DETERMINATION OF PHYSICAL EDUCATION TEACHERS' EDUCATIONAL BELIEFS

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ABSTRACT

The main purpose of this research is to determine physical education teachers’ educational beliefs and the study was conducted in relational screening model. A total of 240 people participated in the study, of which 73 were physical education teachers and 167 were candidate physical education teachers. As a data collection tool, “Education Beliefs Scale (EIO)” was used in the study. Descriptive statistics and t-test technique were used to analyze the data. In the study, progressivism was found to be the educational philosophy with highest agreement from physical education teachers. In addition to this, it was observed that they agreed with perennialism, existentialism, re-constructionism and essentialism philosophies in the order from high to low. In the study, from the results obtained from candidate physical education teachers, they were found to be similar to the results of physical education teachers. No significant difference was found between physical education teachers and candidate teachers in terms of gender variable and differences were established in certain subdimensions in terms of variables of sports branches and professional length of service.

Key words: Physical Education, Education Philosophy, Physical Education Teacher, Educational Beliefs

1. INTRODUCTION

Knowledge and belief are among the key factors that affect people’s attitudes and behaviors. Knowledge is objective and has the same value for everyone. However, it is not possible to say the same thing for belief. Belief is subjective and may vary according to any person (34). Beliefs are stronger than effects of experiences and have more power and effect than real experiences in emergence of human behavior. At the same time, people’s beliefs also direct their behaviors (3).

Beliefs having great impact in the educational process taking behavioral change as the basis emerge as the strongest predictor of individuals’ all decisions taken, choices made and behaviors shown throughout their lives (28). The fundamental basis of educational beliefs of the individuals performing the education process is educational philosophies, and which educational philosophy and how much the individual believes in it have a direct effect on the behavior of individuals receiving education (29, 38).

Education philosophy, considered as an essential part of culture, addresses education as a whole and is a set of critical and methodological studies. Education philosophy embodies philosophical movements such as perennialism, idealism, realism, essentialism, pragmatism, progressivism, reconstructionism, naturalism and existentialism (32). In this research, perennialism, progressivism, essentialism, existentialism, and re-constructionism were taken into account.

According to perennialism, which is included in educational philosophies, teacher should be a model and guide the student in finding the truth in his/her mind. As for essentialism, it places the teacher and his/her authority in the center of education. Contrary to essentialism, progressivism represents a more democratic, student-centered educational approach which does not include punishment. Re-constructionism is in line with progressivism in terms of being democratic and not using punishment, while it advocates constant reshaping and reorganization of community through education. The difference between progressivism and re-constructionism is that progressivism places the emphasis on individuality whereas re-constructionism places the emphasis on society. Existentialism approach defends open school system... where everything is based on and appropriate for students. The student should have the right to choose any course and teacher he/she wants. Meanwhile, existentialism criticizes the understanding of current education (1, 6, 32).

Teachers, who have an indispensable role in the educational process, voluntarily or involuntarily carry out education in line with an educational philosophy they believe in (38) and may have different educational beliefs (34). Teachers’ educational beliefs are also the source of their classroom practices and their impact on students (2, 15, 30). Therefore, teachers’ educational beliefs were considered important by the researchers and much research has been done on this subject. It was observed that some of the research studies were based on teachers (1, 4, 10, 11, 14, 18, 19, 27, 35), while some were conducted on teacher candidates (12, 13, 22, 25, 26, 28, 31, 36, 38, 39). In addition, DeWitt (1998) carried out a study aiming to identify educational beliefs of both teachers and academics training teachers (9). In addition to the above, the study by Jones et al. (2004) focused on educational beliefs of parents (20).
Taken as a whole, education, physical education and sports have an indispensable role in this whole. Elements of physical education and sports are teachers, students and education programs (7). In these elements, physical education teachers, the practitioners, come to the forefront. In the implementation process, physical education teachers’ beliefs in education philosophies, as in teachers from different fields, are thought to directly affect the educational process. Therefore, physical education teachers and candidate teachers’ beliefs in philosophies of education are of great importance. In this context, several research studies on educational philosophies and beliefs in the field of physical education were found in the literature (5, 7, 16, 17). These investigations attempted to determine teachers’ and teacher candidates’ educational philosophies and took account of some variables such as gender, professional length of service, etc.

Among such studies, theoretical studies by Green (1998; 2002) play an important role (16, 17). Other than these, another significant study was carried out by Demirhan (2003), in which physical education teachers’ opinions on physical education and sports were determined according to philosophical approaches (7). However, when the studies were reviewed, no research was found to directly determine physical education teachers’ and candidate physical education teachers’ educational beliefs. However, candidate teachers are seen as future teachers. Accordingly, the physical education teachers’ educational beliefs as well as candidate teachers’ educational beliefs are expected to be taken into account in education process. At the same time, examining physical education teachers and candidate teachers together is thought to play an important role in determining the consistency between candidate teachers and teachers. In addition to this, teachers’ and candidate teachers’ sports branches are thought to be possibly effective on their educational philosophy preferences because physical education and sports are included in the area of special skills. For these reasons, examination of physical education teachers’ and candidate teachers’ educational beliefs and taking account of variables such as gender, professional length of service as well as their sports branches will be important. This study aimed to determine physical education teachers’ and teacher candidates’ educational beliefs. In the research, it was also aimed to study beliefs in educational philosophies in terms of variables of gender, sports branches and professional length of service which are thought to affect educational beliefs.

2. METHOD

This study is a study of relational screening model which investigates physical education teachers and physical education teacher candidates’ beliefs in teaching philosophies. Relational screening is a research model which aims to determine the existence and/or degree of joint variation between two or more variants (23). By this method, physical education teachers’ and teacher candidates’ educational beliefs were studied comparatively in terms of variables of gender, sports branch and professional length of service.

2.1. Research Group

Research group is composed of 73 physical education teachers serving in provinces of Aksaray and Eskisehir (Turkey) and 167 teacher candidates studying in 3 different universities.

Physical education teachers, 19 of whom are female (26%) and 54 of whom are male (74%) are aged 23 to 50 years (\(\bar{x}=34.42\pm6.134\)) and in terms of their professional length of service, it was seen that 51 physical education teachers are in their 1st – 14th year (69.9%), and 22 are in their 15th year and above (30.1%) in the profession. With respect to their sports branches, 52 teachers (71.2%) are engaged in team sports and 21 teachers (28.8%) are engaged in individual sports.

When the distribution of physical education teacher candidates in the study group is considered, it was seen that 67 teacher candidates (36.5%) were female and 106 (63.5%) were male. Their age range was 17-28 years (\(\bar{x}=21.86\pm1.977\)). 101 teacher candidates (60.5%) were engaged in team sports and 66 teachers (39.5%) were engaged in individual sports.

2.2. Data Collection

Personal Information Form and Education Beliefs Scale were used as data collection tools in the study.

2.2.1. Education Beliefs Scale

Education Beliefs Scale (EIO) was developed by Yilmaz, Altkurt and Cokluk (2011) (38). EIO is composed of 40 items aimed to determine teachers’ educational beliefs. The scale has 5 subscales, being progressivism, existentialism, reconstructionism, perennialism, and essentialism. The scale is of five likert type and scored in the range of “1=Absolutely Disagree and 5=Absolutely Agree”. The scale has no items scored reversely. The scale is utilized to determine how much the participants adopt each education philosophy, rather than to get a total score. A high score obtained from a subscale indicates that a participant believes in and adopts the education philosophy in that sub-scale and a low score indicates that a participant weakly believes in that philosophy.

Explanatory and confirmatory factor analyses were conducted for construct validity of the scale. As a result of explanatory factor analysis, factor load values of the scale were calculated as 0.50–0.73, 0.58–0.74, 0.52–0.68, 0.42–0.61 and 0.61–0.73 for progressivism, existentialism, reconstructionism, perennialism, and essentialism, respectively. Total of variances explained by five individual factors is approximately 50%. Confirmatory factor analysis was applied to a structure of 40 items under 5 factors obtained as a result of explanatory factor analysis. By confirmatory factor analysis, chi-square (\(x^2\)) value statistical significance levels (\(x^2/sd=2.23\)) conforming to the model constituted for the scale were calculated. Moreover, other fit indices regarding the model were also shown to follow the suggested model (\(GFI=0.85\), \(AGFI=0.83\), \(RMSEA=0.05\), \(RMR=0.05\), \(SRMR=0.08\), \(CFI=0.73\)).
0.95, NFI and NNFI ≥ 0.95, PGFI= 0.75). Internal consistency of EIO was tested with Cronbach’s Alfa. The scale’s Cronbach’s Alfa coefficients vary in the range of 0.70–0.91 in subscales.

Reliability of the scale was re-tested in the study. According to this, Cronbach’s Alfa coefficients of the scale applied to teachers and teacher candidates were found to be in the range of 0.88-0.93 and 0.86-0.94 in subscales, respectively.

2.3. Statistical Analyses

Descriptive statistics (arithmetic mean, standard deviation, frequency, percentage) was utilized to determine distribution of teachers and teacher candidates in the study group with respect to their gender, sports branches and their length of service.

T-test was performed in order to establish if there is any significant difference in educational beliefs of the study group with respect to gender, sports branch and professional length of service.

3. RESULTS

Sub dimensions of physical education teachers and teacher candidates’ educational beliefs scale and their general scores are shown in Table 1.

When Table 1 was analyzed, it was seen that the subdimension agreed with most by physical education teachers was progressivism (τ=53.64±7.918), and least was essentialism (τ=16.12±5.763).

The item agreed with most by physical education teachers in “progressivism” subdimension was “Students should actively participate in the learning process” (τ=4.520±0.709). It was established that the item agreed with least in “progressivism” subdimension was “Students should be able to receive courses from any teacher he/she wants, and even be able to select him/her” (τ=3.972±0.865).

It was seen that the item agreed with most by physical education teachers in “essentialism” subdimension was “A student who does not observe rules in education environment can be punished” (τ=3.575±1.353). It was established that the item agreed with least by physical education teachers in “essentialism” subdimension was “Education should be teacher-centered, rather than student-centered (τ=3.972±0.865). According to Table 1, it was seen that the subdimension agreed with most by physical education teacher candidates was progressivism (τ=50.37±10.885), and least was essentialism (τ=17.08±5.075).

It was established that the item agreed with most by physical education teacher candidates in “progressivism” subdimension was “Learning should be based on solving problems rather than memorizing (τ=3.964±1.069). It was seen that the item agreed with least was “School is life itself, not a preparation to life” (τ=5.786).

It was seen that the item agreed with most by physical education teacher candidates in “essentialism” subdimension was “A student who does not observe rules in education environment can be punished” (τ=3.515±1.260). The item agreed with least in “essentialism” subdimension was “It is the teacher who has basic power in school” (τ=3.371±1.253).

In order to compare physical education teachers’ beliefs in educational philosophies with respect to gender, t-test of the difference between arithmetic means in independent groups was conducted (Table 2).

Table 2. Comparison of arithmetic means of physical education teachers’ beliefs in educational philosophies with respect to gender variable

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressivism</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Female</td>
<td>19</td>
<td>54.28</td>
<td>7.733</td>
<td>71</td>
<td>0.695</td>
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<tr>
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<td></td>
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<tr>
<td>Existentialism</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>19</td>
<td>29.05</td>
<td>4.915</td>
<td>71</td>
<td>0.286</td>
</tr>
<tr>
<td>Male</td>
<td>54</td>
<td>27.57</td>
<td>5.232</td>
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<tr>
<td>Re-construction</td>
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<td></td>
</tr>
<tr>
<td>Female</td>
<td>19</td>
<td>27.15</td>
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<tr>
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<td>Perennialism</td>
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</tr>
<tr>
<td>Female</td>
<td>19</td>
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<td>5.025</td>
<td>71</td>
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<tr>
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<td>16.68</td>
<td>5.945</td>
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</tbody>
</table>

p<0.05*

As seen in the Table 2, no significant difference was found with respect to gender in all five sub-dimensions (progressivism, existentialism, re-constructionism, perennialism, essentialism) as a result of the t-test of the difference between arithmetic means in groups.

In order to compare physical education teacher candidates’ beliefs in educational philosophies with respect to gender, t-test of the difference between arithmetic means in independent groups was conducted (Table 3).
As seen in the Table 3, no significant difference was found with respect to gender in all five subdimensions (progressivism, existentialism, re-constructionism, perennialism, essentialism) as a result of the t-test of the difference between arithmetic means in independent groups was conducted (Table 4).

As seen in the Table 4, as a result of the t-test of the difference between arithmetic means in independent groups was conducted, no significant difference was found with respect to sports branch, t-test of the difference between arithmetic means in independent groups was conducted (Table 5).

As seen in the Table 5, as a result of the t-test of the difference between arithmetic means in independent groups was conducted, no significant difference was found with respect to sports branch, t-test of the difference between arithmetic means in independent groups was conducted (Table 6).
As seen in the Table 6, as a result of the t-test of the difference between arithmetic means in groups, no significant difference was found in progressivism, existentialism, and perennialism dimensions included in five subdimensions (p>0.05), however, the difference between arithmetic means with respect to professional length of service in subdimensions of re-constructionism and essentialism was found to be significant (p<0.05). According to this, it was established that teachers with professional length of service of 1 year to 14 years believe more in reconstructionism philosophy, included in educational philosophies (X̄ =25.78±6.229). In addition to this, it was seen that teachers with professional length of service of 15 years and above believe more in essentialism philosophy, included in educational philosophies (X̄ =19.13±5.742).

4. DISCUSSION AND CONCLUSION

This study aimed to determine physical education teachers’ and teacher candidates’ educational beliefs. According to this, progressivism was found to be the educational philosophy with highest agreement from physical education teachers. Other philosophies were also established as perennialism, existentialism, re-constructionism and essentialism in the order from high to low. In consideration of physical education teacher candidates, the results were completely in line with those of physical education teachers (Table 1).

In Demirhan’s study (7) on determination of physical education teachers’ educational philosophies, it was concluded that pragmatist approach was adopted more and traditional training philosophies were also adopted by a substantial rate. This result is in parallel with the research. Similarly, it was seen in this study that progressivism, a part of pragmatic approach, was adopted at the highest rate and perennialism, which represents traditional education understanding, was in the second place. In addition to this, research studies conducted by Doganay and Sari (2003), Duman and Ulugbey (2008), Ekiz (2007), Tekin and Ustun (2008), and Altinkurt et al. (2012) also support the results of this research (1,10,12,13,33). It can be thought as an expected result that teachers and teacher candidates, who are considered to know well the importance of learning by experiencing and living in physical education lessons, in which practice excessively comes to the forefront, adopted progressivism philosophy at a high percentage. Dewey (2011), who stated that the foundation of progressivism is composed of individuality, trying and experiencing, noted that when solid foundations of this philosophy are not settled, problems can be experienced in education especially in terms of control factors (8). To this end, considering that in Turkey pragmatic educational approaches have not settled well yet (19), adoption of perennialism philosophy at a high rate after progressivism can be evaluated as a reaction to the problems experienced in education in terms of the control factors.

It is thought as a positive result that physical education teachers and teacher candidates adopt the same educational beliefs and that this belief is in line with progressivism, a pragmatic approach. In addition to this, it is also important that perennialism philosophy was in second place in both groups. Johnson (2008) suggested that teachers become aware of professional values during initial periods of their employment and therefore this period has a critical and decisive value for internalization of professional values (21). Lay et al. (2005) states that proper planning of teacher training process and training an individual in accordance with objectives are very important factors which ensure that the individual’s, as a teacher, corporate and class affiliation, commitment to profession and process of adaptation, after graduation, take place in a problem-free manner (24). In this respect, during teacher training process, the fact that employed teachers and teacher candidates interact in practice environment and provision of pre-service educational process in accordance with the common curriculum across the country can be given as reasons for these results.

Physical education teachers’ and physical education teacher candidates’ educational beliefs were studied in terms of gender and it was seen that educational beliefs did not differ with respect to gender in both groups (Table 2, Table 3). This result is similar to the study by Altinkurt et al. (2012) (1), whereas it is contrary to the results of certain studies (7, 22).

It was seen that physical education teachers’ education beliefs with respect to sports branches showed a difference in re-constructionism and essentialism philosophies, which are certain subdimensions (Table 4). It was seen that the teachers specialized in team sports believe in re-constructionism philosophy more and that the teachers specialized in individual sports believe in essentialism philosophy more. When physical education teachers’ educational beliefs are compared in terms of the variable of sports branches, it was seen that teacher candidates engaged in team sports believe more in essentialism philosophy (Table 5). No similar research on this subject was encountered in the literature. Team sports and individual sports are known to have different
characteristics. Yıldırım and Ozcan (2011) concluded in their study that the individuals engaged in team sports are more social and their social skill levels are higher than those of the individuals engaged in individual sports (37). This explains why teachers engaged in team sports adopted re-constructionism philosophy more than teachers engaged in individual sports. Because re-constructionism has almost the same features as progressivism. The difference between them is that, unlike progressivism, re-constructionism puts the community on the forefront, not the individuality (32). However, another striking result is that it was established that physical education teachers engaged in team sports adopted re-constructionism and that physical education teacher candidates engaged in team sports adopted essentialism philosophy more than those engaged in individual sports. At first glance, this may seem to be a contradiction. However, physical education teacher candidates are thought to be practitioners before service and become those asking others to practice during service. In other words, when teacher candidates are practitioners, they are subject to a leader, however, they are the leaders when they become those asking others to practice. This may have influenced the results.

As a result of comparison of physical education teachers’ educational beliefs with respect to the variable of length of professional service, it was seen that teachers with professional length of service of 1 to 14 years believe more in re-constructionism philosophy, included in subdimension of educational philosophies. In addition to this, it was seen that teachers with professional length of service of 15 years and above believe more in essentialism philosophy, included in sub dimension of educational philosophies (Table 6). This result is in line with many studies (1, 7, 10). The reason for this can be the change in the education system in recent years and the increase in importance given to democratic values in individual and social as well as institutional level. Isikoglu et al. (2009) concluded that experienced teachers show better adaptation to student-centered education and adopt such education more, in their study related to student-centered education (19). This result is contrary to the results of our study. However, Isikoglu et al. (2009) stated that the problems faced by inexperienced teachers because of lack of experience may prevent them from adapting to student-centered education and this might have also affected the result (19).

As a result, it is thought that adoption of progressivism and re-constructionism philosophies, recognized as modern educational philosophies in general, at a high rate by physical education teachers and teacher candidates is an indication of the fact that teachers and teacher candidates have started to adopt modern education understanding. However, besides this, adoption of perennialism philosophy at a substantial rate can be regarded as an indication of the fact that modern education understanding and freedom concept have not been fully recognized throughout the country. In addition, to what extent modern educational philosophies are reflected on the process of education in practice is still unclear. Therefore, in order to identify practical implications of the concept of modern education in the field of physical education, qualitative studies on ideas, experiences and expectations of managers, teachers, students and families are thought to provide a major contribution to this field.

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Baku, Azerbaijan | 391