

Attitudes of secondary school students towards physical culture, physical education classes and exercises

Postawy uczniów szkół ponadpodstawowych wobec kultury fizycznej, lekcji wychowania fizycznego i ćwiczeń

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Summary

Introduction: Shaping positive attitudes of students towards physical culture is the most important task of the school and physical education teacher. The purpose of the study was to determine the attitudes of secondary school students towards physical culture, PE classes and exercises.

Materials and methods: The study was carried out in the 2015/2016 school year among secondary school students in the Niepołomice commune. 238 students were surveyed in total, including 103 girls and 135 boys. The basic study method was a diagnostic survey, and the Questionnaire by S. Strzyżewski was the tool for conducting the study of adolescents' attitudes towards physical culture.

Results: The study has shown an average level of attitudes of students towards physical culture. Most students (61.4%) would attend physical education classes, even if they were optional. A large group of respondents (50.4%) believe that the number of physical education hours at school should be increased. Boys enjoyed exercise more often than girls. They also felt a greater need to play football.

Conclusions: The attitudes of students towards physical culture, PE classes and physical exercises were satisfactory. The results obtained were differentiated by gender of the respondents in many areas where the percentages were higher among boys. It would be advisable to involve physical education teachers more closely in shaping students' desirable attitudes towards physical culture.

Keywords: attitudes, students, physical culture, class, exercises

Introduction

According to the Pedagogical Encyclopedia [1], *attitude is usually understood as a relatively persistent system of beliefs, emotions and feelings as well as individual behavior in relation to a given subject (person, object, idea)*. According to Grabowski [2], an attitude considered as a positive attitude towards one's own body and referred to as prosomatic is a *relatively permanent disposition to creative, recreational and rehabilitative behavior towards the body, on the basis of learning their importance for health, fitness and beauty, and a positive emotional attitude towards them*. According to Makuła [3], a positive image of a prosomatic attitude should consist of the student's understanding of the reasons for body care (cognitive factor), expression of a desire to care for the body (emotional factor) and

conscious decision-making about its implementation, including through participation in physical activity (action factor).

Shaping positive prosomatic attitudes should be a priority of physical education. At school, the teacher is responsible for this area of activity, which is to motivate students to physical activity through interest in various forms of movement, strive to ensure that their pupils want to take an active part not only in physical education classes, but also extracurricular activities. To encourage students to be physically active, curriculum content and exercises should be selected so as to give students joy and meet their expectations. While the learning outcomes are measurable and visible after the end of the didactic process, the effects of upbringing can only be seen after many years.

The purpose of the study was to determine the attitudes of secondary school students towards widely understood physical culture, PE classes and exercises.

The results of the study were to answer the following questions:

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1. How is the attitude of the respondents towards physical culture shaping in global terms and in terms of individual components?
2. What is the students' attitude towards physical education classes and physical exercises?
3. Does gender differentiate the respondents' attitudes in particular areas?

Materials and methods

The study was carried out in the 2015/2016 school year among secondary school students in the Niepołomice commune. The required consents were obtained from the students to participate in the study. 238 students were surveyed in total, including 103 girls and 135 boys.

The basic study method was a diagnostic survey, and the *Questionnaire* by S. Strzyżewski was the tool for conducting the study of adolescents' attitudes towards physical culture. The Questionnaire contained 67 questions. The students had a choice of five possible answers. Of all the questions, 47 were scored by the following key: 4 points – definitely yes, 3 points – yes, 2 points – I don't know, 1 point – no, 0 points – definitely not. While, 20 questions were scored inversely from 0 to 4 points. The Questionnaire included three components. Cognitive component – CC (26 questions), emotional component – EC (21 questions) and behavioral component – BC (20 questions).

The global attitude index and individual components were calculated according to the following formulas:

$$\text{CC index} = \frac{\text{total points}}{26}$$

$$\text{EC index} = \frac{\text{total points}}{21}$$

$$\text{BC index} = \frac{\text{total points}}{20}$$

$$\text{Global index of attitude} = \frac{\text{total points CC} + \text{EC} + \text{BC}}{67}$$

Results

The study analysis results showed the diversity of average values of attitude indexes of students towards broadly understood physical culture. The mean value of the global index was 2.40. The highest mean value (2.60) was recorded for the cognitive component index, and the lowest (2.23) was achieved by the behavioral component index (Table 1).

Mean values in individual components were higher among boys compared to girls. The largest gap by gender related to the behavioral and global component index (Table 2).

The four questions in the Questionnaire (9, 10, 11, 65) were related to students' attitudes towards physical education classes. Most students (61.4%) would attend physical education classes, even if they were optional. However, every fifth student would not be interested. For more than half of the respondents (56.4%) PE classes in which they participated were interesting, and almost 60% experienced satisfaction. About 2/3 of students confirmed that if they were healthy they would always participate in physical education classes (Tab. 3).

Significantly more boys (65.9%) than girls (55.3%) declared to participate in optional PE classes. It turned out that girls were bored in the physical education classes more often. Distinct differences between the genders were observed in the answers to the questions about satisfaction with participation in the class. Most boys (67.4%) experienced positive emotions from participating in PE classes, and an even larger percentage (75.5%) would like to participate if their health condition allowed them to (Table 4).

S. Strzyżewski's Questionnaire also contained questions (5, 14, 41, 46, 63, 64, 67) that directly concerned the attitudes of girls and boys towards physical exercise. According to the study, 72.7% of students exercising during PE classes experienced satisfaction, despite the fact that the exercises proposed by the teacher were tiring for them. In addition, the majority of students (76.1%) said they had enjoyed just doing physical exercises. It was also positive that half of the surveyed population (50.4%), seeing the ball, wants to play it, and for a comparable group of students (55.6%), what counts is not the result but satisfaction from participating in the game. A fairly large group of respondents (50.4%) believe that the number of physical education hours should be increased, and an even greater percentage (58.4%) would be satisfied with this fact (Table 5).

Analysis of the results showed that the gender of the respondents clearly differentiated their attitudes towards physical exercise. Boys enjoyed exercise more often than girls. They also felt a greater need to play football, but for this group of respondents the result of the game was more important. They would also call for an increase in the number of physical education hours. While, the girls were less bored with physical exercises, and treated their participation in the game as joy (Table 6).

Table 1.
Values of indexes of the respondents' attitudes towards physical culture

Class categories		CC		EC		BC		GI	
		Nr	%	Nr	%	Nr	%	Nr	%
1	0.5-0.75	0	0.0	1	0.4	1	0.4	0	0.0
2	0.75-1	0	0.0	1	0.4	2	0.8	1	0.4
3	1-1.25	2	0.8	5	2.1	4	1.7	3	1.3
4	1.25-1.5	2	0.8	5	2.1	14	5.9	4	1.7
5	1.5-1.75	4	1.7	12	5.0	21	8.8	8	3.4
6	1.75-2	7	2.9	28	11.8	31	13.0	17	7.1
7	2-2.25	26	10.9	52	21.8	40	16.8	46	19.3
8	2.25-2.5	45	19.0	53	22.3	51	21.5	68	28.6
9	2.5-2.75	72	30.3	33	14.0	35	14.7	39	16.4
10	2.75-3	43	18.1	27	11.3	21	8.8	31	13.0
11	3-3.25	20	8.4	19	8.0	9	3.8	15	6.3
12	3.25-3.5	10	4.2	2	0.8	5	2.1	6	2.5
13	3.5-3.75	7	2.9	0	0.0	4	1.7	0	0.0
Total		238	100	238	100	238	100	238	100
Maximum value		3.69		3.38		3.70		3.48	
Minimum value		1.19		0.52		0.55		0.85	
Mean		2.60		2.32		2.23		2.40	
Standard deviation		0.43		0.48		0.54		0.43	
Median		2.62		2.33		2.25		2.42	
Mode		2.69		2.33		2.40		2.46	

Table 2.
Summary of the mean values of the respondents' attitudes towards physical culture by gender

Gender	Attitude indexes for physical culture			
	CC	EC	BC	GI
Girls	2.52	2.22	2.08	2.29
Boys	2.67	2.39	2.35	2.49

Table 3.
Respondents' attitudes towards physical education classes

Questions	Answer categories									
	Definitely yes		Yes		I do not know		No		Definitely no	
	Nr	%	Nr	%	Nr	%	Nr	%	Nr	%
Question 9	65	27.4	81	34.0	44	18.5	22	9.2	26	10.9
Question 10	26	10.8	39	16.4	39	16.4	77	32.4	57	24.0
Question 11	41	17.2	101	42.4	49	20.6	28	11.8	19	8.0
Question 65	84	35.3	81	34.0	17	7.1	42	17.7	14	5.9

Key:

Question 9: Would you participate in PE classes if it wasn't obligatory?

Question 10: Do PE classes bore you?

Question 11: Do you enjoy taking part in the PE class?

Question 65: Do you always participate in PE classes when you are fit?

Table 4.
Respondents' attitudes towards physical education classes depending on gender

Gender	Questions	Answer categories									
		Definitely yes		Yes		I do not know		No		Definitely no	
		Nr	%	Nr	%	Nr	%	Nr	%	Nr	%
Girls	Question 9	16	15.5	41	39.8	23	22.3	13	12.6	10	9.7
	Question 10	14	13.6	23	22.3	18	17.5	31	30.1	17	16.5
	Question 11	9	8.7	42	40.7	25	24.3	15	14.6	12	11.7
	Question 65	26	25.2	37	35.9	7	6.8	23	22.3	10	9.7
Boys	Question 9	49	36.3	40	29.6	21	15.6	9	6.7	16	11.8
	Question 10	12	8.9	16	11.8	21	15.6	46	34.1	40	29.6
	Question 11	32	23.7	59	43.7	24	17.8	13	9.6	7	5.2
	Question 65	58	43.0	44	32.5	10	7.4	19	14.1	4	3.0

Key:

Question 9: Would you participate in PE classes if it wasn't obligatory?

Question 10: Do PE classes bore you?

Question 11: Do you enjoy taking part in the PE class?

Question 65: Do you always participate in PE classes when you are fit?

Table 5.
Respondents' attitudes towards physical exercises

Questions	Answer categories									
	Definitely yes		Yes		I do not know		No		Definitely no	
	Nr	%	Nr	%	Nr	%	Nr	%	Nr	%
Question 5	74	31.1	99	41.6	30	12.6	10	4.2	25	10.5
Question 14	16	6.7	54	21.8	48	20.2	90	37.8	30	12.6
Question 41	49	20.6	71	29.8	28	11.8	68	28.6	22	9.2
Question 46	18	7.6	39	16.4	49	20.6	96	40.3	36	15.1
Question 63	51	21.4	69	29.0	47	19.8	70	29.4	1	0.4
Question 64	71	29.8	68	28.6	43	18.1	27	11.3	29	12.2
Question 67	86	36.1	100	42.0	21	8.8	15	6.3	16	6.7

Key:

Question 5: Do you enjoy exercising, even though it makes you tired?

Question 14: Do exercises usually bore you?

Question 41: When you see the ball, do you feel the inner need to play it?

Question 46: When you take part in the game, is the result more important to you than the joy of participating in the game?

Question 63: Do you think it is necessary to increase the number of PE hours at school?

Question 64: Would you be pleased if the number of PE hours increased in school?

Question 67: Do you enjoy physical exercises?

Table 6.
Respondents' attitudes towards exercises depending on gender

Gender	Questions	Answer categories									
		Definitely yes		Yes		I do not know		No		Definitely no	
		Nr	%	Nr	%	Nr	%	Nr	%	Nr	%
Girls	Question 5	19	18.4	53	51.5	18	17.5	4	3.9	9	8.7
	Question 14	7	6.8	14	13.6	23	22.3	40	38.8	19	18.4
	Question 41	14	13.6	23	22.3	11	10.7	41	39.8	14	13.6
	Question 46	4	3.9	16	15.5	21	20.4	40	38.8	22	21.4
	Question 63	13	12.6	29	28.2	20	19.4	40	38.8	1	1.0
	Question 64	19	18.4	30	29.1	25	24.3	15	14.6	14	13.6
	Question 67	26	25.2	49	47.6	14	13.6	7	6.8	7	6.8
Boys	Question 5	55	40.7	46	34.1	12	8.9	6	4.4	16	11.9
	Question 14	9	6.7	40	29.6	25	18.5	50	37.0	11	8.1
	Question 41	35	25.9	48	35.6	17	12.6	27	20.0	8	5.9
	Question 46	14	10.4	23	17.0	28	20.7	56	41.5	14	10.4
	Question 63	38	28.1	40	29.7	27	20.0	30	22.2	0	0.0
	Question 64	52	38.5	38	28.1	18	13.3	12	8.9	15	11.1
	Question 67	60	44.4	51	37.8	7	5.2	8	5.9	9	6.7

Key:

Question 5: Do you enjoy exercising, even though it makes you tired?

Question 14: Do exercises usually bore you?

Question 41: When you see the ball, do you feel the inner need to play it?

Question 46: When you take part in the game, is the result more important to you than the joy of participating in the game?

Question 63: Do you think it is necessary to increase the number of PE hours at school?

Question 64: Would you be pleased if the number of PE hours increased in school?

Question 67: Do you enjoy physical exercises?

Discussion

Ensuring a high didactic and educational level in physical education is one of the basic duties of school and teachers. These activities are not only to meet the immediate needs in stimulating the physical development of students, but also to prepare them for attention to and care for the body after completing education [2].

Based on the analysis of the results obtained, it was found that the surveyed students demonstrated a positive attitude towards physical culture, achieving the average value of the global index at the level of 2.40. The cognitive component achieved the highest mean value and the behavioral component the lowest. The identical set of values of indexes of the analyzed components of attitudes was observed in the studies conducted by K. Górna [5]. In global terms, boys presented a higher level of attitudes towards physical culture in all indexes compared to girls. This trend was also confirmed by studies of other authors [5, 6].

Differences between girls and boys occurred in many areas of attitudes under study. The boys showed definitely more positive emotions from participating in physical education classes. In turn, girls in motor classes are more bored. The reason for this phenomenon may be incorrect organization of classes and inadequate adjustment of syllabus content in groups of girls to their interests and expectations. The positive impact of changing the organization of physical activities on the students' attitudes towards physical culture was demonstrated by experimental studies [4, 7]. It is also worth noting that the later participation in physical activity depends on the quality of PE classes. [8, 9, 10]

Attitudes toward exercise were also more positive among boys compared to girls. Weaker level of attitudes among girls during education does not bode well for their later participation in physical recreation [5]. Insufficient cooperation between teachers and family may be another source of the reasons for the analyzed failures. These relationships, as study has shown, significantly influence the formation of positive attitudes of children and adolescents towards physical culture [11].

Conclusions

Based on the results of the conducted study, the following conclusions were made:

1. The attitudes of secondary school students towards physical culture within individual indexes were satisfactory. The highest values were recorded in the cognitive component, and the lowest in the behavioral one.
2. Most of the respondents presented positive attitudes towards physical education classes and physical exercises.
3. The results of the study varied depending on gender. The boys enjoyed the exercises more often, they felt a greater need to play football and they would postulate to increase the number of hours of physical education. While, the girls

were less bored with physical exercises, and treated their participation in the game as joy.

It would be advisable to systematically conduct studies on students' attitudes towards physical culture, the results of which would help the teacher to plan didactic and educational work and to better prepare students for participation in lifelong physical activity.

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Streszczenie

Wstęp: Kształtowanie pozytywnych postaw uczniów wobec kultury fizycznej jest najważniejszym zadaniem szkoły oraz nauczyciela wychowania fizycznego. Celem badań było określenie postaw uczniów szkół ponadpodstawowych wobec kultury fizycznej, lekcji wf i ćwiczeń.

Material i metody: Badania zostały zrealizowane w roku szkolnym 2015/2016 wśród uczniów szkół ponadpodstawowych w gminie Niepołomice. Ogółem przebadano 238 uczniów, w tym 103 dziewczęta i 135 chłopców. Podstawową metodą badawczą był sondaż diagnostyczny, a narzędziem Kwestionariusz do badania postaw młodzieży wobec kultury fizycznej autorstwa S. Strzyżewskiego.

Wyniki: Badania wykazały przeciętny poziom postaw uczniów wobec kultury fizycznej. Większość uczniów (61,4%) uczestniczyłaby w lekcjach wychowania fizycznego, nawet wtedy, gdyby były nieobowiązkowe. Duża grupa badanych (50,4%) uważa, że należałoby jeszcze zwiększyć liczbę godzin wychowania fizycznego w szkole. Chłopców częściej niż dziewczętom, ćwiczenia fizyczne sprawiały przyjemność. Czuli też większą potrzebę gry w piłkę.

Wnioski: Postawy uczniów wobec kultury fizycznej, lekcji wf i ćwiczeń ruchowych były zadawalające. Płeć badanych różnicowała uzyskane wyniki w wielu obszarach, gdzie wartości procentowe były wyższe u chłopców. Wskazane byłoby większe zaangażowanie nauczycieli wychowania fizycznego w kształtowanie u uczniów pożądaných postaw wobec kultury fizycznej.

Słowa kluczowe: postawy, uczniowie, kultura fizyczna, lekcja, ćwiczenia
