

Physical education candidate teachers' beliefs about vocational self-esteem

A. Meliha CANPOLAT¹, Murat OZSAKER²

¹ Department of Physical Education and Sport, Ege University, Izmir, Turkey.

² Department of Physical Education and Sport, Celal Bayar University, Manisa, Turkey (e-mail: muratozsaker@yahoo.com).

Abstract

The purpose of this study was to determine epistemological belief and vocational self-esteem physical education candidate teachers of Physical Education and Sports Department in 3 different universities, and also to examine effect of epistemological beliefs on vocational self-esteem. A total of 346 candidate teacher respondents (137 female and 209 male) participated in the study. Epistemological Beliefs and Vocational Self-Esteem Scale were used to determine candidate teachers' epistemological beliefs and vocational self-esteem levels, respectively. Independent sample t test, bivariate correlation, and multiple regression analysis were used to analyze the data. According to the analyses, there was a negative moderate-level significant relationship between Vocational Self-Esteem and two subscales of Epistemological Beliefs scale (The Belief That Learning Depends on Effort and the Belief That Learning Depends on Ability). However, there was no relationship between vocational self-esteem and the belief that there is only one right answer subscale. In addition, The Belief That Learning Depends on Effort and The Belief That Learning Depends on Ability were the negative and significant predictors of Vocational Self Esteem.

Key Words: Epistemological beliefs, vocational self-esteem.

Beden Eğitimi Öğretmen Adaylarının Mesleki Benlik Saygısı Hakkındaki İnançları

Özet

Bu çalışmanın amacı, 3 farklı üniversitenin Beden Eğitimi Öğretmenliği bölümünde okuyan beden eğitimi öğretmen adaylarının mesleki benlik saygısı ve epistemolojik inanç düzeylerini belirlemek ve Epistemolojik İnançların Mesleki Benlik Saygısı üzerindeki etkisini incelemektir. Çalışmada, 137'si kadın ve 209'si erkek olmak üzere toplam 346 öğretmen adayı yer almaktadır. Öğretmen adaylarının Epistemolojik inançlarını ve mesleki benlik saygısı düzeylerini belirlemek için Epistemolojik İnançları Ölçeği ve Mesleki Benlik Saygısı Ölçeği kullanılmıştır. Verilerin değerlendirilmesinde bağımsız gruplar için t testi, bivariate korelasyon analizi ve çoklu regresyon analizi kullanılmıştır. Analizlere göre, Mesleki Benlik Saygısı ile Epistemolojik İnançların 2 alt boyutu (Öğrenmenin Çabaya Bağlı Olduğu İnançlar ve Öğrenmenin Yeteneğe Bağlı Olduğu İnançlar) arasında negatif ve orta düzeyde bir ilişki vardır. Fakat, Mesleki Benlik saygısı ile Tek bir Doğrunun Var olduğu İnanç alt boyutu arasında bir ilişkinin olmadığı bulunmuştur. Ayrıca, Öğrenmenin Çabaya Bağlı Olduğu İnanç ve Öğrenmenin Yeteneğe Bağlı Olduğu İnançlarının Mesleki Benlik Saygısı ile negatif ve anlamlı bir belirleyicisi olduğu belirlenmiştir.

Anahtar Kelimeler: Epistemolojik inançlar, mesleki benlik saygısı.

INTRODUCTION

Today, the most important factor in the development of societies is undoubtedly educated people and trained labour force (9). Also, the economic, cultural, and social developments of societies depend on the level of integration of education system into the conditions of the changing

era. On the other hand, it is the teachers who will effectively take part in this system.

The profession of teaching is considered as an occupation which requires particular professional knowledge and ability. It is of great importance that the individuals who have this profession should have various qualifications to be able to fulfill the

basis of this profession accurately. Moreover, it is necessary that candidate teachers should acquire the needed pre-occupational information and equipment to obtain such qualifications by attending a particular training (27).

In addition to particular professional knowledge and ability of candidate teachers for being successful and efficient in this occupation, the other factor, which is vocational self-esteem, has a significant role as well. This vocational self-esteem, on the other hand, refers to the qualitative judgment of the individual related to the profession that he/she selects, and accounts for how remarkably the individual considers his/her occupation (1,2,24).

According to Arıcak (1), vocational self-esteem and esteem for vocation are different from each other. Esteem for vocation refers to a general approach, while vocational self-esteem is a more particular and a completely individual approach (1).

The belief of achievement, which the candidate teachers have during their fulfillment of tasks and responsibilities through vocational self-esteem, will enable them to achieve the desired goal more rapidly. The reasons for all the decisions taken and all the attitudes performed during the lives of individuals can be these beliefs which they have (14,22). Beliefs determine how the individual perceive any event, phenomenon, person or object, and how he/she gives meaning to these facts and how he/she reacts to them. Therefore, beliefs are considered as internal affirmations which are undoubtedly adopted by the individual as right affirmations (5). According to Riggs and Enochs (23), it was reported that studying the beliefs of teachers is of vital importance in understanding the behavior of them more effectively.

When taken into consideration in terms of educational psychology, the term "epistemological belief" can be defined as subjective beliefs of individuals related to what knowledge is and how knowing and learning is performed (6).

Epistemological beliefs affect largely the educational and academic activities of the teachers in class (such as which academic methods and techniques to use, how to manage the class, and what subject to focus on in learning). In the basis of the factors, which prevent the reforms to be carried out in education, lies the beliefs of teachers that determine to what extent they tend to change. Hence, it seems significant to know the

epistemological beliefs of candidate teachers in arranging and administering the programmers in teacher education (18).

In the study of Öztaş (21) made relative to university students, it was determined that there is a positive relationship between the values of vocational self-esteem and epistemological beliefs, and consequently it was observed that these epistemological beliefs are the most important determining factors in selecting the profession of students (21).

The profession of teaching is an occupation with a professional statue which requires academic study and vocational performance with the basis of particular professional knowledge and ability in its field (26). Every teacher should acquire the current knowledge and skills in view of his/her own branch. The leading field of study, particularly the one which involves practice predominantly, is teaching of physical education. Epistemological beliefs and vocational self-esteem are some of the effective factors in the profession of Physical Education. Different from other teachers, the teacher of Physical Education plays an effective role at schools by lecturing practical activities rather than theoretical ones. The teacher of Physical Education and trainers are the crucial factors in terms of leading the child or adolescent to sports. Therefore, students and teachers of physical education at schools are always in contact with each other. As a result, the structure of personality and vocational efficiency are of extreme importance in this interaction between the teacher and the student (4).

It seems significant to discuss the concept of vocational self-esteem and epistemological belief which are regarded as quite effective in defining the behavior of physical education teachers by considering the candidate teachers of physical education. Furthermore, the beliefs that the teachers have will be determinants in both learning of teachers and students. Therefore, the purpose of this study is to determine the levels of vocational self-esteem and epistemological beliefs of candidate teachers who are studying in the academy of Physical Education and Sports.

MATERIAL & METHOD

Participants

This study includes 346 participants from physical education candidate teachers of Physical Education and Sports Department in 3 different

universities, 137 of whom were females ($M \pm SD = 21.79 \pm 2.16$) and 209 of whom were males ($M \pm SD = 22.74 \pm 2.53$), with a mean age of 22.36 years (range = 18 – 37 years; $SD = 2.44$). All the classes (Schools) were coeducational.

Measures

Epistemological Beliefs Scale; Epistemological beliefs were developed by Schommer (25) and were adapted into Turkish by Deryakulu and Büyüköztürk (6). This scale consisted of three subscales (The Belief of Learning Depends on Effort (BLDE)-17 items, The Belief of Learning Depends on Ability (BLDA) - 8 items, The Belief of There is Only One True Truth (BOTT) – 9 item) includes a total of 34 items. Students responded to a five-point likert-type scale with anchors of “strongly disagree” (1) and “strongly agree” (5). The Cronbach Alpha inner consistencies of coefficients of the adapted version of scale are .84, .69 and .64 respectively and .81 for the whole scale (6). The highest and lowest scores gained from investigated subscales show that the person has immature and mature beliefs regarding that subscales respectively.

Vocational Self-Esteem Scale; this scale was developed by Arıcak (1999) for Turkish students. Vocational self-esteem scale consisted of 30 items (1). These 30-items included 14 positive and 16 negative expressions. The points for each item are added and total point is obtained. Accordingly, the answers were given on a 5-point scale for positive items ranging from 5 (Completely agree) and 1 (strongly disagree) and negative items ranging from 1 (Completely agree) and 5 (strongly disagree). This scale of Cronbach’s alpha coefficient is .93, with a test-retest reliability coefficient of .90.

Procedure and Data Analyses

Physical education candidate teachers were asked to answer the questions concerning themselves. Each administration took approximately 15 minutes. In this study, SPSS 15.0 statistical program were used for data analysis. First, descriptive statistics for all measures were presented. Cronbach’s alphas were also computed to

assess internal reliability of the subscales. Then, independent sample t test, bivariate correlation, and multiple regression analysis with enter method were conducted gradually.

RESULTS

Means, standards deviations, and Cronbach’s Alphas of all subscale variables were presented in Table 1. Consistent with previous research that used these scales on physical education candidate teachers; the data for all measures were calculated and used in subsequent analyses in terms of mean scores. The mean score of epistemological belief scale’s subscales The Belief of Learning Depends on Effort and The Belief of Learning Depends on Ability were equal or below the midpoint (i.e., 2.5) of the 5-point scale. The mean score of epistemological belief scale’s subscales The Belief of There is Only One True Truth and The vocational self-esteem scale were above the midpoint (i.e., 2.5) of the 5-point scale. Table 1 also shows the internal reliability for each measure’s subscales.

In table 2, results of t test related to Subscales of Epistemological Beliefs and Vocational Self-Esteem Scales are presented. There are significant differences between the scores of female and male physical education candidate teachers and the subscales of The Belief of Learning Depends on Ability ($t = -2.45, p < .05$) and Vocational Self-Esteem ($t = 2.39, p < .05$). On the contrary, the result shows that, there are no significant differences in scores obtained in the subscales of “The Belief of There is Only One True Truth” and “The Belief of Learning Depends on Effort” between genders.

The bivariate correlation analyses presented in Table 3 indicate that “The Belief of Learning Depends on Effort” was negatively correlated with “The Belief of There is Only One True Truth” ($r = -.40, p < .01$) and Vocational Self-Esteem ($r = -.45, p < .01$). Furthermore, The Belief of Learning Depends on Ability was related to The Belief of There is Only One True Truth ($r = .30, p < .01$) and Vocational Self-Esteem ($r = -.29, p < .01$).

Table 1. Descriptive statistics and Cronbach’s Alphas for all measures.

	Range	Mean	SD	α
1. The Belief of Learning Depends on Effort	1-5	2.08	.78	.92
2. The Belief of Learning Depends on Ability	1-5	2.65	.87	.78
3. The Belief of There is Only One True Truth	1-5	3.33	.71	.67
4. Vocational Self-Esteem	1-5	4.02	.69	.92

Table 2. T-test related to comparison of vocational self-esteem and epistemological beliefs according to gender.

	Gender	N	Mean	SD	t
The Belief of Learning Depends on Effort	Female	137	2.02	.70	-1.08
	Male	209	2.11	.82	
The Belief of Learning Depends on Ability	Female	137	2.51	.91	-2.45*
	Male	209	2.75	.84	
The Belief of There is Only One True Truth	Female	137	3.26	.74	-1.44
	Male	209	3.37	.69	
Vocational Self-Esteem	Female	137	4.12	.66	2.39*
	Male	209	3.94	.69	

*p<.05

Table 3. Correlation of epistemological beliefs and vocational self-esteem.

	1	2	3	4
1. The belief of learning depends on effort	-			
2. The belief of learning depends on ability	.07	-		
3. The belief of there is only one true truth	-.40*	.30*	-	
4. Vocational self-esteem	-.45*	-.29*	.08	-

* p<.01

Table 4. Multiple regression analysis of the relation between vocational self-esteem and epistemological beliefs.

Variations	B	SE B	β	t
The Belief of Learning Depends on Effort	-.38	.046	-.43	-8.36*
The Belief of Learning Depends on Ability	-.20	.039	-.25	-4.99*
The Belief of There is Only One True Truth	.01	.052	-.01	-.25

R²=.264 ; Adjusted R²= .257; * p<.001

Multiple Regression Analysis was used to test whether the subscales of epistemological belief scale is the determinant of vocational self-esteem. In accordance with the results of this analysis, it was determined that the belief of learning which depends on effort ($\beta = -.43$, $t = -8.36$, $p < .001$) and the belief of learning which depends on ability ($\beta = -.25$, $t = -4.99$, $p < .001$) are the statistically negative predictors with the vocational self-esteem. Furthermore, the significant part of the variance in terms of the point of vocational self-esteem relative to the belief of learning which depends on effort and the belief of learning which depends on ability was also determined [$R^2 = .264$, $F(3,342) = 40.85$, $p < .001$]. As opposed to this, it was seen that the belief of "there is only one true truth" is not the predictor of self-esteem ($p > .05$).

DISCUSSION

The purpose of this study is to determine the relation between the epistemological beliefs and vocational self-esteem of Physical Education candidate teachers studying at Physical Education and Sports Department. As a result of the analyses made, it was determined that the levels of epistemological belief and vocational self-esteem were statistically different in terms of genders.

When "the belief of learning depending on ability" was compared between genders, it was observed that the levels of this belief for male candidates were higher than those of female candidates ($t = -2.45$, $p < .05$). When the literature related to this issue was examined, similar results like the ones in this study were observed. In the study of Özşaker et al., it was reported that in terms of the belief of learning depending on ability, the mean scores of the male candidate teachers in this study were statistically higher than those of female candidates (20). In the studies of Gürol et al. (11), Ertekin et al. (10) with Eroğlu and Güven (9), it was determined that the belief levels of male candidates only in the belief of learning depending on ability subscale was higher in comparison to the levels of females. Furthermore, the study of Güven (13) carried out with 21.985 students studying at Nursery Department of the Education Faculty and at the department of English Language Teaching supported this study as well. Also, Güven (13) found that the belief level of male candidates in the belief of learning depending on ability was higher than those of female candidates. Besides this study, Can and Arabacıoğlu (3), on the other hand, reported that the levels of subscales of "the belief depending on ability" of male candidates were just narrowly different from the levels of

females. Likewise, in our study it was reported that there was no significant difference in the mean scores of “the belief of there is only one true truth” which is the other subscales of epistemological belief between genders. Karhan (16), Demirli et al. (7), and Güven (13) reported the same results in their studies carried out with the candidate teachers. On the other hand, in some studies it was found out that the scores of female candidates relative to the belief of There are only one true truth was higher than those of males (10).

It was observed that the vocational self-esteem of the candidate teachers involved in the study had significant differences according to gender. Accordingly, it was determined that the mean scores of the vocational self-esteem of the female candidate teachers were statistically higher than those of male candidates ($t= 2.39, p<.05$). In the examination of literature, it was reported that in their study including the students of Psychological Counseling and Guidance at Education Faculty, Arıcak and Dilmaç (2) determined that female students had higher rate of vocational self-esteem than male students. In the study of Gürsoy (12) performed on 100 primary school teachers, it was observed that the levels of vocational self-esteem of the female teachers was higher than the levels of male students. The studies in question supported the findings of the research. However, in literature, different results were obtained as well in terms of gender variable. In the study of Özdemir et al. (19) including senior students of Physical Education and Sports Department and in the study of Karakaya et al. (17) which was carried out with athletes, it was determined that the levels of vocational self-esteem of the male participants were significantly higher than those of females in terms of gender variable. Besides, in the research made by Yıldırım et al. (28), it was reported that when compared with the scores of female teachers of Physical Education according to gender, the vocational self-esteem scores of the male teachers were significantly high.

In the results of the analyses made in order to determine the relation between the subscales of vocational self-esteem and epistemological belief, it was found out that except for vocational self-esteem and the belief of There is only one True Truth, there was a significant relation between the other subscales. Besides, it was reported that the belief of learning depending on effort and the belief depending on ability were the significant determinants of vocational self-esteem. In parallel

with our study results, the study of Öztaş (21) suggested that vocational self-esteem had significant relation with only the belief of learning depending on ability. Recently, many educators have claimed that the epistemological beliefs of students have major role in their learning process (15).

It was emphasized that Physical Education candidate teachers made great efforts to achieve anything and their epistemological beliefs had important effect on learning. Also, it was reported that the students who had developed epistemological beliefs were more successful in terms of learning (5,6,8,18). Therefore, it has been known that epistemological belief is one of the most important features which should be emphasized during education.

It is extremely important to look into what the candidate teachers believe and how they think in terms of their being more successful in both their lives and professions. Moreover, it is a controversial issue how the candidate teachers can develop or change their epistemological beliefs and how their vocational self-esteem can be expanded. In order to fulfill the expectations in education and to educate a qualified young generation, the teachers of Physical Education and Sports who have positive effects on students will improve their vocational self-esteem by solving every kind of problem related to their vocational lives. Besides, making qualified researches on the epistemological beliefs of teachers and the factors affecting them will make significant contributions to the profession of teaching.

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