

Pre- and In-service EFL Teachers' Sense of Efficacy and Teaching Concerns*

Hizmet Öncesi ve İçi İngilizce Öğretmenlerinin Özyeterlik Algıları ve Öğretmeye Yönelik Endişeleri

Demet Yaylı**

Fulden Ekizler***

ABSTRACT: This study examined pre- and in-service English as a foreign Language (EFL) teachers' sense of efficacy and teaching concerns and also the relationships within and between their concern and efficacy subscale scores. Two instruments, the Teachers' Sense of Efficacy Scale (TSES) and the Teaching Concerns Checklist (TCC), were used. First, while in-service EFL teachers were found to be more self-efficacious, pre-service EFL teachers were observed to have higher concern levels. Second, both pre- and in-service EFL teachers' sense of efficacy and teaching concern scores indicated a positively strong relationship within both concern and efficacy subscale scores. This relationship suggests that an increase or a decrease in one efficacy or concern subdimension affects the other efficacy or teaching concern subdimensions. Third, between TCC and TSES subscale scores, a negatively moderate correlation was observed for both groups of teachers, which suggests that high confidence in one's ability to teach is negatively correlated with teaching concerns.

Keywords: teachers' sense of efficacy, teaching concerns, pre-service teachers, in-service teachers, English as a foreign language (EFL)

ÖZ: Bu çalışma hizmet öncesi ve hizmet içi İngilizce öğretmenlerinin özyeterlik algılarını, öğretmeye yönelik endişelerini ve endişe ve özyeterlik ölçeklerinin alt boyutlarından elde edilen bulguların kendi içlerinde ve birbirleriyle olan ilişkilerini incelemiştir. Bu amaçla, Öğretmen Özyeterlik Ölçeği ve Öğretmeye Yönelik Endişeler Ölçeği kullanılmıştır. Öncelikle, hizmet içi İngilizce öğretmenlerinin özyeterlik algısı daha yüksek gözlenirken, hizmet öncesi İngilizce öğretmenlerinin ise endişe düzeyi daha yüksek olarak izlenmiştir. Ayrıca, hem hizmet öncesi hem de hizmet içi İngilizce öğretmenlerinden elde edilen özyeterlik ve endişe ölçeklerinin alt boyutlarında gözlenen bulgular kendi içinde karşılaştırıldığında olumlu yönde güçlü bir ilişki ortaya koymaktadır. Diğer bir deyişle, özyeterlik alt boyutlarından birinde gözlenecek bir artış başka bir alt boyutta da artışa neden olabilecektir. Son olarak, bu alt boyutlardan elde edilen bulgular endişe ve özyeterlik olarak birbirleriyle karşılaştırıldığında ise olumsuz yönde dengeli bir ilişki gözlenmiştir. Bu da öğretmenin özyeterlik algısının yüksek olmasının endişe düzeyinin düşük olmasını beraberinde getireceği şeklinde yorumlanabilir.

Anahtar sözcükler: öğretmen özyeterlik algısı, öğretmeye yönelik endişeler, hizmet öncesi öğretmenler, hizmetiçi öğretmenler, İngilizcenin yabancı dil olarak öğretilmesi

* This paper has been produced from the master's degree thesis of the second author.

** Assoc.Prof. Dr., Pamukkale University, Faculty of Education, Department of Foreign Languages Education, demetyayli@gmail.com

*** Lecturer, Pamukkale University, School of Foreign Languages, fezikler@pau.edu.tr

Introduction

Teachers’ sense of efficacy and their concerns about teaching are two important constructs that help illuminate an understanding of teaching profession. Delving into teachers’ perceptions and beliefs is crucial as teachers, heavily involved in various teaching and learning processes, are the practitioners of educational principles and theories. They have a primary role in determining what is needed or what would work best with their students. In our own efforts to understand the growing literature on teachers’ efficacy beliefs and teaching concerns, we should note that these two have been explored in a variety of very different ways. However, in terms of the relationship between teachers’ sense of efficacy and concern levels, the studies investigating the fundamental points about this relationship are scant. Thus, the purpose of this study is to investigate both efficacy and concern levels of two groups of English as a foreign Language (EFL) teachers (pre- and in-service teachers) and also the relationship within and between their efficacy and concern subscale scores.

Theoretical Framework

Teachers’ Sense of Efficacy

Teachers’ sense of efficacy is defined by Tschannen-Moran and Woolfolk Hoy and Hoy (1998) as “the teacher’s belief in his or her capability to organize and execute course of action required to successfully accomplish a specific teaching task in a particular context” (p.22). Effective action depends upon the personal judgment that one can mobilize such knowledge and skills to perform an act successfully under varied and unpredictable circumstances. This judgment, named as perceived self-efficacy by Bandura (1997) has been found to be directly related to many positive teacher behaviors and attitudes (Bandura, 1997; Tschannen-Moran, Woolfolk-Hoy & Hoy, 1998), their instructional practices and classroom behavior (Henson, 2001; Hollon, Anderson & Roth, 1991; Johnson, 1992) as well as to student achievement and attitudes (Armor, Conroy-Oseguera, Cox, King, McDonnell, Pascal, Pauly & Zellman, 1976; Ashton & Webb, 1986; Henson, 2001; Soodak & Podell, 1997).

Two strands of research are identified (Tschannen-Moran et al., 1998; Tschannen-Moran & Woolfolk-Hoy, 2001) and the first strand follows Rotter’s (1982) Social Learning Theory (SLT) of internal versus external control. Teachers who believe that they are efficient to teach difficult or unmotivated students are considered to have internal control. On the other hand, teachers who believe that the environment has more effect on student learning than their own teaching abilities are considered to have external control. The second strand is rooted in Bandura’s Social Cognitive Theory (SCT). Significant theory and research concerning teachers’ skills to effectively perform for successful educational outcomes have stemmed out of Bandura’s SCT (1986) and his construct of self-efficacy. Bandura’s SCT, which addresses both the development of competencies and the regulation of action, consists of three components: human agency (i.e., humans are seen to produce actions for given purposes under certain circumstances), outcome expectancy (i.e., an

individual's estimation of effort required for changes in behaviour or consequences of an action) and efficacy beliefs (i.e., beliefs in one's capabilities to organize and perform the courses of an action). Social relationships play an important role in self-efficacy beliefs, which are based on four different sources: (1) enactive mastery experiences (i.e., the perception that if a performance has been successful, it will raise efficacy beliefs and contribute to the expectation that performance will be proficient in the future), (2) vicarious experiences (i.e., social comparison or modelling the desired performance), (3) social persuasion (i.e., people who are persuaded verbally by others that they possess the skills to succeed in given tasks will make greater effort and sustain it than the ones who have doubts), and (4) physiological or emotional arousal (i.e., enhancing physical status, reducing stress levels and negative emotional motives and correcting misinterpretations of bodily states are some of the ways to promote self-efficacy) (Bandura, 1986; 1997).

Teaching Concerns

While the efficacy beliefs of teachers have a significant impact on both teachers and students as teachers perform activities and prompt students' motivation, performance and success (Tschannen-Moran & Woolfolk-Hoy, 2001), considerable importance is placed on teachers' concerns about teaching in different stages of teacher development (Boz & Boz, 2010). Fuller's (1969) model of concerns has been widely used in teacher education institutes as an illustration of different stages of teacher professional development. This model identifies three areas of concern as important constructs in teacher education: concerns about self, concerns about the teaching task, and concerns about the impact that teaching has on students' learning. These three areas are developmentally related. Fuller (1969) supports the view that as pre-service teachers move through their training, their concerns move from self to task, then finally to impact concerns. The first stage is self concern. Novice teachers want to be liked by students, to be accepted by their colleagues, and to be evaluated favorably by their supervisors. As the self concern is dealt with, teachers become more concerned about the task of teaching; having too many students, too few instructional materials, confusions about the priorities of actions and the teaching system. After both the self concern and task concern are resolved, teachers become concerned about the impact that teaching brings to student learning. Moving from one stage to the next stage is determined by the completion of previous stage(s).

Literature Review

Studies on Pre-service Teachers' Sense of Efficacy

The development of efficacy beliefs among pre-service teachers has created a lot of research interest, which is reflected in longitudinal studies (Atay, 2007; Courtad, 2009; Fortman & Pontius, 2000; Newman, Lenhart, Moss & Newman, 2000; Woolfolk-Hoy & Burke-Spero, 2005; Woolfolk-Hoy & Hoy, 1990). Besides, some other studies have focused on factors that contribute to efficacy judgements such as the relationship between the teacher efficacy of pre-service teachers and their instructional practices (Gerges, 2001), the factors which influence pre-service teachers' teaching efficacy (Poulou, 2007), the effect of exposure to various sources on the efficacy levels of pre-service teachers (Liaw, 2009).

Among the few studies conducted in Turkey, efficacy levels of pre-service elementary (Sarikaya, 2004) and EFL teachers (Incecay & Kesli-Dollar, 2012) were previously focused.

Studies on In-service Teachers' Sense of Efficacy

The ample research on in-service teachers' efficacy beliefs has also shown intriguing venues. There are some longitudinal studies with foci such as the correlation between teacher efficacy and student achievement (Moore & Esselman, 1994) and changes in efficacy in student teaching and in the first year of teaching (Woolfolk-Hoy 2000). Some other studies have investigated in-service teachers' efficacy in relation to different variables such as the relationship between teachers' sense of control over classroom practice and self efficacy (Lee, Dedrick & Smith, 1991), the relationship between teachers' assessment of key resources and supports and their efficacy judgments (Tschannen-Moran & Woolfolk-Hoy, 2002), personal teaching efficacy and educational level (Campbell, 1996), teacher efficacy and attitudes toward innovative teaching (Ghaith & Yaghi, 1997), pre-service and beginning teachers' perceptions of their preparedness to teach (Moore-Hayes, 2008), the effects of having mentor teachers on efficacy beliefs (Yost, 2002), beginning teachers' efficacy beliefs and demographic variables as gender, race, and types of teacher preparation program (Murshidi, Konting, Elas, & Fooi, 2006), and teachers' self efficacy and gender, age, professional qualification and school status (Shaukat & Iqbal, 2012). In Turkey, Yavuz (2005) investigated EFL teachers' efficacy perceptions and socio-demographic and institutional factors to find that these teachers viewed themselves as highly efficacious. In another study, Ortactepe (2006) found no significant relationship between Turkish EFL teachers' efficacy level and their self-reported practice of Communicative Language Teaching (CLT).

Studies on Pre-service Teachers' Teaching Concerns

Teacher Concern Checklist (TCC) developed by Borich (1992) has been commonly used to measure pre- service teachers' teaching concerns in several studies (McVey, 2004; O'Connor & Taylor, 1992; Smith & Sanche, 1992, 1993; Swennen, Jörg & Korthagen, 2004) and in comparisons of pre- and in-service teachers' concerns (Hall & Symanoskie, 2003). In one of the few studies conducted in Turkey, Boz (2008) examined the teaching concerns of student teachers and found that student teachers held more task-related concerns than self- and impact-related concerns. In another study conducted by Yayli and Hasirci (2009), the fourth year Turkish language pre-service teachers showed higher levels of self, task, impact concerns of teaching than the first year ones.

Studies on In-service Teachers' Teaching Concerns

Based on Fuller's concern constructs, the levels and development of in-service teachers' concerns have also been investigated in some longitudinal studies to reveal developmental changes (Grossman & Thompson, 2004; Pigge & Marso, 1997). In another study of teachers' concerns, Chan (2004) analyzed a group of in-service teachers' motives, perceptions and concerns about teaching in Hong Kong and the results revealed a higher proportion of concern for pupils than concern with self.

Studies on the Relationship between Teachers' Sense of Efficacy and Teaching Concerns

Some other studies have analyzed the relationship between efficacy and concern levels, two important constructs affecting teaching career. In a study closer to the scope of the present study, Ghaith and Shabaan (1999) for instance investigated the relationship between efficacy and concern levels of a group of teachers, and the correlation analysis showed that teachers with high personal efficacy beliefs tended to be less concerned. In an unpublished doctoral dissertation, Liu (2008) compared pre-service and first-year teachers in terms of teachers' perceptions of preparation program quality, efficacy beliefs, and concerns about teaching. The results indicated pre-service teachers with higher efficacy and concern whereas the ratings for quality were similar in both groups of teachers.

In Turkey, Kafkas et al. (2010) compared pre-service Physical Education teachers' self-efficacy beliefs and professional concern levels to find a moderate level of correlation between the two. Similarly, Boz and Boz (2010) examined the relationship between pre-service teachers' concerns about their teaching and their sense of efficacy. Canonical correlation analysis revealed that concern subscale scores were negatively correlated with efficacy subscale scores. This means that if teachers believed their efficacy was weak, they tended to have more concerns about teaching. Boz and Boz (2010) aptly point out that although "it is important to explore the link between prospective teachers' sense of efficacy and their practice, ... theoretical exploration of correlations among efficacy and concern is also important" (p. 289). Therefore, as a future study, they "recommend research that examines in-service teachers' concerns as well as the relationship of these concerns to their sense of efficacy (p. 289-290). Keeping this caveat in mind, the researchers of the present study aimed to investigate two groups of EFL teachers' (181 pre-service and 111 in-service teachers) sense of efficacy and teaching concerns and also how these pre- and in-service teachers' sense of efficacy in terms of classroom management, instructional strategies and student engagement subscales were related to their concerns about teaching in terms of task, self, and impact subscales.

For this purpose, the following research questions were addressed:

1. Is there a significant difference between pre- and in-service EFL teachers' beliefs about their sense of efficacy in terms of student engagement, instructional strategies and classroom management subscales?
2. Is there a significant difference between pre- and in-service EFL teachers' teaching concerns in terms of self, task, and impact subscales?

3. What is the relationship within and between their efficacy and concern subscale scores?

Methodology

Participants

The data were collected from 292 participants, pre- and in-service EFL teachers, in total. The pre-service teachers were 181 students studying in an English Language Teaching (ELT) program in a state university, and 111 volunteering in-service EFL teachers were among the ones working in state primary and high schools and a school of foreign languages (SFL) at a state university in Turkey. The reason why the participating in-service teachers included were from these three institutions was that the ELT graduates are supposed to work in these three types of institutions. The pre-service and in-service EFL teachers' demographic background is presented in Table 1 and Table 2, respectively.

Table 1.	109	60.2
Grade Level		
1st	71	39.3
2nd	43	23.7
3rd	39	21.5
4th	28	15.5
Statistics of pre-service EFL teachers' demographic background		
Gender	N	%
Male	72	39.8

As seen in Table 1, the number of students in 4th grade level who participated in the study was less than that of other grade levels. It was because the 4th graders were supposed to take Practicum courses and practice teaching in assigned schools out of the university so many of them could not be reached. Also, as seen in Table 2, the number of in-service EFL teachers from primary education institutions was less than that of other groups. It stemmed from the fact that English classes started at fourth grade so there were not many teachers employed at this level.

Table 2. Statistics of in-service EFL teachers' demographic background

Gender	N	%
Male	42	37.8
Female	69	62.2
Institution		
Primary	22	24.4
Secondary education	40	44.4
Tertiary education	7	7.8
Teaching experience		
1-5 years	33	29.7
6-10 years	48	43.3
More than 10 years	30	27

Data Collection Instruments

The instruments used in the present study were chosen after a perusal of the relevant literature on teacher education, English language teaching, teachers' sense of efficacy and teaching concerns and the two instruments, TSES and TCC, were agreed upon to collect data. Also, initially a background part to gain demographic information about the pre- and in-service EFL teachers was attached to the questionnaire sets.

Teachers' sense of efficacy scale (TSES)

The first instrument was the Teachers' Sense of Efficacy Scale (TSES) which was developed by Tschannen-Moran and Woolfolk-Hoy (2001) and translated and adapted into Turkish by Capa, Cakiroglu, and Sarikaya (2005). It aimed to measure pre- and in-service teachers' sense of efficacy and provides three subscale scores for: (1) efficacy in student engagement, (2) efficacy in instructional practices and (3) efficacy in classroom management. This instrument contains 24 items in a nine-point scale anchored with these notations: (1)nothing, (3)very little, (5)some influence, (7)quite a bit and (9)a great deal. The factor analysis confirmed the instrument's three factors. Reliability was found to be 0.95 overall and 0.82 for student engagement, 0.90 for instructional strategies and 0.89 for classroom management. In the scale, the values varied between 25 and 225, and an increase in the measures presents an increase in the teachers' sense of efficacy levels.

Teaching concerns checklist (TCC)

The second instrument used was the TCC developed by Borich (1992) and adapted into Turkish by Boz (2008). This checklist measures teaching concerns organised in terms of self, task and impact. It contains 45 items, 15 for each type of concern, in a five-point Likert scale: (1) not concerned, (2) a little concerned, (3) moderately concerned, (4) very concerned, and (5) completely preoccupied. Cronbach alpha values were 0.94 for the overall scale and 0.89 for self-, 0.81 for task- and 0.91 for impact-related items (Boz, 2008). In the scale, the scores varied between 45 and 225, and an increase in the values demonstrates an increase in teaching concern levels.

Data Analysis

In the data analysis of the present study, t-test was used to see whether the independent groups of pre- and in-service EFL teachers' sense of efficacy and teaching concerns in each subscale were significantly different or not. Also, Pearson product-moment correlation coefficient was conducted for the multivariable correlation analyses to measure whether the correlation between the scores of the efficacy and concern subscales was positively or negatively positioned (Harris, 1995; Gravetter & Wallnau, 1996).

Findings and Discussion

The descriptive statistics of independent t-tests and Pearson product-moment correlation coefficient on the quantitative data gathered by TSES and TCC aimed to gain insight to pre- and in-service EFL teacher's sense of efficacy and teaching concerns and

the also the relationship within and between their efficacy and concern subscale scores. In line with the research questions, the research findings were presented and discussed in three parts.

TSES Scores

Student engagement of TSES

Table 3. Means and Standard Deviations of Pre- and In-service EFL Teachers' Sense of Efficacy Related to Student Engagement

	N	Mean	Standard Deviation	Sd	T	p*
Pre-service	181	6.549	1.024	290	-2.862	.005
In-service	111	6.899	.999			

p<0.05

Descriptive statistics revealed that the mean scores of in-service EFL teachers ($\bar{X}_{In.} = 6.899$) was significantly higher than the mean scores of pre-service EFL teachers ($\bar{X}_{Pre.} = 6.549$). The difference was also recognized in the $[t(290) = -2.862, p < .05]$ value of pre-service EFL teachers. There seemed to be a discrepancy between these findings and those obtained in some previous studies. In the present study, pre-service teachers' sense of efficacy in student engagement was lower than those in the other two subscales, but in Poulou's (2007) study, Greek pre-service teachers had higher scores in student engagement efficacy than in instructional strategies and classroom management subscales. Similarly, in Liaw's study (2009), pre-service teachers at a private university in Taiwan showed higher efficacy to motivate students. In terms of the three subscales, opposite the findings of Poulou (2007), in Murshidi et al.'s study (2006), in-service teachers scored the lowest mean score in student engagement. In the present study, also in-service and pre-service teachers got the lowest score in student engagement. This suggest that the participating teachers in this study judged their abilities to motivate students or to provide students with positive attitudes towards English at a low level. Pre-service teachers' lower efficacy levels in student engagement suggests that they feel less confident in influencing student learning compared to in-service teachers and this might be attributed to that most of them did not yet have experience in student teaching at schools. They did not get modelling from their cooperating teachers or encouragement by their mentors so "the chance to observe others teaching and the encouragement of other group members" (Liaw, 2009, p. 179) were lacking as the most valuable and practical skill to be gained to become more aware of the central role students play in any teaching.

Instructional strategies of TSES

Table 4. Means and Standard Deviations of Pre- and In-service EFL Teachers' Sense of Efficacy Related to Instructional Strategies

	N	Mean	Standard Deviation	Sd	T	p*
Pre-service	181	6.879	1.087	290	-4.480	.000
In-service	111	7.417	.823			

p<0.05

As Table 4 above presents, descriptive statistics revealed a significant mean difference between the values of pre and in-service EFL teachers concerning their sense of efficacy in instructional strategies. Independent t-test was conducted and the mean scores of in-service EFL teachers ($\bar{X}_{In.}= 7.417$) was observed to be significantly higher than the mean scores of pre-service EFL teachers ($\bar{X}_{Pre}=6.879$). The difference was also recognized in the $[t(290)= -4.480, p<.05]$ value of pre-service EFL teachers. In terms of variation in instruction, Gerges (2001) found no statistically significant relationship between pre-service teachers' efficacy beliefs and the degree of instructional variation. In terms of applying innovative methods, Ghaith and Yaghi (1997) stated that highly efficacious in-service teachers were more open to innovative methods and had greater interest and tolerance in accepting and applying new methods than less efficacious in-service teachers. Most of the pre-service teachers in the present study did not have practicum experience yet thus in terms of applying innovative methods they judged themselves in a similar way with the less efficacious in-service sample of this previous study. In Atay's study (2007), pre-service teachers' efficacy for instructional strategies decreased at the end of practicum, but the ones who were satisfied with their cooperating teachers still had high efficacy scores. Therefore, the pre-service teachers in this study might have higher efficacy levels in instructional strategies as well as the other two subscales in the future if they are provided with "extensive and specific verbal feedback, especially related to their instructional practices" (Atay, 2007, p. , 215) from their cooperating teachers who are viewed as models of good practice.

Classroom management of TSES

Table 5. Means and Standard Deviations of Pre- and In-service EFL Teachers' Sense of Efficacy Related to Classroom Management

	N	Mean	Standard Deviation	Sd	T	p*
Pre-service	181	6.715	1.123	290	-5.076	.000
In-service	111	7.365	.951			

p<0.05

As can be seen from Table 5, according to the independent t-test results, the mean scores of in-service EFL teachers ($\bar{X}_{In.}= 7.365$) was significantly higher than the mean scores of pre-service EFL teachers ($\bar{X}_{Pre}=6.715$) in the subdimension of classroom management. The difference was also recognized in the $[t(290)= -5.076, p<.05]$ value of pre-service EFL teachers. In Poulou's (2007) study, pre-service teachers had the highest score for sense of efficacy in student engagement and had the same scores for classroom management and instructional strategies. In the present study also the participating pre-service teachers scored similarly in the sense of efficacy for classroom management and instructional strategies, while had the lowest scores for student engagement. With regard to classroom management subscale, Lee et al. (1991) emphasized that the more student disorder was controlled, the more efficacious teachers felt so student disorder was found to be negatively correlated with teacher efficacy. In line with this, Shaukat and Iqbal (2012) warned that more qualified teachers managed their classrooms better than less qualified

teachers as professional quality is to be taken a significant variable that contributes to feeling competent in teaching.

Although Moore-Hayes' study (2008) revealed no statistically significant difference between pre- and in-service teachers' perceptions of preparedness to teach concerning classroom management subscale, the in-service teachers' sense of efficacy in classroom management in this study was higher than that of pre-service teachers. The reason behind the higher mean scores of in-service teachers in all three subscales of sense of efficacy might be related to the experience of in-service teachers in real classroom atmospheres. Since pre-service teachers' classroom management efficacy and their readiness to manage challenging classroom behaviors are related (Incecay & Kesli-Dollar, 2012), this calls for more modelling and professional help for pre-service teachers by mentors (Yost, 2002) and by cooperating teachers with a potential of good modelling.

Sum of TSES scores

Table 6. Sum of Mean and Standard Deviations for Pre- and In-service EFL Teachers' Sense of Efficacy

	N	Mean	Standard Deviation	Sd	T	p*
Pre-service	181	6.714	1.019	290	-4.419	.000
In-service	111	7.227	.860			

p<0.05

A significant mean difference between the sum scores of pre- and in-service EFL teachers regarding their sense of efficacy was obtained. Independent t-test was conducted and the mean scores of in-service EFL teachers ($\bar{X}_{In}=7.227$) was seen to be higher than the mean scores of pre-service EFL teachers ($\bar{X}_{Pre}=6.714$). The difference was also recognized in the [t(290)= -4.419, p<.05] value of pre-service EFL teachers. In the present study, in-service EFL teachers were found to have a higher sense of efficacy than pre-service EFL teachers in relation to all three subdimensions and the two groups had the same order of ratings with the instructional strategies the highest and students engagement the lowest. Campbell's study (1996), carried out with 140 Scottish and American pre- and in-service teachers, revealed that in-service teachers were more efficacious than pre-service teachers. The reasons for this significant difference were explained by demographic variables such as age, status and years of teaching experience. Also, in Yavuz's study (2005), EFL teachers working in different SFLs at both state and private universities in Istanbul were observed to perceive themselves as highly efficacious and specifically more efficacious in classroom management and instructional strategies than student engagement. Yavuz (2005) claimed that cooperative and respectful student profile and encouragement of innovation at universities caused these variations on the efficacy perceptions of EFL teachers. Since 46 participants of the present study (41.4 %) were employed at a SFL at a university, similar reasons might be given for the high levels of efficacy in these subdimensions. Also two third of the participating teachers had 6 or more years of teaching experience in the present study, which also signals a contributing factor to efficacy beliefs with a sounder frame of pedagogical decision making and transformation.

In Atay 's study (2007), at the end of the student teaching period, pre-service teachers efficacy scores for instructional strategies decreased whereas the classroom management and student engagement efficacy scores increased. In their study, Woolfolk-Hoy and Hoy (1990) revealed that pre-service teachers in preparation program had higher levels of efficacy with decreasing levels during teaching. Likewise, Woolfolk-Hoy and Burke-Spero's longitudinal study (2005) revealed rising levels of efficacy during preparation for teaching and these efficacy levels declined with the actual experience as a teacher. In Liu's study (2008), pre-service teachers had higher scores for efficacy beliefs than in-service teachers. All these are in contrast with the findings of present study in which in-service EFL teachers' sense of efficacy was found to be higher than that of pre-service EFL teachers. This may have stemmed from the fact that two third of the participating in-service teachers in this study had more than six years of teaching experience so they can not be called as novice teachers who have more potential to suffer from low efficacy levels and whose optimism can be easily tarnished when confronted with the realities and complexities of teaching tasks (Woolfolk-Hoy & Burke-Spero, 2005).

One reason for the higher levels of sense of efficacy in in-service EFL teachers in terms of three subdimensions might be attributed to the practice of real teaching many pre-service teachers lack. In Sarikaya's study (2004) also pre-service teachers were observed to have moderate levels of efficacy regarding science teaching. Similarly, Courtad's study (2009) indicated that TSES scores of pre-service teachers increased over time. Thus, a word of caution is due here. Pre-service teachers' sense of efficacy can be increased through professional development as it has been frequently put forward in literature. Teacher preparation programs should provide pre-service teachers with more opportunities for instructing and managing learners in real contexts (Tschannen-Moran et al., 1998). In Turkish universities, these opportunities are provided only in the two of the fourth year courses; School Experience (fall semester) and Teaching Experience (spring semester). In School experience, students are assigned to secondary or high schools for four hours a week to mostly observe coordinator teachers and "get an idea about the teaching profession and the scholastic environment" (Boz, 2008, p. 370). In Teaching Experience, they spend six hours a week in their assigned schools to gain teaching experience. Therefore, lower levels of efficacy for this group of pre-service EFL teachers can be associated with the ineffectiveness of or the limited time allowed for such practical courses. Another reason for the low efficacy of the participating pre-service teachers could stem from the fact that only 15.5 % of the pre-service teachers were fourth year students and the rest were first, second and third year students who had not started their practicum experience yet (see Table 1).

TCC Scores

Self-related concerns

Table 7. Means and Standard Deviations of Pre- and In-service EFL Teachers' Self-related Teaching Concerns

N	Mean	Standard Deviation	Sd	T	p*
---	------	--------------------	----	---	----

Pre-service	181	2.265	.804	261.07	7.20	.000
In-service	111	1.631	.683			

p<0.05

With an independent t-test, the mean scores of pre-service EFL teachers ($\bar{X}_{Pre}=2.265$) was found to be significantly higher than the mean scores of in-service EFL teachers ($\bar{X}_{In.}=1.631$) in the subdimension of self-related teaching concerns. The difference was also recognized in the [t(261.07)= 7.20, p<.05] value of pre-service EFL teachers. Among the subdimensions of teaching concerns self-related concerns caused the least concern for in-service teachers and formed the second biggest source of concern for pre-service teachers after task-related concerns. The present study does not confirm the findings of Hall and Symanoskie's study (2003), in which a group of pre-service teachers in the University of Georgia, US had significantly higher self concerns scores whereas in-service teachers had higher task concerns scores. However, similar to the present findings, in Boz's study (2008), student teachers held more task-related concerns but had the fewest self-related concerns. In sum, consistent with Fuller's model (1969) and Pigge and Marso's longitudinal study (1997), self-related concerns lose power and influence in years, which means that task and impact-related concerns start to play a bigger and more permanent role.

Task-related concerns

Table 8. Means and Standard Deviations of Pre- and In-service EFL Teachers' Task-related Teaching Concerns

	N	Mean	Standard Deviation	Sd	T	p*
Pre-service	181	2.342	.599	290	6.429	.000
In-service	111	1.869	.628			

p<0.05

Descriptive statistics revealed a significant mean difference between the measures of pre- and in-service EFL teachers in the subscale of task-related teaching concern. Independent t-test was conducted to find that mean score of pre-service EFL teachers ($\bar{X}_{Pre}=2.342$) was significantly higher than that of in-service EFL teachers ($\bar{X}_{In.}=1.869$). This difference was also recognized in the [t(290)= 6.429, p<.05] value of pre-service EFL teachers. Of the three subdimensions, in-service teachers in this study had the highest mean score for task related teaching concerns. In line with Fuller's model (1969), this lends support to previous research in which in-service teachers' task concerns are observed to be higher than their self concerns (e.g. Kazelskis & Reeves, 1987) or than their impact concerns (Chan, 2004). Also consistent with Fuller's model, this corroborates the concern development of the longitudinal sample of in-service teachers in Pigge and Marso's study (1997) in which concerns about survival as a teacher (self-concern) were observed to decrease while their concerns about task increased in years.

Pre-service teachers' higher task concern scores than self and impact concerns scores corroborate the findings of Boz (2008). In her study also pre-service teachers were

observed to hold more task-related concerns but fewer self-related concerns. Boz gives “[h]aving too many students in a class, lack of public support for schools, the large number of administrative interruptions, the inflexibility of the curriculum and the rigid instructional outline” (p. 374) as the reasons for the high task-related concern scores as classes in Turkey are highly crowded and teachers must work with enormous numbers of students. While these reasons are highly valid for the high task-related concerns of inservice-teachers who are engaged in real teaching, pre-service teachers’ high task-related concerns in this study may also be depending on and reflecting the actualities in Turkish teaching/learning contexts.

Impact-related concerns

Table 9. Means and Standard Deviations of Pre- and In-service EFL Teachers’ Impact-related Teaching Concerns

	N	Mean	Standart Deviation	Sd	T	p*
Pre-service	181	2.263	.829	290	4.660	.000
In-service	111	1.819	.722			

p<0.05

As Table 9 above presents, descriptive statistics revealed a significant mean difference between the measures of pre- and in-service EFL teachers in the subscale of impact-related teaching concern. As a result of the independent t-test analysis, the mean score of pre-service EFL teachers ($\bar{X}_{Pre}=2.263$) was found to be significantly higher than the mean score of in-service EFL teachers ($\bar{X}_{In.}=1.819$), which was also recognized in the [t(290)= 4.660, p<.05] value of pre-service EFL teachers. In-service teachers in this study had the highest mean scores for the task-related concerns that was followed by impact- and self-related concerns. This is in line with the results obtained in Chan’s (2004) study in which in-service teachers showed a higher proportion of concern for pupils than concern with self. Although pupils (i.e., impact related concerns) are believed to play a central role from the very beginning of the professional development of the student teachers (Smith & Sanche, 1992; 1993), the pre-service teachers in this study had the highest mean scores for the task-related concerns that was followed by self- and impact-related concerns. The finding that pre-service-teachers in this study expressed more task-related concerns runs counter to results of several studies in which student teachers were found to have more impact-related teaching concerns (O’Connor & Taylor 1992; Smith & Sanche 1992; Swennen, Jörg & Korthagen 2004).

In Yayli and Hasirci’s (2009) study, fourth grade Turkish language pre-service teachers showed stronger levels of self, task, impact concerns of teaching than the first grade Turkish language pre-service teachers. This might be useful to explain the reasons for pre-service teachers’ lowest impact-related concern level among the three subscales in the present study as most of them were first, second and third year students (85%) who did not have the practice of teaching which starts in the fourth year in all teacher education programs in state universities in Turkey. Therefore, the majority of the pre-service teachers

in the present study might not have developed the envision of students and the crucial roles of student motivation and learning in teaching yet.

Sum of TCC scores

Table 10. Sum of Mean and Standard Deviations of Pre- and In-service EFL Teachers' Teaching Concerns

	N	Mean	Standard Deviation	Sd	T	p*
Pre-service	181	2.290	181	290	6.598	.000
In-service	111	1.773	111			

p<0.05

As can be seen from Table 10 above, descriptive statistics revealed that there was a significant mean difference between the sum scores of pre- and in-service EFL teachers regarding the levels of teaching concerns. The mean scores of pre-service EFL teachers ($\bar{X}_{Pre.}= 2.290$) was found to be significantly higher than the mean scores of in-service EFL teachers ($\bar{X}_{In}=1.773$). The difference was also recognized in the $[t(290)= 6.598, p<.05]$ value of pre-service EFL teachers. The results of Pigge and Marso's longitudinal study (1997) identified increases in task concerns and decreases in self concerns, but no differences were identified in impact concerns for cross-sectional samples of teachers at different points in their pre-service preparation and in-service teaching. In other words, while the concerns about survival as a teacher (self-concern) were observed to decrease, the concerns about the task increased. Similarly, while in-service teachers in this study had the lowest scores in self concerns, pre-service teachers had the lowest scores in impact concerns. As teachers progress through career stages and experience the complexity of the classroom teaching-learning process, what is expected is an increase in concerns about the actual tasks of teaching and a decrease in concerns of their self survival as teachers (Fuller, 1969; Pigge & Marso, 1997). Such developmental changes in concerns through teaching career might also be interpreted to mean a decrease in total concern levels of in-service teachers in years and this might suggest an explanation for pre-service EFL teachers' the higher sum scores of teaching concerns than the ones of in-service EFL teachers in this study.

Correlational Analysis of TSES and TCC Subscale Scores

Table 11. Correlational Analysis of the Subscale Values of TSES and TCC for Pre- and In-service EFL Teachers

	SC	TC	IC	Sum of concerns differences	EFSE	EFIS	EFCM	Sum of efficacy differences
Self-related	1.00	0.65	0.80	0.92	-0.62	-0.66	-0.63	-0.68
Task-related	0.71	-	0.83	-0.45	-0.44	-0.46	-0.49	0.60
Impact-related	0.86	0.62	-	0.91	-0.65	-0.63	-0.63	-0.69
Sum scores of	0.95	0.83	0.93	-	-0.65	-0.66	-0.65	-0.70
Efficacy in student	-0.57	-0.46	-	-0.56	-	0.83	0.80	0.94
Efficacy in	-0.52	-0.42	-	-0.54	0.84	-	0.77	0.92
Efficacy in	-0.52	-0.43	-	-0.54	0.83	0.85	-	0.92
Sum scores of teacher efficacy	-0.57	-0.46	0.53	-0.58	0.94	0.95	0.95	-

(P<0.01)

In Table 11 above, the descriptive statistics in black give the correlations between the subscale values of teaching concern and sense of efficacy for pre-service EFL teachers (N=181). The descriptive statistics in bold give the correlations between the subscale values of teaching concern and sense of efficacy for in-service EFL teachers (N=111). In the correlational analysis of the data, SC, TC, IC were used for Self-related Concern, Task-related Concern and Impact-related Concern scores, respectively. Also, EFSE, EFIS and EFCM were used for Efficacy in Student Engagement, Efficacy in Instructional Strategies and Efficacy in Classroom Management scores, respectively.

Concerning the relationship within TCC scores of pre-service EFL teachers, Table 11 presents a significantly strong relationship between the scores of self- and task-related teaching concerns ($r=.71$, $p<.01$), a significantly strong relationship between the scores of self- and impact-related teaching concerns ($r=.86$, $p<.01$) and a moderate sense of relationship in terms of task- and impact-related concerns ($r=.62$, $p<.01$). It is indicated by these findings that there was an overall positively significant relationship between the subscale values of teaching concerns for pre-service group of EFL teachers; therefore, an decrease in one of the teaching concern subscale would mean a decrease in the other concern subscales.

In terms of the relationship within TSES scores of pre-service teachers, there was a significantly strong relationship between the scores of efficacy in instructional strategies and student engagement ($r=.84$, $p<.01$), between the scores of efficacy in student engagement and classroom management ($r=.83$, $p<.01$) and between the scores of efficacy in instructional strategies and classroom management ($r=.85$, $p<.01$). In sum, a positively strong relationship within the subscale scores of teaching efficacy was obtained. This relationship suggested that an increase in student engagement scores of pre-service teachers would, for instance, positively affect the other efficacy subscale scores because they were highly correlated with each other.

Related to the relationship between TCC and TSES scores, Table 11 shows that pre-service EFL teachers' scores reflected a negatively moderate relationship between their scores of self-related teaching concern and efficacy in terms of student engagement, instructional strategies and classroom management, respectively ($r=.57$, $r=.52$, $r=.52$, $p<.01$), a negatively moderate relationship between the scores of task-related teaching concern and efficacy with regard to student engagement, instructional strategies and classroom management, respectively with ($r=.46$, $r=.42$, $r=.43$, $p<.01$) and a negatively moderate relationship between the scores of impact-related teaching concern and efficacy in terms of student engagement, instructional strategies and classroom management, respectively with ($r=.49$, $r=.51$, $r=.50$, $p<.01$). These findings may provide certain implications for teacher education programmes. This negative correlation between TCC and TSES subscale values signifies the need to enhance pre-service teachers' sense of efficacy, and a possible way would be to address their concern levels as they were found to be negatively correlated with efficacy levels.

Concerning the relationship within TCC scores of in-service EFL teachers, Table 11 presents a moderate sense of relationship between self- and task-related teaching

concerns ($r=.65$, $p<.01$), a significantly strong correlation between self- and impact-related teaching concerns ($r=.80$, $p<.01$) and between task- and impact-related teaching concerns ($r=.83$, $p<.01$). It is implied by these findings that there was an overall positively significant relationship between the subscale scores of teaching concerns for this group of in-service EFL teachers. Indeed, the decrease in one of the teaching concern subscale value would reduce the other concern subscale values.

In terms of the relationship within TSES scores of in-service teachers, Table 11 reveals that the relationship between the efficacy in student engagement and instructional strategies was significantly strong with the score of ($r=.83$, $p<.01$). Similarly, the relationship between the efficacy in student engagement and classroom management was significantly strong with the score of ($r=.80$, $p<.01$). It was also found that there was a significantly strong relationship between the efficacy in instructional strategies and classroom management with the score of ($r=.77$, $p<.01$). In brief, the results of this group of in-service EFL teachers revealed a positively strong relationship within the subscale scores of teaching efficacy. This relationship suggests that an increase in one of the teaching efficacy subscale value for in-service teachers would, for instance, increase the other efficacy subscale values because they are highly correlated with each other.

In terms of the relationship between TCC and TSES scores, Table 11 indicates that in-service EFL teachers' scores reflected a negatively moderate relationship between efficacy in student engagement and self- and impact- related concerns, respectively with these scores ($r=.62$, $r=.65$, $p<.01$) while the relationship between efficacy in terms of student engagement and task-related teaching concern was negatively moderate with ($r=.44$, $p<.01$). The relationship between the efficacy in instructional strategies and concern subscale scores was relatively similar to the one between the efficacy in student engagement and concern subscale scores. The relationship between efficacy in instructional strategies and self- and impact-related concerns was negatively moderate, respectively with these scores ($r=.66$, $r=.63$, $p<.01$) while the relationship between efficacy in instructional strategies and task-related teaching concern was negatively moderate with ($r=.46$, $p<.01$). Moreover, it was found that the relationship between efficacy in classroom management and self-related concern was the same with the one between efficacy in classroom management and impact-related concern with a negatively moderate score ($r=.63$, $p<.01$). In-service EFL teachers' scores reflected a negatively moderate relationship between efficacy in classroom management and task- related concern with ($r=.49$, $p<.01$). In sum, these findings for in-service teachers were similar with the ones obtained for pre-service teachers. The higher the TSES subscale scores were, the lower the TCC subscale scores were because they were negatively correlated among one another.

In sum, a positively strong relationship was obtained within both pre- and in-service EFL teachers' sense of efficacy and teaching concern subscale scores. Also, there was a negatively moderate correlation between the subscale scores of TCC and TSES. While Kafkas et al.'s findings (2010) revealed a moderate level of correlation between self-efficacy and professional concern levels of pre-service teachers, Boz and Boz (2010) similarly found a negative correlation between concern and efficacy subscale scores. This means that if pre-service teachers believe their efficacy is weak, they tend to have more

concerns about teaching. The correlational analysis in Ghaith and Shabaan's study (1999) also revealed that teachers with high personal efficacy beliefs tended to be less concerned. These studies all suggest that high confidence in one's ability to teach is negatively correlated with teaching concerns.

Conclusion

The purpose of the present study was to explore both a group of pre- and in-service EFL teachers' sense of efficacy and their teaching concerns and also investigate the relationship within and between their concern and efficacy subscale scores. For the first research question, the findings revealed that in-service EFL teachers were more self-efficacious than their pre-service EFL counterparts' in student engagement, instructional strategies and classroom management subscales with a significant difference. The main reason for the in-service teachers' higher sense of efficacy might be related to their practice of teaching many pre-service teachers lacked. Concerning the second research question, the findings revealed that there was a significant mean difference between pre- and in-service EFL teachers in terms of the three subscales of teaching concerns (self, task and impact). To put it succinctly, pre-service EFL teachers were observed to have higher concern levels than their in-service EFL counterparts.

In relation to the third research question, the results of the study pointed out that there was a positively strong relationship within the subscale scores of TSES for both pre-service and in-service EFL teachers. For instance, the enhancement of pre-service teachers' efficacy in instructional strategies would increase their sense of efficacy in classroom management. Similarly, within the subscale scores of TCC for pre- and in-service EFL teachers, a positively significant relationship was found. Dealing with in-service teachers' task-related concerns would decrease their impact-related concerns. These relationships signal a need for the enhancement of sense of efficacy and an urge to deal with teaching concerns by focusing on each subdimension as highly related subdimensions. The findings also showed a moderately negative correlation between the TCC and TSES subscale scores. In other words, the higher the efficacy scores for pre- and in-service teachers were, the lower the concern scores were. Conversely, the higher the concern scores for pre- and in-service teachers were, the lower the efficacy scores were. A negative correlation between efficacy and concern subscale scores emphasizes the need for the enhancement of efficacy beliefs and the need to deal with teaching concerns.

Bandura (1997) supports the view that pre-service teachers should be given more opportunity to practice in real class environments so that self-efficacy beliefs could be enhanced. It is also commonly stated that pre-service teachers should be aware of their teaching beliefs before they begin teaching. Therefore, through the use of questionnaires and observation checklists, pre-service teachers may compare and monitor the changes in their beliefs after they start teaching in schools. Practicum courses at tertiary education through which teachers' senses of efficacy is developed should encourage pre-service teachers to apply different and innovative teaching methods in the classroom as mastery experiences are the most influential sources of self-efficacy beliefs (Bandura, 1997). While having teaching experience at assigned schools, pre-service teachers should be provided

with a great deal of cooperation and modelling by administration, mentors, and experienced in-service teachers because vicarious experiences and social persuasion are also among the sources of efficacy beliefs (Bandura, 1997) and also because guidance, support and advice given by mentors would contribute to their sense of efficacy (Yost, 2002; Woolfolk-Hoy & Burke-Spero, 2005). Similarly, in terms of support for in-service teachers, colleagues, parents, and administrators play an important role in enhancing teachers' overall sense of efficacy. School administration might provide opportunities for both experienced and novice in-service teachers to improve their teaching practice and apply the latest, innovative teaching methods and approaches in the classroom. Through in-service training which will enhance collaboration and professional development with further learning, teachers might renew their teaching styles and their attitudes towards students, colleagues and school administration, thereby they can have more successful and motivated students.

Teaching concerns should also be dealt with in effective ways as a decrease in teaching concerns means an increase in teachers' sense of efficacy. Particular beneficial will be greater knowledge of pre- and in-service teachers' concerns about teaching as teaching concerns and ways to cope with them influence the professional growth of teachers (O' Connor & Taylor, 1992). Effective field experiences and university courses are among the most influential ways to deal with teaching concerns (Boz & Boz, 2010). In schools, pre-service teachers should be given the opportunity to discuss their concerns with their mentors. Similarly, in-service teachers should be encouraged to share their experiences and concerns with their colleagues in workshops as a part of their in-service training. These colleagues and mentors should be supportive and offer advice on ways of dealing with teaching concerns. These needs call for research investigating teachers' concerns about teaching in different contexts other than mainstream ones as well.

To conclude, findings and implications of this study are to be viewed in the light of its limitations. First of all, the findings in the study are based on self-reported data, which implies certain built-in limitations. Secondly, this study gathered the data from a group of pre- and in-service teachers in the EFL context of Turkey; therefore, the results obtained can not be generalized to other settings. Thirdly, the study did not focus on which grade level pre-service teachers were and whether in-service teachers differed in terms of experience or work place. Such comparisons of teachers across grade levels, work places, subjects and teaching years would also bring about fruitful results. Also, longitudinal studies following teachers through their training and first years in teaching would produce richer and more instructive venues. Finally, the participants were administered two different quantitative questionnaires in this study; therefore, it lacks a qualitative dimension which could have enriched the interpretation of the quantitative data.

References

- Armor, D., Conroy-Oseguera, P., Cox M., King, N., McDonnell, L., Pascal, A. Pauly, E., & Zellman, G. (1976). Analysis of the school preferred reading programs in selected Los Angeles minority schools. (REPORT NO. R-2007-LAUDS). Santa Monica, CA: Rand Corporation. (ERIC Document Reproduction Service No. 130 243).

- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York: Longman.
- Atay, D. (2007). Beginning teacher efficacy and the practicum in an EFL context. *Teacher Development, 11*(2), 203-219.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice- Hall, Inc.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman and Company.
- Borich, G. D. (1992). Validation of the stages of concern questionnaire. *Routledge: Taylor & Francis Group, 14*(2), 43-48.
- Boz, Y. (2008). Turkish student teachers' concerns about teaching. *European Journal of Teacher Education, 31*(4), 367-77.
- Boz, Y., & Boz, N. (2010). The nature of the relationship between teaching concerns and sense of efficacy. *European Journal of Teacher Education, 33*(3), 279-291.
- Campbell, J. (1996). A comparison of teacher efficacy for pre- and in-service teachers in Scotland and America. *Education, 117* (1), 220-238.
- Capa, Y., Cakiroglu, J., & Sarikaya, H. (2005). The development and validation of a Turkish version of teachers' sense of efficacy scale. *Eğitim ve Bilim (Education and Science), 30*(137), 74-81.
- Chan, K. W. (2004). Teacher professional development: In-service teachers' motives, perceptions and concerns about teaching. *Hong Kong Teachers' Centre Journal, 3*, 57 - 71.
- Courtad, C. A. (2009). *Changes in knowledge about assistive technology of pre-service teachers*. Poster presented at the annual Council for exceptional conference, Seattle, WA.
- Fortman, C. K., & Pontius, R.W. (2000). Self-efficacy during student teaching. Paper presented at Midwest Educational Research Association. Chicago, IL. October 25-28, 2000.
- Fuller, F. F. (1969). Concerns of teachers: A developmental conceptualization. *American Education Research Journal, 6*, 207-226.
- Gerges, G. (2001). Factors influencing preservice teachers' variation in use of instructional methods: Why is teacher efficacy not a significant contributor. *Teacher Education Quarterly, 4*, 71-87.
- Ghaith, G., & Shaaban, K. (1999). The relationship between perceptions of teaching concerns, teacher efficacy, and selected teacher characteristics. *Teaching and Teacher Education, 15*, 487-496.
- Ghaith, G., & Yaghi, M. (1997). Relationships among experience, teacher efficacy attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education, 13*, 451-458.
- Gravetter, F. J., & Wallnau, L. B. (1996). *Statistics for the behavioral sciences*. New York: West Publishing Company.
- Grossman, P., & Thompson, C. (2004). District policy and beginning teachers: A lens on teacher learning. *Educational Evaluation and Policy Analysis, 26*(4), 281-301.
- Hall, H. C., & Symanoskie, J. E. (2003). Stages of concerns of preservice student, and inservice career and technical education teachers. Paper presentation at the annual meeting of the Association for Career and Technical Education, Orlando, FL.

- Harris, M. B. (1995). *Basic statistics for behavioral science research*. Needhamd Height, MA: Allyn & Bacon.
- Henson, R. K. (2001). The effects of participation in teacher research on teacher efficacy. *Teaching and Teacher Education, 17*(7), 819-836.
- Hollon, R. E., Anderson, C. W., & Roth, K. L. (1991). Science teachers' conceptions of teaching and learning. In J. Brophy (Ed.), *Advances in research on teaching* (pp. 145-185). Greenwich, CT: JAI Press.
- Incecay, G., & Kesli-Dollar, Y. (2012). Classroom management, self-efficacy and readiness of Turkish pre-service English teachers. *International Association of Research in Foreign Language Education and Applied Linguistics, 1*(3), 189-198.
- Johnson, K. E. (1992). The relationship between teachers' beliefs and practices during literacy instruction for non-native speakers of English. *Journal of Reading Behavior, 24*(1), 83-108.
- Kafkas, M., Acak, M., Coban, B., & Karademir, T. (2010). Investigation of the relationship between preservice physical education teachers' sense of self-efficacy and professional concerns. *Inonu University Journal of the Faculty of Education, 11*(2) 93-111.
- Kazelskis, R., & Reeves, C. K. (1987). Concern dimensions of pre-service teachers. *Educational Research Quarterly, 11*(4), 45-52.
- Lee, V. E., Dedrick, R. F., & Smith, J. B. (1991). The effect of the social organization of schools on teachers' efficacy and satisfaction. *Sociology of Education, 64*, 190- 208.
- Liaw, E. (2009). Teacher efficacy of pre-service teachers in Taiwan: The influence of classroom teaching and group discussions. *Teaching and Teacher Education, 25*, 176 180.
- Liu, J. (2008). *A comparison of teacher candidates and first-year teachers by gender an licensure level, in terms of their perceptions of preparation program quality, efficacy beliefs, and concerns about teaching*. Unpublished doctoral dissertation. The Ohio State University, Ohio.
- McVey, M. K. (2004). *The role of teacher education experiences in addressing the concerns of apprentice teachers*. Unpublished doctoral dissertation, Duquesne University, Pittsburgh.
- Moore-Hayes, C. (2008). *Exploring pre-service and beginning teachers' perceptions of preparedness to teach*. Unpublished doctoral dissertation, Capella University.
- Moore, W., & Esselman, M. (1994). *Exploring the context of teacher efficacy: The role of achievement and climate*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- Murshidi, R., Konting, M. M., Elas, H., & Fooi, F. S. (2006). Sense of efficacy among beginning teachers in Sarawak. *Teacher Education, 17*, 265-275.
- Newman, C., Lenhart, L., Moss, B., & Newman, D. (2000). A four-year cross-sectional study of changes in self-efficacy and stages of concern among pre-service teachers. *Education Journal Database*, <http://www.eric.ed.gov>.
- O'Connor, J., & Taylor, H. P. (1992). Understanding preservice and novice teachers' concerns to improve teacher recruitment and retention. *Teacher Education Quarterly, 19*, 19-28.
- Ortactepe, D. (2006). *The relationship between teacher efficacy and professional development within the scope of an in-service teacher education*. Unpublished MA Thesis in Adult Education, Boğaziçi University.
- Pigge, F. L., & Marso, R. N. (1997). A seven year longitudinal multi-factor assessment of teaching concerns development through preparation and early years of teaching. *Teaching and Teacher Education, 13*(2), 225-35.

- Poulou, M. (2007). Personal teaching efficacy and its sources: Student teachers' perceptions. *Educational Psychology*, 27, 191-218.
- Rotter, J. B. (1982). *The development and applications of social learning theory*. New York: Praeger.
- Sarikaya, H. (2004). *Preservice elementary teachers' science knowledge, attitude toward science teaching and their efficacy beliefs regarding science teaching*. Published master's thesis. Middle East Technical University, Ankara, Turkey.
- Shaukat, S., & Iqbal, H. M. (2012). Teacher self-efficacy as a function of student engagement, instructional strategies and classroom management. *Pakistan Journal of Social and Clinical Psychology*, 9(3), 82-85.
- Smith, D. J., & Sanche, R. P. (1992). Saskatchewan interns' concerns at three stages of a four month practicum. *The Alberta Journal of Educational Research*, 38(2), 121-13.
- Smith, D. J., & Sanche, R. P. (1993). Interns' personally expressed concerns: A need to extend the Fuller model?. *Action in Teacher Education*, 15(1), 36-41.
- Soodak, L. C., & Podell, D. M. (1997). Efficacy and experience: perceptions of efficacy among preservice and practicing teachers. *Journal of Research and Development in Education*, 30, 214-221.
- Swennen, A., Jörg, T., & Korthagen F. (2004). Studying student teachers' concerns, combining image-based and more traditional research techniques. *European Journal of Teacher Education*, 27(3), 265-283.
- 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. (2002). The influence of resources and support on teachers' efficacy beliefs. Paper presented at *the annual meeting of the American Educational Research Association*, Session 13.82: What is the value of understanding beliefs? An exploration of beliefs related to academic achievement. April 2, 2002. New Orleans, LA., Retrieved 12 November, 2005 from <http://www.coe.ohiostate.edu/ahoy/AERA%202002%20megan.pdf>.
- Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68, 202-248.
- Yavuz, S. (2005). *Socio-demographic and institutional predictors of variations in English as foreign language teachers' efficacy perceptions*. Published master's thesis. Marmara University, İstanbul.
- Yayli, D., & Hasirci, S. (2009). Concerns of prospective teachers of Turkish on teaching, *The Journal of International Social Research*, 2(9), 520-525.
- Yost, R. (2002). I think I can: Mentoring as a means of enhancing teaching efficacy. *The Clearing House*, 75, 195-198.
- Woolfolk-Hoy, A. (2000). *Changes in teacher efficacy during the early years of teaching*. Paper presented at *the annual meeting of the American Educational Research Association*, New Orleans, LA.
- 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(4), 343-356.
- Woolfolk-Hoy, A., & Hoy, W. K. (1990). Pre-service teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology*, 82, 81-91.