

Investigation of the Relationship Between Perceptions of Self-Efficacy and Occupational Anxiety of Prospective Physical Education Teachers

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Abstract

This study aims to examine the relationship between perceptions of self-efficacy and occupational anxiety of prospective physical education teachers. For this purpose, a total of 140 prospective physical education teachers, 55 females and 85 males, who were studying in physical education and sports teaching departments and who voluntarily agreed to participate in the study, participated in the study. The self-efficacy scale, which was developed by Tschannen-Moran and Hoy and examined for validity and reliability by Çapa et al., and Occupational Anxiety Scale for Physical Education Teachers, which was developed by McCormack and validity and examined for reliability by Özer et al., were conducted with the prospective physical education teachers. According to the findings obtained in the study, significant differences were determined in the variables of self-efficacy status, gender and doing licensed sports, while no significant difference was determined according to the variable of choosing the physical education teaching department. Moreover, it was determined that there was a moderate correlation between self-efficacy and occupational anxiety.

Keywords: Physical Education, Self-efficacy, Occupational Anxiety

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INTRODUCTION

The concept of physical education is defined as an educational activity that consists of physical movements such as sports and games and aims to develop individuals through physical activities (Açak, 2006). In primary and secondary schools, physical education teachers organize many activities to contribute to the socialization of young people. To become a teacher in Turkey, it is necessary to be successful in the qualification exam. In addition to being successful in this exam, it is a fact that prospective teachers experience concerns about whether they consider themselves sufficient for the teaching profession.

According to Wood and Bandura (1977), who presented the concept of self-efficacy within cognitive theory, self-efficacy depends on the individual's belief that he/she will overcome and succeed in every situation and that his/her capacity is sufficient. Self-efficacy is related to individuals' beliefs in their motivation, cognitive resources and abilities to activate the actions necessary to gain control over the events in their lives. To be successful in a given task, a person must have the necessary abilities (Wood & Bandura, 1989).

The concept of self-efficacy is used especially in educational processes to combat stress in teachers and students, to predict teachers' behaviors related to teaching duties and responsibilities, and to explain individual differences in teaching activities in the field of education (Yılmaz et al., 2004). For this reason, self-efficacy has been one of the important fields of study, especially for experts working in the field of teacher education (Morgil et al., 2004). Among the factors that are considered necessary for and affect quality education, teacher self-efficacy gains great importance in parallel with their responsibilities in the effort of continuous self-renewal and development.

The concept of self-efficacy, which Albert Bandura emphasized in his social learning theory and which constitutes the center of this theory, is expressed as "the individual's belief in his/her capacity to organize and successfully perform the necessary activity to exhibit a certain performance" (Bandura, 1997; Goddard, 2004; Çakan, 2004). Educational researchers conducted many studies on teacher training, which is one of the most important issues to be investigated in the education system, with the help of constantly advancing and developing science and technology (Lewitt, 2001; Colodarci, 1992; Czerniak, 1996; Tschannen-Moran, 2001; Chan, 2008). In light of these studies, developments in the field of education have brought the needs of societies for educated manpower to the forefront, and as a result of this situation, having qualified manpower is included in the education policies of all countries of the world. With this result, the education system and teacher training programs of Turkey have been reviewed in recent years. Numerous studies were also conducted by educational experts to provide better education and to train more qualified and adequately equipped teachers (Üstüner et al. 2009; Çakır, 2006; Erdem, 2008; Akbulut, 2006; Kahyaoglu, 2007).

Teacher Self-Efficacy

Tschannen-Moran and Woolfolk Hoy (2001) define teacher self-efficacy as a teacher's judgment about whether or not he/she can produce desired outcomes such as student engagement and learning with the skills he/she possesses. In general terms, teacher self-efficacy is a teacher's belief in his/her ability to produce desired outcomes such as interest and learning, even with unmotivated and difficult students. The decisions taken towards the constructivist approach in the education system revealed the need to increase teachers' self-efficacy beliefs in the teaching methods used during the lesson and in classroom management to create an effective teaching environment (Çandar & Şahin, 2013).

In particular, the main reasons affecting teacher self-efficacy are students' aspirations, their emotional competence and their desire to succeed (Caprara, 2006; Schunk, 1996). Teacher self-efficacy is an important factor that directly affects the quality of education (Chan, 2008). Teachers' actions and behaviors depend on their beliefs, feelings, thoughts and aspirations (Chacon, 2005). Increasing student motivation (Midgley et al., 1989) and developing students' sense of efficacy

(Ashton & Webb, 1986; Moore Esselman, 1992; Ross, 1992; Anderson, Grene, & Loewen, 1988) are among the factors affecting teacher self-efficacy. Some of the factors affecting the self-efficacy of prospective teachers are gender, the level of teaching, preschool experiences, and experience with anxiety encountered during the teaching profession (Lin & Gorrell, 2001; Woolfolk Hoy & Spero, 2005; Ashton & Webb, 1986; Coladarci & Breton, 1997; Gibson & Dembo, 1984; Guskey, 1988; Hoy & Woolfolk, 1990; Woolfolk Hoy, 2015). In task-specific efficacy, self-efficacy belief can be defined in relation to a task. For example, a person who encounters a movement in a physical education class is expected to examine this movement and put it into practice by using his/her skills. In other words, to determine task-specific efficacy beliefs, they should be examined on tasks (Varol, 2007). Considering the literature, the existence of a positive or negative relationship between teachers' self-efficacy and their occupational anxiety is discussed. Therefore, the current study attempts to help explain the relationship between teachers' self-efficacy perceptions and their occupational anxiety.

Occupational Anxiety

When the concept of anxiety is mentioned, negative situations come to mind first. However, anxiety does not always create negative situations. If anxiety is at a moderate level, it can also create positive situations. Anxiety has a negative effect on a person's performance in a difficult and complex task (Cüceloğlu, 2016).

Teachers take an active role in the education system and assume various responsibilities towards the school administration, students and their families. However, teachers' responsibilities do not end with these; they are also responsible for developing and renewing their skills and working to increase their qualifications in their professional life with the rapid changes in education (Özer et al., 2009; Craft, 2002). In this context, teachers inevitably experience some concerns about their professional lives. These professional concerns consist of disciplinary issues, students' motivation, individual differences, learning students' learning problems, their self-efficacy, extracurricular tasks, crowded classrooms, the inadequacy of teaching materials and difficulties encountered while implementing the curriculum (McCormack, 1996; Meek & Behets, 1999; Taşmektepligil, Yılmaz, Osman, & Kılıçgil, 2006; Özer et al., 2009). These researchers identified a wide variety of types of anxiety, ranging from survival anxiety as a teacher, to fulfilling the requirements of teaching duties, to having a positive impact on students' learning, and in a more general sense, to improving the education system. The literature also identifies a large number of personal and contextual variables that are influential in the formation of teaching-related anxieties. These variables include past school experiences (Bullough, 1990; Calderhead & Robson, 1991; Zahorik, 1989) and general teaching experiences (Fuller & Brown, 1975). Similarly, teacher self-efficacy has been widely discussed by numerous researchers (Ashton & Webb, 1986; Coladarci & Breton, 1997; Gibson & Dembo, 1984; Guskey, 1988; Capel, 2001; Ghaith & Shaaban, 1999; Morton et al., 1997).

To date, researchers have drawn attention to the practices in teachers' professional lives (Fuller, 1969; Guillaum & Rudney, 1993; Pigge & Marso, 1997). Fuller (1969) defines anxiety for teachers as their own "competence" in relation to teaching and maintaining their competence and existence in school life, secondly, "duty and responsibility" in relation to managing their daily tasks within the curriculum, and finally, "influence" in relation to their ability to meet the individual needs of students in the learning process with their individual differences. While teachers are practicing their profession and fulfilling their duties and responsibilities, having the belief that they can do these is as important as their professional knowledge and equipment. For this reason, the concept of self-efficacy belief, which expresses one's belief in oneself in terms of success, is of great importance for teachers and prospective teachers (Semiz, 2019).

Within this framework, the current study aims to determine the level of relationship between self-efficacy and occupational anxiety of prospective physical education teachers and to evaluate the self-efficacy and occupational anxiety of prospective physical education teachers according to these independent variables.

MATERIAL AND METHOD

Population and Sample

The population of the study consisted of a total of 140 4th-grade students studying in the physical education and sports teaching departments in Faculties of Sports Sciences of Çanakkale Onsekiz Mart University, İnönü University, Fırat University, Recep Tayyip Erdoğan University and Kahramanmaraş Sütçü İmam University in 2021-2022 academic period. The sample of the study consisted of 55 females and 85 males who voluntarily agreed to participate in the study.

Data Collection Tool

Socio-demographic data collection form: this form, which was developed by the researcher and filled out by the respondents, covers questions about gender, whether the participant is a licensed athlete, whether the participant chose the physical education department willingly or not, and the type of high school the participant graduated from. The teacher self-efficacy scale used in the study was developed by Tschannen-Moran and Hoy (2001) while the validity and reliability study for Turkish culture was conducted by Çapa, Çakıroğlu and Sarıkaya (2005). The self-efficacy scale consists of 24 items and three subscales. As a result of the reliability study conducted by Çapa et al., Cronbach's alpha internal consistency coefficient of the scale was found to be "0.82" for the subscale of ensuring student participation, "0.84" for the subscale of classroom management, "0.86" for the subscale of teaching strategies and "0.93" for the whole scale. The first subscale called "ensuring student participation" consists of items related to the extent to which teachers can make students believe that they can do school activities well. The second subscale called "classroom management" is related to the extent to which teachers can control unwanted behaviors in the classroom. The third subscale called "teaching strategies" consists of items related to the extent to which teachers can use different assessment strategies. The lowest score that can be obtained from the scale is 24 while the highest score is 120.

The Anxiety Scale for Physical Education Teachers, which was developed by McCormack (1996) and adapted for Turkish culture by Özer, Şad, Açak, and Kafkas (2009), was used to evaluate the occupational anxiety of prospective physical education teachers. As a result of the reliability study conducted by Özer et al., the Cronbach Alpha internal consistency coefficient of the scale was found to be "0.70" for the subscale of Anxiety Related to Teacher's Self, "0.069" for the subscale of Anxiety Related to Duties and Responsibilities, "0.71" for the subscale of Anxiety Related to the Impact on Students and "0.70" for the whole scale. The first subscale called "Anxiety Related to the Teacher's Self" consists of items related to teachers' self-beliefs and competencies. The second subscale called "Anxiety about Duties and Responsibilities" is related to teachers' duties and responsibilities in school life. The third subscale, called "Anxiety about the Impact on Students", consists of items related to teachers' attitudes toward students' various learning difficulties. This scale is a 5-point Likert scale consisting of 13 items and three subscales. The lowest score that can be obtained from the scale is 13 while the highest score is 65.

Data Analysis

In this study, descriptive statistics calculations were conducted for the independent variables in the first part of the data collection tools while evaluating the data obtained. Since the variances confirmed the homogeneity tests, a t-test and One-Way Analysis of Variance (ANOVA) were performed to determine whether the participants' responses differed according to the independent variables and an LSD test was performed to determine the difference between groups. Moreover, correlation analysis was conducted to determine the level of relationship between self-efficacy perceptions and occupational anxiety of prospective physical education teachers.

FINDINGS

The findings of the study were analyzed according to each independent variable.

Table 1. Self-efficacy and Occupational Anxiety of Physical Education Teacher Candidates in Terms of Gender Variables

Self-Efficacy Perception	Gender	N	X	S	t	p
Ensuring Student Engagement	Female	55	29.42	5.37	-4.023	0.00
	Male	85	31.90	4.87		
Teaching Strategies	Female	55	29.06	4.33	-3.757	0.00
	Male	85	32.38	4.26		
Classroom Management	Female	55	29.88	5.12	-3.349	0.00
	Male	85	31.82	4.22		
Total	Female	55	84.36	14.86	-4.193	0.00
	Male	85	96.10	13.25		
Occupational Anxiety						
Anxiety Related to Teacher's Self	Female	55	12,02	5.47	-2.362	0.23
	Male	85	14,65	2.42		
Anxiety Related to Duties and Responsibilities	Female	55	13,44	3.62	-1.982	0.142
	Male	85	13,88	4.79		
Anxiety Related to the Impact on Students	Female	55	16,32	4.64	0.162	0.871
	Male	85	16,58	3.90		
Total	Female	55	41.78	10.82	-2.642	0.42
	Male	85	45.11	8.94		

* p<0.05

When Table 1 is examined, it is observed that there is a significant difference between the self-efficacy perceptions of female and male prospective physical education teachers in favor of male prospective teachers according to the gender variable. It is observed that there is a significant difference in favor of male prospective physical education teachers in terms of prospective physical education teachers' occupational anxiety, both in the subscale of anxiety related to the teacher's self and in the total scores of the scale.

Table 2. Self-efficacy and Occupational Anxiety of Prospective Physical Education Teachers in Terms of Licensed Sports Playing Variable

Self-Efficacy Perception	Licensed Athlete	N	X	S	t	p
Ensuring Student Participation	Yes	46	31.50	4.72	2.994	0.003*
	No	94	27.44	4.22		
Teaching Strategies	Yes	46	31.68	4.94	2.438	0.012*
	No	94	28.73	4.46		
Classroom Management	Yes	46	31.98	4.77	2.582	0.036*
	No	94	28.52	5.39		
Total	Yes	46	95.16	12.09	2.874	0.014*
	No	94	84.68	13.48		
Occupational Anxiety						
Anxiety Related to Teacher's Self	Yes	94	15.54	3.27	2.264	0.045*
	No	46	12.47	3.87		
Anxiety Related to Duties and Responsibilities	Yes	94	13.88	3.92	-1.835	0.203
	No	46	13.20	4.46		
Anxiety Related to the Impact on Students	Yes	94	16.96	3.88	2.351	0.041*
	No	46	16.11	4.74		
Total	Yes	94	46.38	8.87	1.879	0.039*
	No	46	41.78	9.38		

* p<0.05

When Table 2 is examined, it is observed that there is a significant difference in all subscales and total of the self-efficacy perceptions scale of prospective physical education teachers in favor of those who do licensed sports. Except for the subscale of anxiety related to duties and responsibilities in

the scale of prospective physical education teachers' occupational anxiety, it is observed that there is a significant difference in favor of licensed athletes.

Table 3. Analyses of Prospective Physical Education Teachers' Self-Efficacy Perceptions and Occupational Anxiety According to the Variable of Wanting Physical Education Department

Self-Efficacy Perceptions	Wanting Physical Education	N	X	S	t	p
Ensuring Student Participation	Yes	122	29.34	5.77	0.464	0.533
	No	18	29.12	7.52		
Teaching Strategies	Yes	122	32.49	4.96	0.877	0.647
	No	18	30.62	5.54		
Classroom Management	Yes	122	31.38	5.58	0.919	0.693
	No	18	30.99	7.22		
Total	Yes	122	93.21	12.15	0.655	0.542
	No	18	90.73	17.47		
Occupational Anxiety						
Anxiety Related to Teacher's Self	Yes	18	13.62	3.44	-0.726	0.498
	No	122	13.74	2.48		
Anxiety Related to Duties and Responsibilities	Yes	18	13.44	3.67	-0.552	0.528
	No	122	13.54	3.73		
Anxiety Related to Impact on Students	Yes	18	16.49	4.44	-0.826	0.484
	No	122	17.57	4.65		
Total	Yes	18	43.55	8.33	-0.827	0.365
	No	122	44.88	8.43		

* p<0.05

When Table 3 is examined, it is observed that both the self-efficacy perceptions scale and the occupational anxiety scale do not differ significantly for both the subscales and the overall scales according to the variable of the prospective teachers' preferences for the physical education department.

Table 4: Correlations of Prospective Physical Education Teachers' Self-Efficacy Perceptions and Occupational Anxiety

Subscales	1.	2.	3.	4.	5.	6.	7.	8.
Ensuring Student Participation	1							
Teaching Strategies	0.623**	1						
Classroom Management	0.644*	0.684**	1					
Total Self-Efficacy	0.865**	0.838**	0.881**	1				
Anxiety Related to Teacher's Self	0.188*	0.166*	0.244*	0.221*	1			
Anxiety Related to Duties and Responsibilities	0.212*	0.177*	0.214*	0.242*	0.367**	1		
Anxiety Related to Impact on Students	0.083	0.192*	0.231*	0.163*	0.514*	0.467*	1	
Total Anxiety	0.194*	0.254*	0.243*	0.285*	0.737**	0.782**	0.854**	1

* p<0.05, ** p<0.01

When Table 4 is examined, according to the correlation between self-efficacy perceptions of prospective physical education teachers and their occupational anxiety, it is seen that there is a low-level positive correlation (r=0.285) between the total scores of prospective physical education teachers from the self-efficacy scale and the total scores from the occupational anxiety scale. It is seen that there is a low-level correlation (r=0.188) in the positive aspect between the scores of prospective physical education teachers from the "ensuring student participation" subscale of the self-efficacy scale and the scores from the "Anxiety Related to Teacher's Self" subscale of the occupational anxiety scale. It is seen that there is a low-level correlation (r=0.177) in the positive aspect between the scores of prospective physical education teachers on the "ensuring student participation" subscale of the self-efficacy scale and the scores on the "Anxiety Related to Duties and Responsibilities" subscale of the occupational anxiety scale. It is seen that there is a low positive correlation (r=0.194)

between the scores obtained from the ensuring student engagement subscale of the prospective physical education teacher self-efficacy scale and the scores obtained from the anxiety related to duties and responsibilities subscale of the occupational anxiety scale.

DISCUSSION

It is thought that academic achievement and vocational competence affect the acquisition of a profession and the current state of anxiety. For these reasons, this study aims to reveal the current status of students' academic self-efficacy and occupational anxiety levels and to reveal the level of the relationship between academic self-efficacy and occupational anxiety. In light of the findings obtained in the current study, it is seen that there is a significant difference in favor of male prospective teachers in the perceptions of prospective teachers about their self-efficacy according to the gender variable. Additionally, there is a significant difference in favor of male prospective teachers in the occupational anxiety status of prospective physical education teachers in the occupational anxiety status of prospective physical education teachers and the subscale of anxiety related to the teacher's self and total scores of the scale. Certain studies aiming to determine the self-efficacy levels of teachers (Kahyaoğlu and Yangın, 2007; Üstüner et al., 2009; Çimen, 2007; Altun & Yazıcı, 2012; Çuhadar, Gündüz & Tanyeri, 2013; Alemdağ, 2015; Oğuz, 2009) did not find a significant difference between academic self-efficacy and gender variable. However, findings of other studies (Mirzeoğlu et al., 2007; İzgar & Dilmaç, 2008; Türk, 2009; Durdukoca, 2010) demonstrated that male teachers' self-efficacy perceptions are higher than female teachers. In a study conducted by Taşğın (2007) on students studying in physical education and sports teaching departments, it is seen that female prospective teachers have higher anxiety levels compared to male prospective teachers, which is contrary to the findings of the current study.

In the current study, it is determined that there is a significant difference in the self-efficacy status of prospective teachers according to the variable of licensed sports status in all subscales and total scores, except for the scores in anxiety related to duties and responsibilities, which a subscale of occupational anxiety status, where there is a significant difference in the subscales of ensuring student participation, teaching strategies and total scores. Kafkas et al. (2010) reported the same result as our study in the self-efficacy dimension of undergraduate students but did not find a significant difference in the occupational anxiety dimension. In a study conducted by Taşğın (2007), it was determined that occupational anxiety did not differ according to the sports branch. In the study, no significant difference was found in the total and subscale scores of both self-efficacy and occupational anxiety according to the variable of wanting to study physical education. According to the results explained above, it is seen that prospective physical education teachers who were previously licensed athletes consider themselves more competent. This result can be explained by the fact that prospective physical education teachers think that their active participation in sports during or before school life will positively affect their self-efficacy in their professional lives.

When the scores of prospective physical education teachers from self-efficacy and occupational anxiety scales are examined, it is seen that there is a low level of positive correlation between the total scores of prospective physical education teachers from the self-efficacy scale and the total scores from the occupational anxiety scale. This finding obtained as a result of the current study shows that the self-efficacy scores of prospective physical education teachers and their occupational anxiety are related to each other, albeit at a low level. In other words, we can say that as the self-efficacy scores of prospective physical education teachers increase, their occupational anxiety scores decrease. When the literature is examined, it can be observed that when anxiety is well managed, it helps the individual to work harder to be successful and to take precautions against the negative events to be experienced (Akgün, Gönen & Aydın., 2007). Within this context, attention should be paid to the use of anxiety as a motivating and mobilizing stimulus that develops a positive attitude toward the profession. These definitions in the literature support the current study.

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