

Investigating The Impact Of Classroom Management Course On Self-Efficacy Levels: An Experimental Study On Pre-Service Teachers

Sınıf Yönetimi Dersinin Öz-Yeterlik Düzeyleri Üzerindeki Etkisinin Araştırılması: Öğretmen Adayları Üzerinde Deneysel Bir Çalışma

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Abstract

The basic purpose of the present study was to examine the influence of the classroom management course on pre-service teachers' beliefs regarding teacher self-efficacy perceptions. The study conducted in single-group pretest-posttest research model was carried out with 85 pre-service teachers. Data were collected via "Teacher Self-Efficacy Scale" administered at the beginning and end of the semester. The results revealed that the classroom management course had significant influence on the development of the pre-service teachers' levels of teacher self-efficacy and that pre-service teachers' teacher self-efficacy beliefs did not significantly differ with respect to their gender, their academic achievement and their departments.

Keywords: self-efficacy, teacher self-efficacy, professional teaching knowledge, classroom management skills

Öz

Bu çalışmanın temel amacı, sınıf yönetimi dersinin öğretmen adaylarının öğretmen öz-yeterlik inançları üzerindeki etkisini incelemektir. Tek gruplu öntest-sontest deneysel modelde yapılan çalışma, 2011-2012 öğretim yılında Eskişehir Osmangazi Üniversitesi Eğitim Fakültesinde öğrenim gören 85 öğretmen adayı üzerinde yürütülmüştür. Araştırmanın verileri öğretim yılı başında ve sonunda iki kez uygulanan "Öğretmen öz-yeterlik ölçeđi" ile toplanmıştır. Ölçeđin hesaplanan güvenilirlik katsayısı .93'tür. Verilerin analizinde t testi, varyans analizi, frekans ve yüzdelerden yararlanılmıştır. Araştırmada ulaşılan sonuçlar, sınıf yönetimi dersinin öğretmen adaylarının öğretmen öz-yeterlik inanç düzeyini geliştirmede önemli bir etkiye sahip olduğunu, öğretmen adaylarının öğretmen öz yeterlik inançlarının cinsiyet, akademik başarı ve öğrenim gördükleri bölümlere göre anlamlı bir farklılık göstermediđini ortaya koymuştur.

Anahtar Sözükleler: öz-yeterlik, öğretmen öz-yeterliđi, öğretmenlik meslek bilgisi, sınıf yönetimi

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Introduction

The concept of self-efficacy first emphasized within the social learning theory developed by Bandura (1977) was defined by Bandura (1977; 1997:3) as “beliefs in one’s capabilities to organize and execute the course of action required to produce given attainments”. The theory claims that self-efficacy has important influence on human behavior in such areas as education, health, sports, business, and so on (Bandura, 1997). Academically, students’ self-efficacy beliefs play an important role on their achievement and behavior, and teachers’ self-efficacy beliefs are important for their professional skills (Klassen, Tze, Betts, & Gordon, 2011). Thus, in recent years, discussions on the teaching-learning process have focused mostly on teachers’ attitudes, perceptions, and beliefs as well as on their levels of capability to motivate their students (Yılmaz, 2011). Studies especially investigating teachers’ beliefs among all these variables are important for determining teachers’ ways of perception, planning and management of instruction. These studies demonstrated that teachers’ perceptions and beliefs have influence not only on teachers’ instructional applications and learning outcomes but also on their in-class behavior and classroom management skills (Tuchman & Isaacs, 2011). Teacher self-efficacy refers to the skills, attitudes and knowledge necessary to fulfill the duties and responsibilities required by the profession of teaching (Demirtaş, Cömert, & Özer, 2011). According to Klassen et. al. (2011), teacher self-efficacy refers to the basic motivation beliefs that influence learning and the professional attitudes of a teacher. Tschannen-Moran, Woolfolk Hoy & Hoy (1998) defines self-efficacy as “being on the verge of maturity”, and Henson (2002) defines it as “ready to move beyond adolescent angst” (cited in Klassen et al., 2011).

Initial research on teacher self-efficacy started with RAND studies examining whether teachers believe they can control their own behavior or not (Denham & Michael, 1981). Teachers with a high level of self-efficacy do their best for learning, support their students and take all the precautions to increase their inner motivation (O’Neill and Stephenson, 2011). Woolfolk Hoy & Burke Spero (2005) stated that teachers with a high level of self-efficacy belief are more patient and successful in dealing with problematic students. Betoret (2009) emphasized that teachers with a low level of self-efficacy experience serious problems in teaching and have low level of job satisfaction and high level of job stress. Morris & Usher (2011) reported that teachers with low level of efficacy use more traditional methods in education and tend to create quite a controlled and harsh educational environment in class. The same problems are also main concern of Turkey as well.

As the classroom management and self-efficacy beliefs of pre-service teachers are basic variables related to in-class behavior and attitudes of a teacher, it has been one of the main concern that draws researchers’ attention (Cerit, 2011). Hazır Bıkmaz (2004) reported that the studies conducted on self-efficacy beliefs in the field of education mostly fall into three categories. These are the studies examining the influence of self-efficacy beliefs on academic achievement and performance; studies examining the relationship between different student products and instructional applications of teachers and their self-efficacies; and studies examining the influence of self-efficacy beliefs on field of expert and choice of profession (Hazır Bıkmaz, 2004). In one study carried out by Klassen et. al. (2011), who reviewed 218 studies conducted on teacher self-efficacy between 1998 and 2009, and in another study carried out by Dinther, Dochy & Segers (2011), who chose and reviewed 32 studies among other studies conducted on self-efficacy in 1990 and 2010, striking results were found. In both of these studies, the researchers stated that the previous studies were limited with respect to the methods applied. Henson (2002) emphasized that studies conducted before 2000s were correlational and were based on cross-sectional data and that there was a need for longitudinal, qualitative, observation-based and experimental studies. In addition, Klassen et. al. (2011) reported that only 12 of the 218 studies reviewed were experimental. Dinther

et. al. (2011) examined 13 experimental studies. Another result found in these studies was that the relationship between different variables and self-efficacy was investigated. In the studies reviewed, it was reported that the factors influencing self-efficacy should be investigated thoroughly. Especially when experimental studies are examined, the results showed that only Barbee et. al. (2003) and Ekici (2008) investigated the influence of the courses for teaching profession on self-efficacy. Within this framework, the basic purpose of the present study was to determine the impact of the classroom management training on pre-service teachers' self-efficacy beliefs.

Methodology

The study was designed based on the single-group pretest-posttest design was used to investigate the change in students' ratings of teacher self-efficacy beliefs from the beginning to the end of a 14-week semester (included two weeks for exams). At the beginning of the academic year of 2011-2012, the "Teacher Self-Efficacy Scale" was applied as pretest to 85 students. Following this, the participants took the course of classroom management during the academic term (12 weeks*2 course-hours= 24 course-hours in total). At the beginning of the academic term, the students were informed about the subjects found in the content.

Study Group

The study group was made up of 85 students taking the course of classroom management in the departments of Science Education (SE), Education of Religion and Ethics (ERE) and Computer Education and Instructional Technologies (CEIT) at the Education Faculty of Eskisehir Osmangazi University in the city of Eskisehir in the Fall Term of the academic year of 2011-2012. Of all the 85 students participating in the study, 47 of them (55,3%) were female pre-service teachers, and 38 of them (44,7%) were male pre-service teachers. According to the participants' academic achievement scores, one of the variables in the study, 27 of them (31,8%) had a low academic achievement score (1.50-2.49); 37 of them (43,5%) had a medium academic achievement scores (2.50-2.99); and 21 of them (24,7%) had a high academic achievement score (3.00-4.00).

Data Collection Tool

The research data were collected via the "Teacher Self-Efficacy Scale" which was developed by Tschannen-Moran & Hoy (2001) and which was found by Klassen et. al. (2011) more congruent with the self-efficacy theory than other measurement tools. The reliability and validity studies of the scale were conducted by Çapa, Çakıroğlu & Sarıkaya (2005), who also adapted the scale into Turkish. It was a 9-point Likert-type scale made up of 24 items. The scale included three sub-dimensions: Efficacy for Student Engagement, Efficacy for Instructional Strategies and Efficacy for Classroom Management. There were 8 items in each dimension, and the highest score to be produced by each of these dimensions was 72, and the lowest was 8. The highest score to be obtained from the whole scale was 216, the average score was 120, and the lowest was 24.

The reliability coefficients of the scale calculated by Çapa et al. (2005) were for Student Engagement as .82; for Instructional Strategies as .86; for Classroom management as .84; and for the whole scale as .93. In this study, the reliability coefficients calculated were .78 for Student Engagement, .87 for Instructional Strategies, .84 for Class Management, and .93 for the whole scale, respectively.

Procedure

After receiving Faculty Board approval to proceed with the research, instructor of research and practice courses were recruited to administer the measurement instruments during the first and the last weeks of the semester. Participants were administered the Teacher Self-Efficacy Scale as pretest. Students were ensured to write their ID numbers which cannot be followed. These IDs were

used to pair pre and posttest scores. Then, following this, the participants took the course of classroom management during the academic term (12 weeks*2 course-hours= 24 course-hours in total). Finally participants were administered the teacher self-efficacy scale as posttest at the end.

Data Analysis

In order to determine whether the pretest and posttest scores obtained via the whole scale and via the sub-dimensions of the scale applied twice to 85 pre-service teachers taking the course of Classroom Management, dependent t-test was applied. For the purpose of determining whether the teacher self-efficacy beliefs of the pre-service teachers differed with respect to their gender, independent t-test was conducted. Lastly, one-way analysis of variance (ANOVA) was applied to determine whether the participants' self-efficacy beliefs differed depending on their academic achievement and on their department. For the statistical analysis and interpretation of the research data, the significance level was taken as $p < .05$.

Findings

This study involved one dependent variable, which was the change in students' Teacher Self-Efficacy Scale scores from the beginning to the end of the semester and three independent variables: participants' gender (male-female), students' major (SE,CEIT and ERE), grade point averages-GPA (1.50-2.50; 2.50-3.00, and 3.00- 4.00). The results were presented by comparing gains in teacher self-efficacy first between male and female participants and second between SE, CEIT and ERE majors and finally between participants' GPE.

The study first examined whether there was a significant difference between the pretest and posttest scores of the pre-service teachers regarding the whole scale and its sub-dimensions. The results of the dependent t-test applied for this purpose are presented in Table 1.

Table 1.

Comparison of pre-test and post-test scores of students in teacher self-efficacy scale

	<i>n</i>	\bar{X}	<i>Sd</i>	<i>df</i>	<i>t</i>	<i>p</i>
Whole Scale						
Pre-test	85	154,36	15,59	84	3,48	,001*
Post-test	85	164,55	20,59			
Student Engagement						
Pre-test	85	49,69	8,40	84	3,44	,001*
Post-test	85	53,87	7,15			
Instructional Strategies						
Pre-test	85	52,12	8,56	84	2,16	,033*
Post-test	85	54,92	7,80			
Classroom Management						
Pre-test	85	52,55	8,65	84	2,46	,016*
Post-test	85	55,76	7,73			

$p < 0.05$

When Table 1 is examined, findings manifested that students' total scores of both pretest ($\bar{X} = 154,36$) and posttest ($\bar{X} = 164,55$) were higher than the average score (120). It is also seen that regarding the sub-dimensions of the scale, both test results were higher than the means of sub-dimensions ($\bar{X} = 40,00$). These results demonstrated that the pre-service teachers' levels of teacher self-efficacy beliefs were satisfying for the whole scale as well as for the sub-dimensions.

When Table 1 is examined, it is also seen that there was a significant difference between the pretest and posttest scores of the pre-service teachers for the scale regarding their levels of teacher self-efficacy beliefs and that the difference was in favor of the posttest. ($t_{(84)} = 3,48, p < 0,05$). The findings also revealed a significant difference between the pretest and posttest scores of the participants for the sub-dimensions of the scale. Statistically significant differences were determined in favor of the posttest regarding the dimension of Student Engagement ($t_{(84)} = 3,44, p < 0,05$), the dimension of Instructional Strategies ($t_{(84)} = 2,16, p < 0,05$) and the dimension of Classroom management ($t_{(84)} = 2,46, p < 0,05$). These results pointed out that the course of Classroom Management, which is one of the courses of professional teaching knowledge, contributed to the development of the pre-service teachers' self-efficacy beliefs and that it led to positive changes in their beliefs.

The second concern of the study was related to whether pre-service teachers' pretest and posttest scores regarding their levels of teacher self-efficacy beliefs differed with respect to their gender. The independent t-test results are presented in Table 2.

Table 2.

Comparison of teacher self-efficacy beliefs levels of students' according to gender variable

Sub-Dimensions / Groups	Gender	n	\bar{x}	Sd	df	t	p
Whole Scale							
Pre-test	Female	47	153,91	15,06	83	,294	,769
	Male	38	154,92	16,41			
Post-test	Female	47	163,36	22,36	83	,591	,556
	Male	38	166,03	18,34			
Student Engagement							
Pre-test	Female	47	48,51	8,75	83	1,45	,150
	Male	38	51,16	7,81			
Post-test	Female	47	54,02	7,24	83	,22	,830
	Male	38	53,68	7,13			
Instructional Strategies							
Pre-test	Female	47	51,06	7,75	83	1,27	,209
	Male	38	53,42	9,41			
Post-test	Female	47	54,53	8,29	83	,51	,615
	Male	38	55,39	7,23			
Classroom Management							
Pre-test	Female	47	54,34	8,04	83	2,16	,033*
	Male	38	50,34	8,97			
Post-test	Female	47	54,81	8,23	83	1,27	,207
	Male	38	56,95	6,98			

$p < 0,05$

When Table 2 is examined, findings resulted that there was a difference between the female and male students' levels of self-efficacy beliefs before and after the application and that the difference was not significant, though [pretest= $t_{(83)} = .294, p > 0,05$ and posttest= $t_{(83)} = .591, p > 0,05$]. The findings revealed that there was a significant difference between the male and female students' levels of self-efficacy beliefs only in the sub-dimension of Classroom management with respect to the pretest results and that the difference was in favor of the female students (pretest= $t_{(83)} = 2.16, p < 0,05$).

The thirdly, the study investigated whether the pre-service teachers' pretest and posttest scores regarding their levels of teacher self-efficacy beliefs differed with respect to their academic achievement. Table 3 presents the results of the one-way analysis of variance applied.

When Table 3 is examined, it is seen that there was a difference between the self-efficacy beliefs of the participants with different averages of academic achievement (1,50–2,49 , 2,50–2,99 and 3,00-4,00) before and after the application and that the difference was not found significant as a result of the analysis of variance [pretest= $F_{(2-82)} = .056$, $p=.95$ and posttest =($F_{(2-82)} = .067$, $p=.94$]. This finding obtained for the whole teacher self-efficacy scale was also found for the sub-dimensions of the scale.

Table 3.

Comparison of teacher self-efficacy beliefs levels of students' according to their academic achievement

		<i>n</i>	\bar{x}	<i>Sd</i>		<i>Ss</i>	<i>Df</i>	<i>Ms</i>	<i>f</i>	<i>p</i>
Whole Scale										
Pre-test	1,50-2,50	27	153,70	16,05	Between Groups	27,82	2	13,91	0,06	0,95
	2,50-3,00	37	154,35	16,28	Within Groups	20391,87	82	248,68		
	3,00+	21	155,24	14,40	Total	20419,69	84			
Post-test	1,50-2,50	27	164,52	20,43	Between Groups	58,35	2	29,18	0,07	0,94
	2,50-3,00	37	165,32	21,57	Within Groups	35538,66	82	433,40		
	3,00+	21	163,24	19,92	Total	35597,01	84			
Student Engagement										
Pre-test	1,50-2,50	27	48,78	7,36	Between Groups	33,68	2	16,84	0,23	0,79
	2,50-3,00	37	50,05	8,95	Within Groups	5892,37	82	71,86		
	3,00+	21	50,24	8,95	Total	5926,05	84			
Post-test	1,50-2,50	27	53,59	6,97	Between Groups	3,73	2	1,87	0,04	0,97
	2,50-3,00	37	53,92	7,59	Within Groups	4287,85	82	52,29		
	3,00+	21	54,14	6,89	Total	4291,58	84			
Instructional Strategies										
Pre-test	1,50-2,50	27	53,81	7,82	Between Groups	157,40	2	78,70	1,08	0,35
	2,50-3,00	37	50,68	8,63	Within Groups	5997,42	82	73,14		
	3,00+	21	52,48	9,28	Total	6154,82	84			
Post-test	1,50-2,50	27	54,74	8,19	Between Groups	27,82	2	13,91	0,06	0,95
	2,50-3,00	37	55,41	7,64	Within Groups	20391,87	82	248,68		
	3,00+	21	54,29	7,91	Total	20419,69	84			
Classroom Management										
Pre-test	1,50-2,50	27	51,11	8,97	Between Groups	58,35	2	29,18	0,07	0,94
	2,50-3,00	37	53,62	9,08	Within Groups	35538,66	82	433,40		
	3,00+	21	52,52	7,51	Total	35597,01	84			
Post-test	1,50-2,50	27	56,19	7,34	Between Groups	33,68	2	16,84	0,23	0,79
	2,50-3,00	37	56,00	8,25	Within Groups	5892,37	82	71,86		
	3,00+	21	54,81	7,55	Total	5926,05	84			

$p<0.05$

The last concern of the study was related to whether the pretest and posttest scores of the pre-service teachers regarding their teacher self-efficacy beliefs differed depending on their department. The results of analysis of variance applied are presented in Table 4.

When the pretest and posttest scores of the pre-service teachers from three different departments of education presented in Table 4 is examined, it is seen that with respect to the whole scale, the scores of the teachers from the three departments increased and that the posttest scores of the students from the department of CEIT were higher than those of the students attending the other two departments ($\bar{X} = 166,83$). The results of the one-way analysis of variance revealed no significant difference in terms of their departments regarding the whole scale and all the sub-dimensions except for the pretest scores of the sub-dimension of Student Engagement. In addition,

the difference between the pre-service teachers' pretest scores regarding the sub-dimension of Student Engagement was found statistically significant [$F_{(2-82)} = 3.08, p = 0.05$]. According to the results of the Post-Hoc LSD test applied to determine what caused the difference, the difference was caused by the difference between the departments of Education of Religion and Ethics (ERE) and CEIT as well as between the departments of ERE and Science Education.

Table 4.

Comparison of teacher self-efficacy beliefs levels of students' according to their departments

		<i>n</i>	\bar{x}	<i>Sd</i>		<i>Ss</i>	<i>Df</i>	<i>Ms</i>	<i>f</i>	<i>p</i>
Whole Scale										
Pre-test	SE	24	151,50	17,89	Between Groups	280,09	2	140,04	0,57	0,57
	CEIT	29	155,17	16,52	Within Groups	20139,61	82	245,61		
	ERE	32	155,78	12,87	Total	20419,69	84			
Post-test	SE	24	162,50	23,10	Between Groups	259,91	2	129,95	0,30	0,74
	CEIT	29	166,83	19,40	Within Groups	35337,11	82	430,94		
	ERE	32	164,03	20,09	Total	35597,01	84			
Student Engagement										
Pre-test	SE	24	47,88	8,61	Between Groups	413,59	2	206,80	3,08	0,05
	CEIT	29	48,07	8,06	Within Groups	5512,46	82	67,23		*
	ERE	32	52,53	8,01	Total	5926,05	84			
Post-test	SE	24	52,71	8,00	Between Groups	87,95	2	43,97	0,86	0,43
	CEIT	29	53,45	7,03	Within Groups	4203,63	82	51,26		
	ERE	32	55,13	6,59	Total	4291,58	84			
Instructional Strategies										
Pre-test	SE	24	50,83	8,67	Between Groups	76,31	2	38,15	0,52	0,60
	CEIT	29	53,24	8,53	Within Groups	6078,52	82	74,13		
	ERE	32	52,06	8,64	Total	6154,82	84			
Post-test	SE	24	54,21	7,64	Between Groups	103,42	2	51,71	0,85	0,43
	CEIT	29	56,45	6,95	Within Groups	5007,01	82	61,06		
	ERE	32	54,06	8,63	Total	5110,42	84			
Classroom Management										
Pre-test	SE	24	52,79	8,78	Between Groups	110,73	2	55,37	0,74	0,48
	CEIT	29	53,86	9,30	Within Groups	6176,28	82	75,32		
	ERE	32	51,19	7,99	Total	6287,01	84			
Post-test	SE	24	55,58	8,53	Between Groups	67,38	2	33,69	0,56	0,58
	CEIT	29	56,93	7,92	Within Groups	4951,91	82	60,39		
	ERE	32	54,84	7,01	Total	5019,29	84			
	SE	24	52,79	8,78	Between Groups	110,73	2	55,37		

$p < 0.05$

Discussion and Conclusion

One of the basic requirements for becoming a qualified teacher is that pre-service teachers should successfully pass the courses of professional teaching knowledge in the process of their undergraduate education. Among these courses is the Classroom Management, which is an important course that pre-service teachers should take before teaching practice. In this course, which aims at helping students acquire the skills regarding how to achieve classroom management effectively and productively, the basic purpose is to increase and develop the teachers' self-efficacy beliefs. Teacher self-efficacy beliefs both influence classroom management skills and are considerably influenced by classroom management skills (Ekici, 2008). In studies conducted, it was emphasized that teacher self-efficacies are in relationship with teachers' approaches and skills regarding classroom management (Cerit, 2011; Savran & Çakıroğlu, 2003; Woolfolk & Hoy, 1990;

Ekici, 2008). Therefore, investigating the influence of the course of classroom management - which aims at helping students gain effective classroom management skills – on pre-service teachers' levels of teacher self-efficacy beliefs is thought to lead to important contributions to the field.

The findings of the study indicated that there was an average of 10-point difference between the pretest scores and posttest scores of the participants regarding the whole teacher self-efficacy scale and its sub-dimensions and that the difference was significant in favor of the post-test. Depending on this result, it could be stated that the course of classroom management was influential on the levels of teacher self-efficacy beliefs. In one study conducted by Ekici (2008) with pre-service teachers from the department of Electronics and Computer, similar results were found. On the other hand, this result was not consistent with the results of another study carried out by Cerit (2011). Overall, participants' self-confidence as reflected by teacher self-efficacy scores, increased over the course of a semester. Due to the fact that classroom management courses are designed to teach students about classroom management and to increase their teacher self-efficacy, and due to the students' maturation this gain cannot be seen as a surprising result. However, it helps us to make some implications for the course itself. This finding suggests that teacher training programs can expect that students' participating classroom management courses will significantly increase teacher self-efficacy over the course of the semester.

Another finding obtained in this study manifested that teacher self-efficacy beliefs of participants differed significantly with respect to their gender. When related literature is reviewed, it is seen that this finding is in complete agreement with the earlier findings (Britner & Pajares, 2006; Celep, 2000; Ekici, 2005; Yaman, Koray & Altunçekiç, 2004). These studies reported that gender made a significant difference in teacher self-efficacy belief. However, the current study does not support some previous researches in this area. Previous researches conducted by Akbaş and Çelikkaleli (2006), Arsal (2006), Cerit (2011), Çakıroğlu, Çakıroğlu, and Bone (2005), Çimen (2007), Ekici (2008), Özçelik and Kurt, (2007), and Tschannen-Moran and Woolfolk-Hoy (2001) found that teacher self-efficacy beliefs did not differ significantly in terms of gender.

The study revealed that there was no statistically significant difference between the pre-service teachers' teacher self-efficacy beliefs with respect to their overall academic achievement scores. This finding was similar to the results of other studies carried out by Alabay (2006), Cerit (2011), Ekici (2008) and Yaman et al., (2004). In these studies as one of the main independent variables, students' academic achievement made no difference in self-efficacy beliefs. On the other hand, in their study, Hampton & Mason, (2003) and Zajacova, Lynche & Espenshade (2005) found out that self-efficacy beliefs differed with respect to academic achievement. In these studies, it was revealed that there was a positive relationship between academic achievement and self-efficacy beliefs.

In addition, findings indicated that pre-service teachers' teacher self-efficacy beliefs did not differ significantly with respect to their department of education considering the whole scale. This finding was consistent with the results of other studies conducted by Yaman et al., (2004) and Alabay (2006). On the other hand, this finding differed from the findings obtained in another study carried out by Demirtaş et al. (2011) who reported that there was a significant difference between the self-efficacy beliefs of pre-service teachers from the department of Science Education and those of pre-service teachers from the department of CEIT. Unrau and Ann (2004) indicated that students' from Speech-language pathology programme made greater gain in self-confidence than students in Social-work programme. However, it was also revealed in the study that pre-service teachers from mathematical departments had higher levels of self-efficacy beliefs than those from non-mathematical departments did (Demirtaş et al. (2011). In the present study, the pre-service teachers attending the department of Education of Religion and Ethics – a non-mathematical department – had higher levels of self-efficacy beliefs than those attending the other two departments.

Consequently, it was found out that the course of classroom management had positive influence on pre-service teachers' self-efficacy beliefs and their self-efficacy beliefs were significantly changed with respect to their gender but not with their academic achievement and department of education. Thus, it was seen that the course of classroom management focusing on the skills regarding the management of all the variables in class had great influence on pre-service teachers' beliefs regarding such skills as effective use of instructional strategies, undertaking the class control and using the time productively and their self-efficacy beliefs. Woolfolk and Hoy (1990) pointed out that teachers with a high level of self-efficacy beliefs/perceptions can demonstrate a more flexible, student-centered and positive management methods in coping with problematic behavior of students, achieving the discipline in class and managing the class and time. In this respect, it is important to support and increase especially the self-efficacy beliefs of teachers so that they can develop self-confidence. Therefore, it is necessary to investigate the self-efficacy beliefs of pre-service teachers regarding not only the course of classroom management but also all other courses and to take the necessary precautions. In addition, future research could focus on the factors influencing pre-service teachers' self-efficacy beliefs with respect to different variables.

References

- Akbaş, A. & Çelikkaleli, Ö.(2006).The Investigation of the preservice elementary teachers' science instruction self-efficacy beliefs according to their gender, type of education, and universities *Mersin University Journal of the Faculty of Education*, 2(1), 98-110.
- Alabay, E. (2006). İlköğretim okulöncesi öğretmen adaylarının fen ile ilgili öz-yeterlik inanç düzeylerinin incelenmesi. *Yeditepe Üniversitesi Eğitim Fakültesi Dergisi*, 2(1).
- Arsal, Z. (2006). *Self-efficacy beliefs of pre-service teachers on using a computer in teaching*. Paper Presented at the annual meeting of the 6th International Educational Technologies Conference, Cyprus.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1997). *Self-efficacy. The exercise of control*. New York: W.H. Freeman.
- Barbee, P. W., Scherer, D., & Combs, D. C. (2003). Prepracticum service-learning: Examining the relationship with counselor self-efficacy and anxiety. *Counselor Education and Supervision*, 43, 108-119.
- Betoret, F.D. (2009). Self-efficacy, school resources, job stressors ad burnout among Spanish primary and secondary school teachers: A structural equation approach. *Educational Psychology*, 29, 45-68
- Britner, S. L. & Pajares, F. (2006). Sources of science self-efficacy beliefs of middle school students. *Journal of Research in Science Teaching*, 43(5), 485-499.
- Celep, C. (2000). The correlation of the factors: The prospective teachers' sense of efficacy, belief and attitudes about student control. *National Forum of Educational Administration and Supervision Journal*. 17 (4), 99-112.
- Cerit, Y. (2011).The relationship between pre-service classroom teachers' self-efficacy beliefs and classroom management orientations *Buca Eğitim Fakültesi Dergisi* 30, 156-174
- Çapa, Y., Çakıroğlu, J. & Sarıkaya, H. (2005). The development and validation of a Turkish version of the teachers' sense of efficacy scale. *Education and Science*, 30 (137), 74-81.
- Çakıroğlu, J., Çakıroğlu, E. ve Bone, W. J. (2005). Pre-service teacher selfefficacy beliefs regarding science teaching: A comparison of pre-service teachers in Turkey and the USA. *Science Educator*, 14(1), 31-40.
- Çimen, S. (2007). *İlköğretim Öğretmenlerinin Tükenmişlik Yaşantıları ve Yeterlik Algıları*. Yayınlanmamış Yüksek Lisans Tezi, Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü, Kocaeli.
- Demirtaş, H., Cömert, M. & Özer, N. (2011). Pre-Service teachers' self-efficacy beliefs and attitudes towards profession, *Education and Science*, 36 (159), 96-111
- Denham, C.H. & Michael, J.J. (1981). Teacher sense of efficacy: A definition of the construct and a model for further research. *Educational Research Quarterly*, 6 (1), 39-61.
- Dinther, M. V., Dochy, F. & Segers, M. (2011).Factors affecting students' self-efficacy in higher education, *Educational Research Review*, 6(2), 95-108
- Ekici, G. (2008). The effects of the classroom management lesson on preservice teachers' teacher sense of self-efficacy, *Hacettepe University Journal of Education*, 35, 98-110

- Ekici, G. (2005). *Eğitim fakültesi öğrencilerinin öğretmenlik öz-yeterlik inançlarını etkileyen faktörler*. XIV. Ulusal Eğitim Bilimleri Kongresi, Pamukkale Üniversitesi Eğitim Fakültesi, Denizli.
- Hampton, N. Z. & Mason, E. (2003). Learning disabilities, gender, sources of efficacy, self-efficacy beliefs and academic achievement in high school students. *Journal of School Psychology, 41*(2), 101-112.
- Hazır Bıkmaz, F. (2004). Sınıf öğretmenlerinin fen öğretiminde öz yeterlilik inancı ölçeğinin geçerlik ve güvenirlik çalışması, *Milli Eğitim Dergisi*, 161
- Henson, R.K. (2002). From adolescent angst to adulthood: Substantive implications and measurement dilemmas in the development of teacher efficacy research. *Educational Psychologist, 37*, 137-150.
- Klassen, R. M., Tze, V. M. C., Betts, S. M., & Gordon, K. A. (2011). Teacher efficacy research 1998-2009: Signs of progress or unfulfilled promise?, *Educational Psychology Review, 23*:21-43
- Morris, D.B. & Usher, E. L. (2011). Developing teaching self-efficacy in research institutions: A study of award-winning professors, *Contemporary Educational Psychology, 36*(3), 232-245
- Özçelik, H. & Kurt, A. A. (2007). Primary School Teachers' Computer Self Efficacies: Sample of Balıkesir. *Elementary Education Online, 6* (3), 441-451.
- Savran, A. & Çakıroğlu, J. (2003). Differences between elementary and secondary preservice science teachers' perceived efficacy beliefs and their classroom management beliefs. *The Turkish Online Journal of Education Technology, 2*(4), 3.
- Stough, L.M. (2006). The place of classroom management and standards in teacher education. In C.M. Evertson & C.S. Weinstein (Eds.), *Handbook of classroom management: Research, practice and contemporary issues*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17* (7), 783-805.
- Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W.K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research, 68*, 202-248.
- Woolfolk Hoy, A., & Burke Spero, R. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education, 21*, 343-356.
- Woolfolk, A. E., Rosoff, B. & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching and Teacher Education, 6*(2): 137-148.
- 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.
- Yılmaz, C. (2011).Teachers' perceptions of self-efficacy, English proficiency, and instructional strategies, *Social Behavior and Personality, 39*(1), 91-100
- Zajacova, A., Lynche, S.M. & Espenshade,T.J. (2005).Self-efficacy, stress, and academic success in college. *Research in Higher Education, 46*(6), 677-706.
- Woolfolk, A. E. & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82* (1), 81-91.