

## FORMING OF STUDENTS' ATTITUDES DEPENDING ON FREQUENCY OF PHYSICAL EDUCATION LESSONS

Zivorad Markovic

**Forming of students' attitudes depending on frequency of physical education lessons:** *The goal of this research was to determine eventual influence of different frequency of Physical Education lessons on forming of students' attitudes towards Physical Education. The specimen included 202 examinees, divided into two sub specimen groups – according to the criterion of frequency of Physical Education lessons: sub specimen with 102 examinees with two lessons of Physical Education per week and the other sub specimen with 100 examinees with three lessons of Physical Education per week. There were statistically significant differences and clearly defined borders between the two groups of examinees, which were processes by multivariate analysis of the variance and by discriminative analysis. Statistically significant difference was determined by the use of Roy's test between the two groups in relation to Mercer's sum. Statistically significant difference is in favour of the group of examinees which has three lesson of Physical Education.*

**Key words:** *attitudes, frequency of lessons, Physical Education, secondary school*

### INTRODUCTION

Mercer's inventory of attitudes is an adaptation of inventory which was worked out by Galloway with an aim to evaluate the attitudes of high school female students towards moral, social and spiritual values of Physical Education. Mercer's contributed to methodological perfection of this instrument defining precisely the scoring of the results. He suggested the procedure based upon the use of Lickert's type scale.

### SUBJECT PROBLEM AND THE GOAL OF RESEARCH

The subject of this research are attitudes of secondary school examinees towards Physical Education and physical culture.

The goal of this research was to determine the influence of frequency of Physical education lessons on forming of students' attitudes towards Physical Education and physical culture.

### Method of work

This was empirical research with transversal character, realized in Agricultural-veterinary secondary school with boarding school "Svilajnac" in Svilajnac, Republic of Serbia, and in secondary school of Internal Affairs in Sremska Kamenica, Republic of Serbia. The attitudes of examinees towards Physical Education were determined during regular school lessons of Physical Education by the use of Mercer's inventory of attitudes which was modified for the use in primary and secondary schools (modification was done by Matic, M. and associates in 1982.).

**The specimen** consisted of 202 examinees divided into two special sub specimens – according to the criterion of frequency of Physical Education lessons. The sub specimen with 102 examinees who had two Physical Education lessons per week and sub specimen of 100 examinees who had three lessons of Physical Education per week.

**The research variable** is from the field of students' attitudes towards the Physical Education lessons and values of Physical Education. It consists of 40 statements of Mercer's inventory of attitudes, maximum score is 200. Higher score is an indicator of more positive attitude towards the Physical Education lessons and the values of physical culture.

### Mathematical and statistical data processing

The data acquired by empirical research were processed with suitable mathematical statistical procedures. Mercer's sum, multivariate analysis of variance, discriminative analysis and Roy's test were applied in this research.

**Results of the research with discussion**

The analysis will be applied on realized Mercer's sums of both groups of examinees. Mercer's sum has five modalities: to 135 points-very little, from 136 to 148 points - little, from 149 to 154 points - moderate, from 155 to 162 points - much, and from 163 to 185 points - very much.

**Evaluation of the analysis of examinees' attitudes towards**

**Physical Education in relation to the frequency of Physical Education lessons**

This part shows numeric (n) and percentage (%) frequency of modality of examinees attitude towards Physical Education. It shows significant differences between and within levels.

**Table 1**

**Numeric (n) and percentage (%) frequency of Mercer's sum for two groups**

Points	to 135 points - very little		136 - 148 points - little		149 - 154 points - moderate		155 - 162 points - much		163 - 185 points - very much	
	n	%	n	%	n	%	n	%	n	%
Group-1	12	12.0	23	23.0	19	19.0	23	23.0	23	23.0
Group-2	29	28.4*	20	19.6	22	21.6	15	14.7	16	15.7

**Evaluation of the analysis of examinees' attitudes towards Physical Education in relation to Mercer's sum**

In this part of the work the statement has to be proved or rejected if there is significant difference between two groups of examinees with different frequency of Physical Education lessons in relation to Mercer's sum.

**Table 2**

**Significance of differences between groups in frequency of Physical Education lessons in relation to Mercer's sum**

Analysis	n	F	p
Manova	1	10.855	.001
Diskriminative	1	10.855	.001

It can be stated, by the insight in Table 2, that there is statistically significant difference and clearly defined border between two groups of examinees with different number of Physical Education lessons in relation to Mercer's sum.

**Table 3**

**Significance of differences between two groups of examinees in relation to researched variable - Mercer's sum**

Analysis	$\chi$	R	F	p
Mercer's sum	.221	.227	10.747	.001

On the basis of Roy's test it can be stated that between two groups of examinees in relation to Mercer's sum there is statistically significant difference, with a level of statistical significance of  $p=.001$ . Statistically significant difference is in favour of group of examinees that has more lessons of Physical Education per week.

Table 4

**Characteristics of the groups of examinees in relation to Mercer's sum**

Variable	Discriminative coefficients	Group - 1	Group - 2
Mercer's sum	.054	136 - 148, 155 - 162 163 - 185 points	135, 149 - 154 points

Discriminative coefficient denotes the difference between the groups with a value of 0.54. On the basis of the examinees' attitude towards the Physical Education lessons, which is shown by Mercer's sum it can be seen that group one has characteristics of 136-148, from 155-162 points and from 163-185 points. Group two has characteristics of 135 points, and from 149-154 points.

Table 5

**Homogeneity of groups by frequency of Physical Education lessons in relation to Mercer's sum**

Groups	m/n	%
group-1	69/100	69.00
group-2	51/102	50.00

69 examinees out of 100 have defined characteristics in the group with three lessons of Physical Education per week, which means that 31 examinees have other characteristics than characteristics of their group. Homogeneity is 69% and it is higher than in the group of examinees with two lessons of Physical Education per week. 51 examinees out of 102 have defined characteristics in the group of examinees with two lessons of Physical Education per week, which means that 51 examinees have other characteristics than their group. Homogeneity is 50%.

**CONCLUSION**

The conclusion can be as follows: Physical Education lessons in the group of examinees with three lessons per week, influenced with its positive effects the forming of more positive attitudes towards Physical Education.

**LITERATURE**

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**Contact:**

Zivorad Markovic, PhD. Department for didactic and methodic sciences. Kragujevac University, Pedagogical Faculty in Jagodina, Republic of Serbia. [zmarkovic@yahoo.com](mailto:zmarkovic@yahoo.com)

**Докладът е рецензиран.**