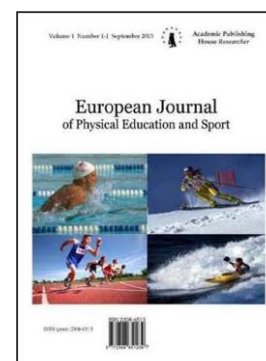


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Examination of Empathetic Tendency Levels of Physical Education and Other Teacher Candidates in Turkey

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Abstract

The purpose of research was to examine the empathetic tendency levels of physical education teacher candidates and other teacher candidates related to age, gender and department and doing/undoing sports variances. Research group in the 2016–2017 academic year at Mustafa Kemal University; Physical Education and Sports Teaching, Classroom Teaching, Turkish Language Teaching, English Language Teaching, Visual Arts Teaching departments studying in the final year totally consisted of 232 (133 female, 99 male) teacher candidates in Turkey. In research, personal information form developed by researchers, Empathetic Tendency Scale developed by Dökmen (1988) was used as data collection tools. In the analysis of the data were used Mann Whitney U test for single comparisons and Kruskal Wallis H test for multiple comparisons from non-parametric tests. In the research, the level of significance was taken as $p < 0.05$. According to the results gained from the research; it was specified that it wasn't significant difference among teacher candidates' age, gender, department, whether they do sports or not, and empathetic tendencies. And also, it was identified that empathetic tendency levels of English language teacher and physical education and sports teacher candidates have higher empathetic tendency levels than classroom, Turkish language and visual arts teachers' candidates.

Keywords: empathy, empathetic tendency, teacher candidates.

1. Introduction

Empathy is a multidimensional fact that involves a set of functional processes that include understanding, sharing, recognizing emotions, emotional transmission, and arousing emotions of others (Walter, 2012). Empathy is simply defined as competence of understanding another person's emotions (Barut, 2004). Hoffman (2000) considers empathy as the primary mediator of positive social behavior and states that empathy plays a broad mediating role in moral behavior. Besides, he defines empathy as the ability to feel the same emotion that someone else experiences. According to him, empathy is an emotional response in accordance with the condition of the other person rather than the condition of the person. Dökmen (1997) states that when an individual empathizes with the role of the other person, he/she should remain in that person's role for a short period of time and then be able to move from that role to his/her own place. Otherwise, the individual cannot be considered as having empathy. It is different from empathy for an individual to identify with the person in front of him, that is to say, to sympathize or sympathize

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with him. Empathy, for a brief period; is the role of the person to be empathized, to try to think and feel in his name. In other words like in this idiom “thinking oneself in other’s shoes”.

Emotional perception of the mentalization system with the emotions that others feel in pain through quick social interactions in an individual’s mind is called as empathic perception. Generally, it is easier for individuals to predict the beliefs and intentions of others or to use such methods in social decisions rather than using this system (Bohl, Van den Bos, 2012).

Empathy plays an important role in both social perception and psychological processes. Empathy-related responses, including social and sympathetic anxiety, are thought to motivate social behavior, prevent aggression, and lead up the way for ethical reasoning (Eisenberg, Eggum, 2009).

It is also observed that empathy gives direction to the present day with neurological studies. There are two crucial principles of empathy. While one of these principles is to reveal the preconscious mechanisms that facilitate the emotional imitation of inner emotions and the behavior of others underlying the emotions, the other is to provide conscious and mature situations by making inferences about the physical and emotional conditions, beliefs and intentions of others (Zaki, Ochsner, 2012; Keysers, Fadiga, 2008).

It may be argued that examining subcomponents of more complex socio-psychological structures, such as empathy, may be useful from a neurodevelopmental point of view, where the only a part of its components or precursors can be observed. When all components of developmental studies (emotion, understanding, feeling, belief and bodily activities, etc.) are fully mature and coordinated, they see that system components interact very seriously in adults and create a nice contribution to the developmental processes of empathy (De Haan, Gunnar, 2009).

Cognitive empathy and emotional empathy are two important structures for empathy. Emotional empathy includes non-reflective processes. Individuals often use this module consciously and unconsciously. In addition, individuals may feel the feelings, behaviors and emotional sincerity of others over time, sometimes not even themselves. In this sense, there are important studies in the literature regarding these factors which are fed by the emotions of individuals such as social status, status, reliability and belongingness which are in emotional empathy (Guo et al., 2012; Bernhardt, Singer, 2012; Liew et al., 2011; Gu, Han, 2007).

While emotional empathy is a reaction based on emotional experience, which involves showing interest in the other, cognitive empathy is understanding of distress of the other without emotional experience (Obhi, 2012; Spengler et al., 2010; Davis, 1996).

Just after the discussions about which cognitive or affective processes were effective in empathy, it was agreed that both processes were effective in the formation of empathy. Today, empathy is conceptualized as a coherent affective response resulting from the mutual interaction of various affective and cognitive processes (Eisenberg, Strayer, 1990; Feshbach, 1997; Hoffman, 2000). The degree and quality of these affective and cognitive processes may vary from person to person. However, there is a consensus that empathy depends on the achievement of the “me-you” distinction and the ability to react emotionally. Empathy that can increase with age is also a teachable skill (Yüksel, 2004).

It is an undeniable fact that the role of teachers is very important in the future goals of countries. For this reason, it is crucial to identify empathetic tendency level of teacher candidates who will undertake education of children who will form the future of the country and to what level they can set an example for the children. The purpose of research was to examine empathetic tendency levels of physical education teacher candidates and other teacher candidates regarding age, gender, department and doing/undoing sports variables.

2. Methods

2.1. Research Model

Survey model has been used in research. This model is research pattern that is in purpose to define a preexisting condition as it is, trying to observe the situations that are subject to research in an appropriate way and not attempting to impress it (Karasar, 2002).

2.2. Study Group

Study group composed of 232 teacher candidates in the 2016-2017 School Year in Mustafa Kemal University, School of Physical Education and Sports, Physical Education and Sports Teaching Department (n = 55) and the Faculty of Education, Classroom Teaching Department

(n = 57), Turkish Language Teaching Department (n = 60), English Language Teaching Department (n = 40), Visual Arts Teaching Department (n = 20) in Hatay in Turkey.

2.3. Instruments

Personal information form developed by researchers, “Empathetic Tendency Scale” developed by Dökmen (1988) were used as data collection tools. Likert type ‘Empathetic Tendency Scale’ comprise of 20 items included 5 answer options such as “Not suitable for me at all”, “Not suitable for me”, “I am undecided”, “Very suitable for me” and “Totally suitable for me”. These options range from 1 to 5. In the scale, 3, 6, 7, 8, 11, 12, 13, 15 questions were gathered in reverse order. While minimum score that can be obtained from the scale is 20, maximum score is 100. If the score obtained from the scale is high, the empathetic tendency is high and if low, the empathetic tendency is low. The scale was implemented to 70 students twice at three-week intervals, and the test-retest reliability coefficient was reached as ,82. The correlation coefficient between the scores of the students from the single and double items of the scale was determined as ,81 with the split half-test. The criterion-related validity coefficient was found as ,68 between the ‘Empathetic Tendency Scale’ and the Intraception subscale of the ‘Edwards Personal Preference Schedule’.

2.4. Data Analysis

In the analysis of the data were used frequency and percentage distributions of descriptive statistical techniques and Mann Whitney U test for single comparisons and Kruskal Wallis H test for multiple comparisons from non-parametric tests because the data are not normally distributed. In the research, the level of significance was taken as $p < 0.05$.

3. Results

In this part, the findings of the analysis are described. In the [Table 1](#) descriptive statistics of demographical data of study group were presented.

Table 1. Descriptive Statistics of Demographical Data of Study Group

Variables		f	%
Gender	Female	133	57,3
	Male	99	42,7
Age	20-22	78	33,6
	23-25	128	55,2
	26 and over	26	11,2
Department	Physical Education and Sports Teaching	55	23,7
	Classroom Teaching	57	24,6
	Turkish Language Teaching	60	25,9
	English Language Teaching	40	17,2
	Visual Arts Teaching	20	8,6
Doing Regular Sports Status	Yes	68	29,3
	No	164	70,7

In [Table 1](#), according to the results regarding the personal features of the participants, there were 133 (57,3 %) female and 99 (42,7 %) male participants, in terms of age there were 78 (33,6 %) in the age range of 20-22, 128 (55,2 %) in the age range of 23-25, 26 (11,2 %) in the age range of 26 and over participants, in terms of departments of physical education and sports teaching 55 (23,7 %), 57 (24,6%) from the classroom teaching department, 60 (25,9 %) from the Turkish language teaching department, 40 (17,2 %) from the English language teaching department, 20 (8,6 %) from the visual arts teaching department, 68 (29,3 %) participants did not do sports and 164 (70,7 %) participants doing regular sports.

In the [Table 2](#) averages of Empathetic Tendency Scale depending on departments were presented.

Table 2. Raw Scores of Empathetic Tendency Scale Depending on Departments

Departments	N	Min.	Max.	x±sd
Physical Education and Sports Teaching	55	57,00	86,00	68,69±7,16
Classroom Teaching	57	48,00	84,00	66,61±6,92
Turkish Language Teaching	60	50,00	79,00	66,43±6,46
English Language Teaching	40	53,00	82,00	68,72±6,99
Visual Arts Teaching	20	48,00	75,00	63,25±8,21
Departments total	232	48,00	86,00	67,13±7,11

In [Table 2](#), when the averages of ‘Empathetic Tendency Scale’ were examined by departments, it was determined that empathetic tendency levels of English language teacher and physical education and sports teacher candidates have higher empathetic tendency levels than classroom, Turkish language and visual arts teachers candidates. The average of empathetic tendency of all departments was found as moderate.

[Table 3](#) points out the Mann Whitney U test analysis of Empathetic Tendency Scale as regards to gender.

Table 3. Depending on Gender Mann Whitney U Test Results of Empathetic Tendency Scale

	Gender	N	Order Average	U	p
Empathetic Tendency	Female	133	116,27	-,060	,952
	Male	99	116,81		

P < 0,05

In [Table 3](#), as regards to Mann Whitney U test results, in terms of gender variance it wasn't found a significant difference among empathetic tendency levels of teacher candidates female and male teacher candidates ($p > 0,05$).

[Table 4](#) points out Kruskal Wallis H test analysis of Empathetic Tendency Scale as regards to the age.

Table 4. Depending on Age Kruskal Wallis H Test Results of Empathetic Tendency Scale

	Age	N	Order Average	X ²	p
Empathetic Tendency	20-22	78	115,99	,094	,954
	23-25	128	116,04		
	26 and over	26	120,29		

P < 0,05

In [Table 4](#), as regards to Kruskal Wallis H Test results, in terms of age variance it wasn't found a significant difference among empathetic tendency levels of teacher candidates ($p > 0,05$).

[Table 5](#) presents the results of Kruskal Wallis H test analysis as regards to departments of Empathetic Tendency Scale.

Table 5. Depending on Department Kruskal Wallis H Test Results of Empathetic Tendency Scale

	Departments	N	Order Average	X ²	p
Empathetic Tendency	Physical Education and Sports Teaching	55	126,28	6,904	,141
	Classroom Teaching	57	112,84		
	Turkish Language Teaching	60	111,03		
	English Language Teaching	40	130,39		
	Visual Arts Teaching	20	88,68		

P < 0,05

In [Table 5](#), as regards to Kruskal Wallis H test results, in terms of department variance it wasn't found a significant difference among empathetic tendency levels of teacher candidates ($p > 0,05$).

Table 6 indicates Mann Whitney U test analysis as regards to doing regular sports status of Empathetic Tendency Scale.

Table 6. Depending on Doing Regular Sports Mann Whitney U Test Results of Empathetic Tendency Scale

Doing Regular Sports Status		N	Order Average	U	p
Empathetical Tendency	Yes	68	119,15	-,388	,698
	No	164	115,40		

$P < 0,05$

In Table 6, as regards to Mann Whitney U test results, in terms of doing regular sports variance it wasn't found a significant difference among empathetic tendency levels of teacher candidates ($p > 0,05$).

4. Discussion

As regards to results of Table 2, it was stated that empathetic tendency levels of English language teacher and physical education and sports teacher candidates have higher empathetic tendency levels than classroom, Turkish language and visual arts teachers candidates. This result can be explained by the fact that the sports backgrounds of the students of physical education and sports teaching department positively affect the development of empathy. It is because sports have the potential to develop empathy in individuals as well as many social skills. Gano-Overway et al. (2009) observed that students' empathy skills increased through sportive activities in their studies aimed at improving empathy skills of the students they included in a special sports program.

As regards to results of Table 3, it wasn't found a significant difference among empathetic tendency levels of male and female teacher candidates. As regards to this result, gender is not thought to affect the empathic tendency levels of teacher candidates. Parallel with research result, Alver (1998) found that there is no relationship between gender adaptation and empathetic skills. Similarly, there are studies that do not differ between gender and empathetic tendency (García-López, Gutiérrez, 2014; Bryant, 1982; Eisenberg, McWolly, 1993; Yılmaz, Akyel, 2008). Besides this, in different studies, it was found that there were studies that found that women had more empathetic tendency than men (Olweus, Endresen, 1998; Eisenberg et al., 2001; Öztürk et al., 2004; Toussaint, Webb, 2005; Alver, 2005; Çelik, 2008; Gülle, 2015).

As regards to results of Table 4, it wasn't found a significant difference among empathetic tendency levels of teacher candidates from the point of age. With the recognition that empathy is a feature that can be improved, empathy education has gained importance. However, it is not possible to educate each individual at the same level. It has been suggested by the researchers that the experience of learning to establish empathy by chance or accidental at an early age is important and even empathy education can be built on these experiences only in advanced lives and it is concluded that the empathy tendency increases with age (Olweus, Endresen, 1998). It has been observed that the same results have been reached with the results obtained from the age variables of the students and many studies conducted in the field (Uygun, 2006; Kolayış, Yiğiter 2010; Taner Derman, 2011; Certel et al., 2013). Considering that the age ranges of the teacher candidates are close to each other and leave behind adolescence, it can be said that it isn't significant difference from the point of age.

As regards to results of Table 5, it wasn't found a significant difference among empathetic tendency levels of teacher candidates in the aspects of departments. Considering this result, considering that the group participating in the research was trained for the teaching profession, it is thought that each teacher candidate assimilated, regardless of the branch of empathy, which is one of the important values of the teaching profession. Similar results have been reached in studies conducted among university students doing exercises and department of sports sciences students. Mutlu et al. (2014) in their research for tennis students, they could not find a significant difference among empathetic tendency levels of sports science students and other faculty students. Yiğiter et al. (2011) found that it wasn't difference among empathetic tendencies of students studying in different departments in the school of physical education and sports. Myyry and Helkama (2001); Arslanoğlu (2012); Gülle (2015) in their studies were specified the opposite outcomes of the research results. Besides, Genç and Kalafat (2008) designated that the opinions of teacher

candidates studying in different departments at the faculty of education about the empathetic tendency were separated from each other.

As regards to results of Table 6, it wasn't found a significant difference among empathetic tendency levels of teacher candidates who do regular sports and those who did not. Yılmaz (2013), Solak (2011) and Kolayış and Yiğiter (2010) found that doing exercises did not make a significant difference on the level of empathetic tendency in their researches for university students. These results support the findings of the research.

5. Conclusion

Yet, although sports have an important place in gaining important emotions in individuals' lives, it is not expected that this study could not make a difference. Because, Kırımoglu et al. (2016) designated that empathetic tendency levels of university students who do sports are higher than university students who don't do sports. Kalliopuska (1987) found that empathy is an important variable in sport activity.

Performing experimental studies in the field may be one of the most vital suggestions in terms of revealing important results. It is thought that very important data can be acquired through beta results of empathic studies that can be performed with bio-feedback instruments. Furthermore, it can be said that conducting empathic tendency researches for different sports branches can produce important results about how individuals should be approached in sports branches.

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