

THE ATTITUDES OF FEMALE STUDENTS SPORTSWOMEN AND NON SPORTSWOMEN ABOUT SPORT AND PHYSICAL EDUCATION

(Research note)

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Abstract

The goal of this research was to evaluate the attitudes of female students sportswomen and no sportswomen about sport and physical education. the research was realized in the first term of 2011/2012 school year with the sample of 64 female students, which were divided into sub sample of 29 sportswomen and 35 non sportswomen. Mercer's inventory is used for the evaluation of attitudes with 40 statements. Apart from numeric and percentage evaluation, multivariant analysis of variance and discriminative analysis and Roy's test were applied. The values of multivariant analysis and discriminative analysis indicate the existence of statistically significant difference and clearly defined limit between sportswomen and non sportswomen, which indicates that sportswomen have positive attitude towards sport and physical education.

Keywords: *Mercer's inventory, female students, older school age students, multivariant analysis of variance, discriminative analysis,*

INTRODUCTION

The time in which we live has a great influence on all dimensions of our lives and with its characteristics directs us towards actual social tendencies and systems of values. In that sense, physical culture is not left out of this permanent process of development and improvement with the aim of adaptation to the needs of modern man.

Physical education is certainly basic, but also obligatory educational area of physical culture, which is applied to all institutions for the education of children from pre schools, primary and secondary school. But regardless of its obligatory character which is given to physical education by the law and by the educational plan and programme which is given by the Ministry of Education, it is also important that teachers, parents and society in general develop positive attitude about the importance of physical education.

The importance of physical education during school education period is mentioned in the work of Krsmanović & Todorović (1996) "If a student during his education is not trained and not involved in a certain sport activity or he does not get enough information about the significance of exercise and does not acquire habit of regular exercise, then he will take part in any kind of organized way of physical activity very hard in the following period."

The research of students' attitudes enables the insight into the way of thinking that students have about a problem, notion etc. In this way we determine effects, apart from the influence of other educational processes,

of other factors (family, surroundings, mates, media..), because students spend only some time at school. There are many factors which influence the forming of attitudes, so it is ungrateful to consider some of them as dominant, it is more correct to have their unity of influence.

Measuring (valorization) of attitude is achieved by the evaluation of its dimensions (metric parameters). Measuring of dimensions of some spiritual notion (as an attitude) is a realistic achievable project. The latest sociological research indicates that there are measuring instruments which can help in reaching the information about the key attitude dimensions. In modern sociology there are talks about four essential attitude dimensions. Those four mentioned metric characteristics (four dimensions) are: *direction, level, intensity and prominence*.

Measuring of attitude dimensions is done most efficiently by the *scaling technique*. So, by the use of scale which is an instrument of this technique and which can be verbal, numeric or graphic? It enables precise gradation within dimensions of the attitudes. Scales for attitude measuring are more complex and more confident instruments than survey or an interview (Perić, 1994).

In most studies about attitudes scales of Tersons' type, Lickert's type and Bogardus' type. In kinesiology research with social orientation a combined model of scale can be also used. However Terstons' scale and Lickert's scale are most recognized.

The research (Radovanović, Arunović, Madić, &

Višnjić, 1993) of attitudes of secondary school students in Serbia according to the physical education teachers, indicates that students highly estimate kindness, openness and good lesson organization.

The second research (Ilić & Stević, 1996) indicates that students have highly positive attitude about the values of physical education, and that the feeling of pleasure during lessons and instructive style of work of teachers represent very important factors for the development of positive students' attitudes, while authoritative approach represents the source of negative attitude of students towards physical education.

The attitudes about physical education by the use of Mercer's inventory were researched by (Katić, 1985; Višnjić and Marković, 2008; Marković, Sekeljić, Višnjić, & Ilčev, 2013).

The goal of the research was to determine eventual influence of sport on forming of positive attitudes of female students about sport and physical education.

METHOD

This was empirical research with transversal character, realized in primary school "Jovan Jovanovic Zmaj" in Svilajnac, in the first term of 2011/2012 school year.

The sample consisted of 64 female students divided into two sub samples – according to their sport engagement. One sub sample consisted of 29 sportswomen and the other one consisted of 35 non sportswomen in seventh and eighth grade of primary school.

The instrument which was applied in this research was Mercer's inventory of attitudes. This inventory is an adaptation which was worked out by Galloway with the aim of evaluating the female students attitudes. The revision has accuracy of 0.92, and value of coefficient is 0.74 and it is calculated according to the criterion of evaluator's personal scale (Barrow, and Mec Gi, 1975).

Mercer gave a contribution to methodological improvement of this instrument by precise definition of results. He recommended the procedure based on the use of Lickert's scale type.

The wholeness of the evaluation of the attitude towards physical education consists of five characteristics (variables) and these are: psychological

space of physical education (contains the following statements: 1, 4, 7, 13, 14, 22, 26, 36 and 39); respecting the rules in physical education (contains the following statements: 2, 9, 11, 19, 21, 30 and 31); educational influence of physical education (contains the following statements: 10, 15, 24, 25, 27, 35, 37,38, and 40); value of the significance of physical education (contains the following statements: 6,12, 16, 17, 18, 20, 28, 29, 32 and 33) and negative effects of physical education (contains the following statements: 3, 5, 8, 23 and 34).

In the data processing we used discriminative analysis, Roy's test and multivariant analysis of variance (MANOVA).

RESULTS

By looking into the Table 1 it can be stated that there is statistically significant difference between female students sportswomen and non sportswomen in relation to five variables for the evaluation of attitudes towards sport and physical education. The level of statistical significance is $p=.000$.

Discriminative analysis indicates achieved level of statistical significance $p=.000$, for five synthesized variables, according to the evaluation of attitude of

Table 1. The significance of differences between female students sportswomen and non sportswomen in relation to the evaluation of attitudes towards sport and physical education

<i>Analysis</i>	<i>n</i>	<i>F</i>	<i>p</i>
Manova	5	10.747	.000
Discriminative	5	10.655	.000

physical education. It means that there is statistically significant difference and clearly defined limit between female students sportswomen and non sportswomen in relation to the evaluation of attitude towards sport and physical education.

The values indicate that between sportswomen and non sportswomen there is statistically significant difference, in relation to the following variables:

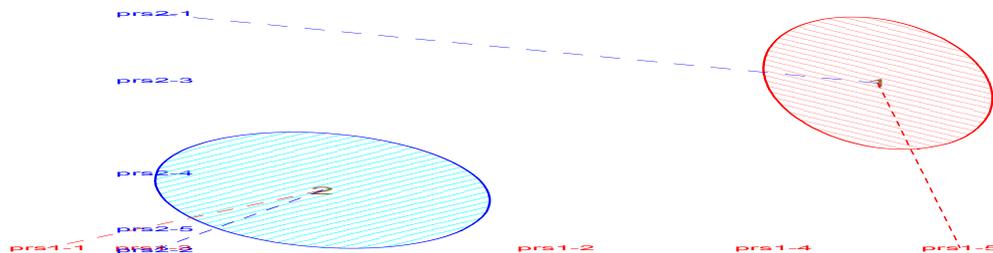
Table 2. The significance of differences between female students sportswomen and non sportswomen in relation to some characteristics of evaluation of attitudes towards sport and physical education

<i>Variables</i>	χ^2	<i>R</i>	<i>F</i>	<i>p</i>
Psychological space of physical education	.486	.556	26.871	.000
Respecting of rules in physical education	.285	.297	5.797	.019
Negative effects of physical education	.257	.266	4.567	.037
Value of physical education	.291	.305	6.136	.016
Educational influence of physical education	.217	.222	3.114	.083

Table 3. Discriminative coefficients between female students sportswomen and non sportswomen in relation to the evaluation of attitudes towards sport and physical education

Variables	Discriminative coefficients
Psychological space of physical education	.554
Respecting of rules in physical education	.247
Negative effects of physical education	.024
Value of physical education	.081
Educational influence of physical education	.151

Graph 1. Ellipse (trust interval) sportswomen and non sportswomen in relation to these two most discriminative states (psychological space of physical education and respecting of rules in physical education)



Legend: sportswomen (1); non sportswomen (2); I don't agree (pr1-1); I partly don't agree (pr1-2); I am undecided (pr1-3); I partly agree (pr1-4); I completely agree (pr1-5); I don't agree (pr2-1); I partly don't agree (pr2-2); I am undecided (pr2-3); I partly agree (pr2-4); I completely agree (pr2-5)

psychological space of physical education, with the level of statistical significance $p=.000$, respecting of rules in physical education, with the level of statistical significance $p=.019$, negative effects of physical education, with the level of statistical significance $p=.037$, and value of physical education with a level of statistical significance $p=.016$. statistically significant difference between sportswomen and non sportswomen does not exist only for the variable educational influence of physical education.

Discriminative coefficients indicate that the highest contribution to discriminativity between female student sportswomen and non sportswomen in relation to the evaluation of attitudes towards sport and physical education is for a variable - psychological space of physical education with a value .554, and the lowest is at variable – negative effects in physical education with a value .024.

On Graph 1 apcis represents variable *psychological space of physical education* (pr1), with a five level scale in evaluation of attitude, and ordinate represents variable *respecting rules in physical education* (pr2), with a five level scale in evaluation of attitudes.

It can be seen, that in relation to axis respecting

the rules in physical education, the most frequent statement at sportswomen is I completely agree, and at non sportswomen I don't agree. In relation to axis, respecting of rule in physical education, the statement I don't agree is for sportswomen and for non sportswomen the statement is I partly don't agree.

CONCLUSION

The research was doen on sub sample of 29 sportswomen and a sub sample of 35 non sportswomen in seventh and eighth grade of primary school, the values of Roy's test indicate that there is no statistically significant difference between sportswomn and non sportswomen only for two variables educational influence of physical education. This can be explained that at sportswomen and non sportswomen dominates the attitude that physical education with its contents and effects has educational role. Active participation in sport games teaches them to respect rules and relations which rule in competitions. Sex also has an influence on forming of positive attitudes. male studnets have more positive attitude towards physical education in comparison to female students (Marković et al., 2013). Number of lessons of physical education also influences

the attitudes towards physical education. Students who have more lessons of physical education have more positive attitude towards physical education (Visnjić and Marković, 2008).

Some of the factors which would influence on forming of more positive attitudes of primary school students towards physical education would be as follows: organising of homogenous groups, adequate programme contents of physical education lessons, intensity of exercise in relation to age and sex, principle of fun and recreation during lessons, avoiding of embarrassing situations, giving advice about body movement exercise in extracurricular activities.

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