

GENDER DIFFERENCES IN SPORTS INVOLVEMENT AND MOTIVATION FOR ENGAGEMENT IN PHYSICAL EDUCATION IN PRIMARY SCHOOL

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Abstract

Physical education plays a central role in increasing the level and quality of physical activity, especially among young people, with a tendency to such a pattern of behavior one day become life-style. Since that physical ability, level of interest and commitment is varying from student to student, the study of problems of motivation for active involvement in physical activity is very important. At sample of 706 pupils from the 4th - 7th grade primary schools (age 11 – 14) were examined the gender differences in sports involvement and motivation for engagement in physical education. There was a statistically significant difference between boys and girls. Boys who were actively involved in sport attained the highest scores on the motivation scale, and girls who were not involved in sport at all attained the lowest scores. So, raising pupils' awareness of the advantages for health, regular growth and development, have their engagement in physical activities, at least in the most basic form, such as active participation in PE, would be important for girls since their scores at Motivation scale for measurement of involvement in PE were significantly lower than boys, no matter on their sports involvement.

Key words: gender, motivation, PE, sports involvement.

Introduction

Although sports can be a central form of content in physical education, physical education and sports are distinctively different regarding goals, expected outcomes, teaching and learning strategies, and education functions. So, sports might be defined as a type of organized physical activity whose goal is to engage participants in formal competition that takes place in interscholastic and other sporting arenas. Physical education, conversely, is a subject designed to help the learner become physically educated by learning necessary information and skills about physical activity. In sports, mastering specialized motor skills is the goal or the end of learning, whereas in physical education, practicing motor skills can be a means by which

students learn concepts and behavior-management strategies as well as develop motor skill proficiency.

Physical Education is a subject matter domain in which students are expected to learn knowledge and skills in sports and physical activities (Allison et al., 2000). Arnold (1979) claimed that physical education is education about movement, education through movement, and education in movement. Learning in physical education individuals often accomplish by mastering a physical movement through physical training. During this specific learning process, motivation serves as a primary force that leads students to achieve the learning goal (Solmon, 2003).

Fundamental movement skill competency increases the likelihood of children participating in different physical activities throughout their lives (Haywood and Getchell, 2005; Stodden et al., 2008). Indeed, studies have shown that childhood motor skill proficiency influences adolescent physical activity and fitness, mediated by perceived sports competence (Barnett et al., 2008). So, if the real aim of PE instruction is to help children understand, develop and adopt patterns of healthy lifestyle, it is necessary to investigate and boost their motivation for adoption of this kind of behavior and the best way to attain this aim is their motivation for maximal involvement in PE classes. And, during this process, many factors can interfere.

Gender is a very important factor that can facilitate or aggravate PE classes. Williams (1988) established that girls, contrary to boys, do not like neither the competing atmosphere in the class, or the classes dedicated to team sports. Also, Clifton & Gill (1994) reported that because of social influences, male and female students can develop differentiated individual interest in physical activities. At an early age, boys begin to show preferences for team sports, whereas girls begin to favor rhythmic activities (Lee et al., 1999).

Chepyator-Thomson & Ennis (1997) established that gender-related stereotypes for sports activities are manifested in PE classes as well. Namely, it has been shown that males avoid aerobic classes and high-school female students avoid weight lifting. In the mixed softball game males shouted abuse and critics at females and passed the ball less frequently to them than to their fellow male players in the mixed game of football.

Problem of Research

So, the problem of the research was motivation of pupils for more active participation in PE classes.

Research Focus

Focus of the research was put on determination of differences between students in motivation level for active participation in PE classes according to pupil's gender, level of sports involvement and opinion of self-sufficiency of knowledge acquired within PE classes.

Methodology of Research

General Background of Research

Variables

Independent variables:

- Students' opinion on sufficiency of knowledge acquired through PE instruction expressed by the following categories – sufficient for some students, sufficient for the majority of students and sufficient for all students.

- Sports involvement – actively, recreationally and not involved at all.

The control research variable was students' gender: male and female.

The dependent variable was the result (score) on the motivation scale obtained by replies from the questionnaire measuring students involvement in PE.

Sample of Research

The sample included 706 pupils (401 males and 305 females) of primary schools from the downtown Belgrade, with standard conditions for realization of PE syllabus. It consisted of 154 pupils of 4th grade – age 11, 121 pupils of 5th grade – age 12, 184 pupils of 6th grade – age 13, 247 pupils of 7th grade – age 14.

Instrument and Procedures

The research instrument was the questionnaire consisting of:

1. Motivation scale for measurement of involvement in PE,
2. The questions referring to involvement in sport and students' opinion on sufficiency of knowledge acquired through PE instruction

The Motivation scale for measurement of involvement in PE resulted from a revised MSP instrument used for Doctoral thesis of Barjaktarević (2001). The original scale originates from the instrument of Sports achievement motive of (MSP) Lazarević and Havelka (the instrument was created in 1976, and the results were published in 1981 in Serbian), from which a subscale of achievement motives was taken (the instrument also contains subscales for measurement of positive and negative competitive anxiety). The Motivation scale for measurement of involvement in PE consists of 29 items. Some of them were taken from the subscale of Sports achievement motives (from MSP instrument). Certain assertions were taken from the General achievement motives (MOP), created by Havelka & Lazarević (1981, in Serbian). One assertion was added by the revision author Barjaktarević (2001, in Serbian). Scoring was changed with regard to the original scale. Scoring is based on a 5-level Likert scale (1 = never to 5 = always). The possible minimum score on the scale is 29 and the maximum 145 points. The internal consistency of the scale, measured by Cronbach's α is 0,84 ($F = 165, 1004, df = 28, p < .000$).

The data were collected in the classroom environment and the research was anonymous.

Data Analysis

The data were processed with the SPSS program version 13.0. The following methodes were used: chi-square test and analysis of variance.

Results of Research

In the examination of the relation between sport's involvement and students' opinion on sufficiency of knowledge acquired through PE instruction, there was no statistically significant difference ($\chi^2 = 1,757; df = 4; p = 0.0780$).

Table 1. The relationships between gender, level of sport's involvement and opinion on sufficiency of knowledge acquired through PE classes.

Gender	Level of sport's involvement			Opinion on sufficiency of knowledge acquired through PE classes		
	Not involved at all	Recreationally	Actively	Sufficient for all students	Sufficient for the majority of students	Sufficient for some students
Male	55	95	251	127	162	112
Female	93	82	130	98	133	74
Total	148 (21 %)	177 (25 %)	381 (54 %)	225 (32 %)	295 (42 %)	186 (26 %)
$\chi^2 = 36,765; df = 2; p < 0.000$				$\chi^2 = 1,323; df = 2; p < 0.516$		

In the examination of the relation between gender and level of sport's involvement and gender and students' opinion on sufficiency of knowledge acquired through PE instruction, there were statistically significant differences. Boys were much more involved in some kind of sport's activity and they thought that knowledge acquired through PE classes was sufficient for the majority of students.

Table 2. The results of descriptive statistics on The Motivation scale for measurement of involvement in PE according to gender, level of sport's involvement and opinion on sufficiency of knowledge acquired through PE classes.

Students' opinion on sufficiency of knowledge acquired through PE instructions	Sport's involvement	Male			Female			Total		
		M	SD	N	M	SD	N	M	SD	N
Sufficient for all students	Not involved at all	102.05	19.74	20	101.27	16.85	26	101.61	17.95	46
	Recreationally	105.93	15.99	30	97.29	15.54	21	102.37	16.23	51
	Actively	107.96	14.92	77	105.08	14.84	51	106.81	14.90	128
	Total	106.55	16.01	127	102.40	15.69	98	104.74	15.97	225
Sufficient for the majority of students	Not involved at all	92.43	14.59	21	88.88	17.62	42	90.06	16.64	63
	Recreationally	95.62	12.83	39	93.32	12.69	41	94.44	12.73	80
	Actively	102.85	15.16	102	96.84	13.24	50	100.87	14.79	152
	Total	99.76	15.06	162	93.24	14.87	133	96.82	15.30	295
Sufficient for some students	Not involved at all	91.50	20.83	14	86.96	12.87	25	88.59	16.06	39
	Recreationally	98.85	16.74	26	92.80	10.89	20	96.22	14.66	46
	Actively	102.92	16.75	72	99.91	16.20	29	101.85	16.60	101
	Total	100.54	17.55	112	93.34	14.62	74	97.68	16.78	186
Total	Not involved at all	95.69	18.55	55	91.83	17.15	93	93.26	17.72	148
	Recreationally	99.76	15.48	95	94.21	13.05	82	97.19	14.63	177
	Actively	104.44	15.97	251	100.60	14.92	130	103.13	15.51	381
	Total	102.13	16.33	401	96.21	15.62	305	99.57	16.28	706

It has been shown that higher score on the Motivation scale was achieved by boys who were actively involved in sport and their opinion was that knowledge acquired through PE instructions was sufficient for all students and lowest score was achieved by girls who were not involved in sport at all and their opinion was that knowledge acquired through PE instructions was sufficient for some students.

Table 3. The results of investigation of differences at The Motivation scale for measurement of involvement in PE by ANOVA.

Source	Mean Square	F	Sig.
Corrected Model	1451.394	6.153	0.000
Intercept	5159699.567	21875.359	0.000
Gender	2459.739	10.428	0.001
Students' opinion on sufficiency of knowledge acquired through PE instructions	4024.969	17.064	0.000
Sport's involvement	3938.936	16.700	0.000

There were statistically significant differences according to gender, sport's involvement and opinion about sufficiency of knowledge acquired through PE. There were no statistically significant interactions between factors. ANOVA results showed that male students permanently had higher scores on motivation scale and post hoc comparison by Scheffe test showed that pupils of both gender, whose opinion was that knowledge acquired through PE instructions was sufficient for all students had had statistically significant higher scores at motivation scale than other two groups. Also, post hoc Scheffe comparison showed that pupils of both gender, who were actively involved in sport had had statistically significant higher scores at motivation scale than other two groups and that pupils who were not involved in sport at all had the lowest scores at Motivational scale.

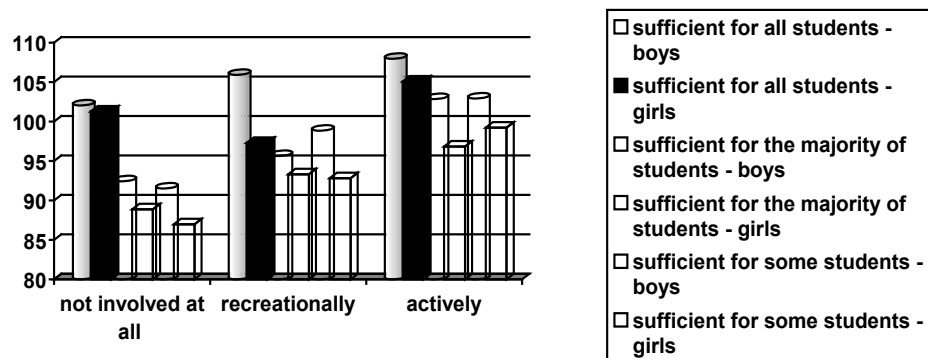


Figure 1: Comparison of scores at The Motivation scale for measurement of involvement in PE according to level of sport's involvement and opinion on sufficiency of knowledge acquired through PE classes.

As it might be seen from the Figure 1, the only deviation from linear trend of growth of motivation is the result of girls who are not involved in sport at all and who thought that PE knowledge was sufficient for all students.

Discussion

In the examination of the relation between gender and sports involvement at this sample, there was statistically significant difference ($\chi^2 = 36,765$; $df = 2$; $p < 0.000$). Boys are more involved in sports whether actively or recreationally than girls who were more often not involved at sports at all. This result emphasize all over the world detected tendency that girls generally are less involved in sport activities, of all levels. Adler et al. (1992) and Thorne (1993) suggests that girls may perceive that it is socially unacceptable to be strong, physical and athletically talented as this is the very definition of a popular boy.

The relationship for girls and femininity to PE is complex, partly because the agenda is at least partially set by the boys (in Serbia, in PE curriculum are dominant team sports, like soccer, handball, volleyball and basketball) and part of the fear revolved around how they looked to others, particularly to the opposite sex. This might be an explanation for consistent differences between boys and girls on scores at Motivation scale for measurement of involvement in PE. Still there were no significant difference between pupils sport's involvement and opinion on sufficiency of knowledge acquired through PE classes. It seems that pupils who were not completely satisfied by PE curriculum and not interested in sports activities outside school are less motivated than others, especially girls. Boys were much more involved in some kind of sport's activity and they thought that knowledge acquired through PE classes was sufficient for the majority of students. So it seems that, after all, sport's involvement does have importance for motivation for active involvement in PE classes and it's importance is independent from gender. Although gender is relevant factor for both sports and PE classes engagement. Since girls who are not involved in sport at all and who thought that PE knowledge was sufficient for all students. It might be interested to pay more attention on this category and investigate more precisely their attitudes and behaviors.

Conclusions

Gender is very important factor that can facilitate or aggravate PE classes. Results showed that girls showed lower levels of motivation and that they are less involved in sports activities outside of school. The highest score on the scale for measuring motivation for active involvement in PE were reached by boys who were actively involved in sports and who considered that knowledge acquired in PE classes was sufficient for all students. The lowest score on the scale for measuring motivation for active involvement in PE were reached by girls who were not involved in sports at all and who considered that knowledge acquired in PE classes was sufficient for some students. Fundamental movement skill competency increases the likelihood of children participating in different physical activities throughout their lives. So, if the real aim of PE instruction is to help children understand, develop and adopt patterns of healthy lifestyle, it is necessary to investigate and boost their motivation for maximal involvement in PE classes.

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