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## Original research article

# ATTITUDES OF THE STUDENTS OF THE TEACHER-TRAINING FACULTY IN VRANJE TOWARDS PHYSICAL EDUCATION

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Abstract. The goal of the paper was to determine the attitudes of the students of the Teacher-Training Faculty in Vranje towards the physical education curriculum. The goal was also to determine the differences in attitudes of the students of physical education in relation to gender and their year of study. Sample consisted of 447 students of all years of studies and both genders, 84 males and 393 females. Students' attitudes were determined by Kneer's inventory of attitudes. The analysis of the results showed that there was no significant difference (T-test) in terms of gender. Based on the significance of the ANOVA test (sig. =0.000), it can be concluded that there are statistically significant differences in the average questionnaire scores among the participants of different years of study. Based on the significance of the Bonferroni test, it is concluded that there are differences between the first and second, first and fourth, as well as second and fourth and third and fourth year of studies in the average questionnaire scores.

Key words: attitudes, students, physical education

## INTRODUCTION

Scientific studies about social attitudes do not have a long history in relation with the significance they now have. The term attitude is widely used today, with its colloquial and scientific use. The latest experimental research about change in attitudes has significantly altered our knowledge about the process of forming and changing attitudes. General and specific factors that affect the change in attitude are interesting as well. The first theories dealing with these issues were, for example, Holland's theory of behavioral strengthening, which referred to social learning via instrumental strengthening. Other theories of studies of attitudes appeared as well, such as Heider's (1958) that considers attitudes as coherent reflections of the environment and the situations in it as possible, as well as reflections of us.

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Another interesting theory is that of Festinger (1957), the theory of cognitive dissonance, which is very similar to Heider's theory. There are many other theories about attitudes and their change, such as typological theories. One of them is Katz's (1960), a theory that implies that cognitive elements and their compliance are not as important as motivational moments and the meaning and the benefits of attitude.

Familiarity with the rules of formation of the attitudes among students, future teachers and tutors, can all contribute to solving of the following issues related to the physical education curriculum:

- a) Providing of all the necessary conditions time, funds, staff and others for complete and competent performing of curricular, extra-curricular and all other forms of physical education.
- b) Precise and comprehensive monitoring and analysis of the condition and results achieved in this educational area, and informing all the interested subjects about it: students, educational authorities (in charge) and others, and together with them undertake all the necessary measures for improvement, i.e. further advancement of this activity.
- c) Providing special physical exercise for students with weak health and impaired physical abilities, and in that way fully contributing to eliminating, overcoming, or at least alleviating the condition, and therefore improving or upgrading their health.
- d) Providing of all the necessary conditions for students who are athletes or those particularly talented for sports creativity (sport talents) and other creative activities in physical education, and enabling them to completely realize their potential.
- e) Forming of special work, advisory and other committees (boards, councils etc.) in order to accomplish collaboration between the faculty and the social environment, especially with organizations for physical education, health institutions and others, and thus join efforts for the promotion of physical education in general, and particularly physical education at the university level.

Much of attitude research begins with the question: What is attitude? We can find answers in research papers written by national and foreign authors. In their studies they review attitude definitions, which are interesting for our research. The majority of authors point out four general types of attitude definitions:

- 1. Attitude as physical alacrity for action (types of adequacy),
- 2. Attitude as general alacrity for action (general theories),
- 3. Attitude as self-behavior (not only as alacrity for behavior),
- 4. Attitude more like a mental, rather than a neural or motor state of alacrity (theory of attitude research).

There were many attempts to define attitude, for example of Morgan & Davies (1956); Allport (1935); Rot (1973); Krech, Crutchfield, & Balaki (1972); McGuire (1969); Eysenck (1954); Mouly (1968); Osgood, Suci, & Tannenbaum (1957); English & English (1958); Rosenberg (1956). We explicitly chose a definition of Galić (1994), which is accepted as the most topical for this research: 'Attitude towards sport and recreational activities (physical education) represents the positive or negative relation of an each individual to physical education, sport and recreation, and, quite certainly decides whether an individual is for or against.'

With the research and studying of attitudes there is a variety of methodological, empirical and theoretical starting points of many psychologists, but not only psychologists, who talk about the complexity of the nature of attitude, but also of scientists from other scientific areas. Cognitive-theoretical or empirical curiosity of the researchers and scientist

indicates that attitudes actually contribute to understanding of personality, and with certain accuracy predict its behavior and control. Attitudes can be divided on account of different criteria. According to one of them, they can be divided into personal and social. Former studies of pupils' and students' attitudes towards physical education were carried out by physical education pedagogues, and we can particularly mention the following researchers: Kitić, Ivanović, Udovičić, Madić, Radovanović, Vuković, Vragović, & Bjelica (Milošević, 1997). These authors performed their research in primary and secondary schools and at universities. All of them affirmed distinctively positive attitudes of male and female students towards physical education. One of the first methodological research studies done here was the research of students' attitudes, conducted within the project managed by Matić (1982).

Međedović & Međedović (2007) were researching pupils' attitudes, the attitudes of their parents, and students' attitudes towards physical education. Međedović et al. (2014) were also studying students' attitudes towards a skiing curriculum.

Methodical research was done by Momčilović (1994, 2006). On a sample of more than 1000 participants from the faculties of Teacher Education in Serbia he studied students' attitudes towards physical education using Mercer's inventory of attitudes.

Pljakić (2011) presented the results of attitude research preformed on a sample of 1177 4<sup>th</sup> grade pupils, of both genders, in twelve primary schools in Novi Pazar.

The aim of actual research was to determine if there are statistically significant differences in attitudes of the Teacher-Training Faculty in Vranje students towards physical education based on gender and year of study.

## **METHODS**

Following independent variables (Gender and Year of study) and dependent variable (Students' attitudes) were defined. As an instrument of research for the assessment of attitudes, a modified version of Kneer's inventory of attitudes was used (Burrow & McGee, 1975).

Students were grading each of the 40 specified prompts with marks 1 to 5. Forty of the offered prompts represent the inventory of attitudes. Scoring is performed in the following manner: Positive items are evaluated as: Completely agree – 5; Agree – 4, Indecisive or neutral – 3; Disagree – 2; Completely disagree – 1; Negative items are evaluated as: Completely agree – 1; Agree – 2; Indecisive or neutral – 3; Disagree – 4; Completely disagree – 5.

The value each question should have is given numerically in the brackets under every question. Thus, every positive attitude gets from 160 to 210 points. A neutral to positive attitude gets from 120 to 159 points. A negative attitude to neutral gets from 80 to 119 points, and a very negative attitude gets from 40 to 79 points. Cronbach's alpha coefficient, obtained in this research is 0.96 and indicates the very high reliability of the test.

## Sample of participants

The sample is mixed, on purpose. The research was conducted on 447 students of both genders and different year of study (table 1).

Table 1 The sample of subjects

1 <sup>st</sup> year students		2 <sup>nd</sup> year students		3 <sup>rd</sup> year students		4 <sup>th</sup> year students	
male	female	male	female	male	female	male	female
21	114	23	86	20	88	20	105
Totally: 447 participants							

# Statistical procedures

For data processing the methods of descriptive statistics and conclusive statistics were used, and a statistic program for data processing SPSS 11.5. Descriptive statistics (N, number of participants; Min, minimum result; Max, maximum result; Mean, mean value; Std. Deviation, standard deviation), T-test and method ANOVA were done.

### **RESULTS**

Within forty questions contained in Kneer's instrument for the study of attitudes towards physical education, and in accordance with the grounded hypotheses, we got the following results, which are reflected in the scores difference among the groups of participants.

Table 2 Results from Kneer's questionnaire

	N	Min	Max	Mean	Std. Deviation
The average score from Kneer's questionnaire	477	1.05	4.90	2.69	.91
Valid N (listwise)	477				

Table 2 shows that the number of valid participants is 477, minimum result is 1.05, maximum result is 4.90, mean value is 2.69 and standard deviation is 0.91.

Table 3 Results of the participants from Kneer's questionnaire based on gender

	Gender	N	Mean	Std. Deviation	Std. Error
The average	Male	84	2.66	.95	.10
questionnaire score	Female	393	2.70	.91	.05

Table 3 shows the mean value from questionnaire depending on participant gender. The number of men is 84, while the number of women is 393. The mean value of male participants is 2.66 and the mean value of female participants is 2.70. The standard deviation of male participants is 0.95 and the standard deviation of female participants is 0.91. The standard error of male participants is 0.10 and the standard error of female participants is 0.05.

Table 4 Comparison of scores among genders from Kneer's questionnaire

	T-test for equality of means			
The average	T DF Sig. (2-tailed) Mean Difference			
questionnaire score	-0.35 475 0.726 -0.04			

Based on the importance of the T-test (sig. =0.726), we conclude that there are no statistically significant differences in the average scores from the questionnaire between both genders (Table 4).

Table 5 shows the number of participants depending on year of studies, mean values, standard deviations and standard errors.

Table 5 The average score of the participants based on the year of studies

Year of study	N	Mean	Std. Deviation	Std. Error
1 <sup>st</sup>	135	2.65	.90	.08
2 <sup>nd</sup>	109	2.96	.86	.08
3 <sup>rd</sup>	108	2.89	.80	.08
$4^{th}$	125	2.34	.94	.08
Total	477	2.69	.91	.04

Based on the significance of the ANOVA test (sig. = 0.000), we can conclude that there are statistically significant differences in the average scores from the questionnaire between the participants of different years of study (table 6).

Table 6 The significance of differences among the average scores of the participants

	Sum of squares	DF	Mean square	F	Sig.
Between groups	27.58	3	9.19	11.84	.000
Within groups	367.32	473	.78		
Total	394.90	476			

Based on the significance of Levene's test (sig. = 0.497), we can conclude that the groups are homogenous and therefore we can use the Bonferroni test for multiple comparison (table 7).

Table 7 The average score of the participants in relation to their year of study

	(i) Year of study	(j) Year of study	Mean Difference (i-j)	Std. Error	Sig.
		$2^{nd}$	31(*)	.11	.038
	1 <sup>st</sup>	$3^{\rm rd}$	24	.11	.235
		$4^{th}$	.31(*)	.11	.030
Bonferroni		1 <sup>st</sup>	.31(*)	.11	.038
	$2^{\text{nd}}$	$3^{\rm rd}$	.076	.12	1.000
		$4^{ ext{th}}$	.62(*)	.12	.000
		1 <sup>st</sup>	.24	.11	.235
Bo	$3^{\rm rd}$	$2^{\text{nd}}$	08	.12	1.000
-		$4^{th}$	.54(*)	.12	.000
		1 <sup>st</sup>	31(*)	.11	.030
	$4^{ ext{th}}$	$2^{\text{nd}}$	62(*)	.12	.000
		$3^{\rm rd}$	54(*)	.12	.000

Based on the significance of the Bonferroni test we conclude that based on the average score from the questionnaire there are differences between students of 1st and 2nd, 1st and 4th, as well as 2nd and 4th, and 3rd and 4th year of study (table 7). The 4th year students have a tendency toward a negative attitude.

### DISCUSSION

As it is already known, attitudes are the result of man's socialization. They are being adopted, as mentioned by Rot (1973), primarily by social learning, i.e. learning in social conditions where there are various social factors. We are particularly interested in how students can change their attitudes, not only towards physical education, but towards other value categories as well. Many authors (Rot, 1973; Havelka, 1972; Galić, 1995, Milošević, 1997, Momčilović, 1994, 2006) indicate that factors that affect the change of attitudes are: general, universal factors (primarily economic factors, the standard of living), behavior (belonging to a certain social group), and specific factors (influence of the public opinion, media, propaganda).

Research indicates that in their fourth year of studies students have tendencies towards a negative attitude. This outcome is an important indicator of a need for further research, since it is significantly different from aforementioned studies where students' attitudes are positive and can serve as a basis for a change of attitudes towards physical education with students of the faculties of Teacher Education in Serbia.

Such an attitude is a good indicator for all those who are in a direct or indirect way working with students and need to change something. Of course, the question remains: What should and must be changed? In any case, the curriculum of the group of subjects at the Teacher-Training Faculty in Vranje that is dealing with physical education and sport deserves more thorough analysis. Namely, there is no subject that requires some practical sort of physical exercise from the students.

One of the reasons for such an attitude tendency among fourth year students can be that the teaching methods of physical education have no basis in the theoretical subject of physical education, which is not the case with Serbian language and mathematics. The reason for that can be that students do not have the possibility to engage in sport clubs. At their faculty there is actually no students' sport club.

We consider that it is necessary to study attitudes towards physical education that would envelop all six faculties of Teacher Education in Serbia.

We agree with Rot (1973) that the most important influence among students for the formation and change of attitudes, and attitudes towards physical education as well, is exerted by the so-called primary groups, such as: family, circle of friends, or school. For the forming and change of attitudes towards physical education the role of awareness and knowledge is important, followed by personal moments, which are motivation of individual and permanent characteristics or personality traits.

## CONCLUSION

In this paper, we provided one aspect and approach to the research of students' attitudes of the Teacher-Training Faculty in Vranje towards physical education, with the task of indicating certain students' views towards one significant segment of education, i.e. physical education. More extensive research of course requires a more complex approach, which implies engaging of both individuals and broader social factors.

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# STAVOVI STUDENATA UČITELJSKOG FAKULTETA U VRANJU PREMA FIZIČKOM VASPITANJU

Cilj rada bio je da se utvrde stavovi studenata Učiteljskog fakulteta u Vranju prema kurikulumu fizičkog vaspitanja, kao i da se utvrde razlike u stavovima učenika fizičkog vaspitanja u odnosu na pol i godinu studija. Uzorak je sačinjavalo 447 učenika svih godina studija i oba pola, 84 muškaraca i 393 devojaka. Stavovi studenata utvrđeni su baterijom testova po Kneer-u. Analizom rezultata utvrJeno je da nije bilo značajne razlike (t-test) u odnosu na pol. Na osnovu yna;ajnosti reyultata ANOVA metode (sig.=0,000), može se zaključiti da postoje statistički značajne razlike u prosečnim rezultatima upitnika između studenata različitih godina studija. Na osnovu značajnosti rezultata Bonferroni testa, može se zaključiti da postoje razlike između prve i druge, prve i četvrte, druge i četvrte, kao i treće i četvrte godine studija u prosečnim rezultatima upitnika.

Ključne reči: stavovi, studenti, fizičko vaspitanje