in classroom management.
- It is observed that the competencies in classroom management of the participants who have teaching experience are higher. For that reason, by making practices on classroom management in the courses and increasing the variety and number of practical course hours in the field, teacher candidates' experience can be increased, and hence, competencies in classroom management can be improved.
- By collecting data from teacher candidates studying at the faculty of education, the results can be compared with the results obtained from analyses of data obtained from pedagogical formation students in this study.

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5. REFERENCES

- Aksu, F. (2009). *Analyzing first stage primary education teachers' efficacy according to their classroom management skills and some variables*. Unpublished master's dissertation, İstanbul: Maltepe University Institute of Social Sciences.
- Albayrak, F. T. (2015). *The relationship between the professional values and the teacher sense of efficacy of primary school teachers: Erzurum city sample*. Unpublished master's dissertation, Erzurum: Atatürk University Institute of Educational Sciences.
- Baloğlu, N. & Karadağ, E. (2008). Teacher efficacy and Ohio teacher efficacy scale: adaptation for Turkish culture, language validity and examination of factor structure. *Educational Administration: Theory and Practice*, 56, 571-606.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavior change. *Psychological Review*, 84, 191-215.
- Çoban, G., S. & Cizrelioğulları, M., N. (2021). Okul öncesi öğretmenlerinin sınıf yönetimine dair görüşleri [*Preschool teachers' views on classroom management*]. *Journal of Computer and Education Research*, 9 (17), 248-277. DOI: 10.18009/jcer.856884
- Erol, E. (2014). *Classroom management competencies of teachers (Manisa province Sarıgöl, Alaşehir town's model)*. Unpublished master's dissertation, Denizli: Pamukkale University, Institute of Educational Sciences.

- George, D., & Mallery, P. (2003). *SPSS for windows step by step: A simple guide and reference (4th ed.)*. Boston: Allyn & Bacon.
- Gordon, L.M. (2001). *High teacher efficacy as a marker of teacher effectiveness in the domain of classroom management*. Paper presented at the annual meeting the California Council on Teacher Education, San Diego, CA.
- Gökyer, N. & Özer, F. (2014). The perception of candidate teachers related to competencies in classroom management. *International Periodical for the Languages, Literature and History of Turkish or Turkic*, 9(2), 691-712.
- Gynne, A., Persson, M. (2018). Teacher roles in the blended classroom-swedish lower secondary school teachers' boundary management between physical and virtual learning spaces. *Journal of Computer and Education Research*, 6 (12), 222-246. DOI: 10.18009/jcer.442499
- Henson, R. K. (2001). *Relationships between preservice teachers' self-efficacy, task analysis, and classroom management beliefs*. In the annual meeting of the Southwest Educational Research Association, New Orleans, LA.
- Hicks, S. D. (2012). *Self-efficacy and classroom management: a correlation study regarding the factors that influence classroom management*. Degree Doctor of Education, Liberty University, Virginia.
- Karasar, N. (2014). *Bilimsel araştırma yöntemi [Research method] (26th Ed.)*. Ankara: Nobel Yay.
- Korkut, K. (2009). *The connection between form tutor/class teachers' confidence in self-efficacy and their perceptions in classroom management*. Unpublished Doctorate Dissertation, Mehmet Akif Ersoy University Institute of Social Sciences, Burdur.
- Kuran, K. (2002). Öğretmenlik mesleği (Teaching profession) (A. Türkoğlu [Ed.] *Öğretmenlik Mesleğine Giriş [in Introduction to teaching profession]*). Ankara: Mikro Publication.
- Özdemir, İ. (2015). *Acting on science and technology teachers' professional burnout variables forecasting with artificial neural network (The sampling of Zonguldak)*. Unpublished doctorate dissertation, Kırşehir: Ahi Evran Üniversitesi Institute of Science.
- Richardson, A. G. & Thomas, A. A. (1989). *Characteristics of the effective teacher as perceived by pupils and teachers: A Caribbean study*. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, California.
- Slavin, R. E. 2003. *Educational psychology: Theory and practice*. Boston: Allyn and Bacon.
- Şahin, Z. S. (2010). *The attitude of kindergarten teachers to their job and the investigation by some variable of adequacy perception*. Unpublished master's dissertation, Konya: Selçuk University Institute of Social Sciences.
- Turan, S. (2006). Foundations of classroom management. (M. Şişman & S. Turan [Eds]) in *Classroom Management in Theory and Practice*, pp. 1–11.) Ankara: PegemA Publications
- Tschannen-Moran, M., & Woolfolk-Hoy, A. (2001) Teacher efficacy: Capturing an elusive concept. *Teaching and Teacher Education*, 17, 783-805.
- Tschannen-Moran, M. & Woolfolk-Hoy, A. (2002). *The influence of resources and support on teachers' efficacy beliefs*. The Annual Meeting of the American Educational Research Association, New Orleans.
- Wolters, C. A. & Daugherty, S. G. (2007). Goal structures and teachers' sense of efficacy: their relation and association to teaching experience and academic level. *Journal of Educational Psychology*, 99(1), 181–193.
- Woolfolk-Hoy, A. 2000. *Changes in teacher efficacy during the early years of teaching*. AERA Annual Meeting, Ohio State University.
- Yılmaz, Z. N. & Aydın, Ö. (2015). Investigation of primary school teachers' perceptions of classroom management skills with respect to some variables. *Mersin University Journal of the Faculty of Education*, 11(1), 148-164.