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**SELECTED FACTORS DETERMINING STUDENTS' READINESS
FOR PARTICIPATION IN PHYSICAL CULTURE**

Key words: physical education, students, preparation for physical culture.

ABSTRACT

The study was carried out among 513 full time university students from Kielce, Poland (378 women and 135 men). It was aimed at identification of factors determining the success of education promoting participation in physical culture.

Factors determining the effectiveness of students' preparation for physical culture included pleasant atmosphere of PE classes ($\eta^2=16.78\%$), negative perception of organized forms of physical culture organization at the university ($\eta^2=23.46\%$), number of terms with physical education classes during university education and PE classes contents ($C=0.67$), motivation activities performed by teacher during PE classes ($\eta^2=20.81\%$), feeling the need to take care of one's own body through practising sport ($C=0.59$), self-assessment of sport skills ($C=0.27$), the range of sport skills learnt at least at a good level ($C=0.29$).

The quality of educational relations influences, to a great extent, the development of certain attitudes of young people towards practising sport in their free time.

INTRODUCTION

As it was stated by M. Demel [2], physical education is an introductory stage of participation in physical culture and proper lifestyle expressed in people's care about their own fitness and health.

Physical education involves molding the pupil's personality so that after finishing his or her education he or she would be interested in active participation in physical culture. At the beginning of their school education children do not tend to develop negative attitudes towards physical activeness, because they have not faced any unpleasant situations which would discourage them from physical culture. Thus it is the educator who is responsible for shaping a new, positive attitude towards physical culture or for reinforcement of the positive attitudes (developed e.g. by parents).

It is not common for students to start physical education classes without any previous experiences. These experiences frequently result in the students' negative mindset towards physical education and their own sport activity [1]. The teachers definitely more often aim at changing the students' negative attitude towards physical culture, developed on the basis of their experiences, rather than at reinforcement of the desirable attitude.

If the negative attitude is caused by teachers' incompetence at the previous education stages, educators in higher schools face a very difficult task since, according to psychologists, it is the most difficult to change the attitudes gained through direct experiences [6].

It is impossible to identify the real effects of education, which is a complex process shaped by different educators with different values. Education

is one of numerous factors of change in the student's personality and behaviour. It is also a process in which the changes are often postponed and undergo continuous evolution [8].

Verbal statements belong to the most frequent factors affecting attitudes. Declarations of change of certain actions or experiencing emotional states constitute the rates of behavioural and emotional factors affecting attitudes [7].

Indirect assessment of the inner effects of upbringing, personality changes, e.g. based on verbal declarations, may only be of approximate character and does not guarantee that the expected actions would ever take place.

The study was aimed at identifying factors determining the success of education promoting participation in physical culture, mainly those linked to students' attending physical education classes.

METHODS

The study was based on the diagnostic poll method aimed at collection of empirical data. The relations between the variables were examined by means of a contingency index C Pearson rate, a V-Cramer index and eta (η^2) correlation ratio.

The study was carried out among full-time students from universities in Kielce. As the research was aimed to deal with the students attending compulsory physical education classes, students of the Physical Education and Tourism Department of Wszechnica Świętokrzyska, and the Seminary students were excluded. The practicability of the applied research tools was verified in pilot studies, which focused on the aptness and articulation of the language of the questionnaire.

528 people, including 378 women (73.7%) and 135 men, took part in the research. After rejection of questionnaires which were incomplete or filled erroneously 513 subjects were qualified for further analysis.

The sample included students from 19 to 26 years of age, however, the majority of them (92.2%) were between 20 and 24 years old. 25.8% of the subjects were permanent residents of Kielce, while nearly 49% come from small towns and villages. 32.2% were first-year students, while 19.3% were fourth-year students.

RESULTS

Students' readiness for participation in physical culture

The term 'readiness' was understood as a behavioural tendency, e.g. willingness (or lack of it) to behave in a certain way [9].

The signs of proper preparation of young students for participation in physical culture were assumed to be the following:

- declaration of participation in sport and tourism in the future,
- expressing a positive attitude towards practising sports by themselves and others,
- practising sport and tourism after finishing obligatory physical education classes.

Every fifth student declared his or her readiness to attend optional sport classes organized by his or her college, while nearly 2/3 were planning to practise sport or tourism after graduation (Table 1).

The students of the University of Technology are more likely to declare their participation in sport after graduation than the students of Akademia Świętokrzyska, who declare their likely future

Table 1. Subjects' declarations of participation in sport and tourism in the future (data in %)

Subject of declaration	definitely yes	rather yes	rather not	definitely not	difficult to decide	Items 4 and 3 total
	4	3	1	0	2	
optional sport classes	5.5	16.0	53.4	1.3	13.8	21.5
sport after graduation	19.5	44.2	21.2	4.7	10.3	63.7
tourism after graduation	20.3	41.5	18.9	2.9	16.4	61.8

participation in tourism. Students of non-state colleges declare their readiness to participate in physical culture after finishing their education least frequently.

Declaration of participation in physical culture requires conviction based on positive, behaviour which the subjects could benefit from. 93.1% of the subjects agree that everyone should take care of their fitness by practising sport. 98.6% of those who practise sport also agree with this view.

Less than half of those who state that everybody should practise sport are physically active subjects (46.9%), while 82.9% feel the need to practise sport, but this need is often unsatisfied – only 51.9% of the people in this group practise sport.

Another sign of effective educational preparation for physical culture, stronger than a verbal declaration is the student's active participation in extracurricular sport activities. 44.3% of the students practised sport during their last college year; 12.7% practised sport during the last academic year at the university in optional classes, e.g. university sport games, aerobics classes, gym exercises, i.e. various forms of recreational activities.

After finishing the compulsory physical education over half the students of Politechnika Świętokrzyska (University of Technology), nearly half the students of Akademia Świętokrzyska and every fourth student of Wszechnica Świętokrzyska do practise sport. Despite significant differences in the structure of the questioned groups of students in terms of subjects' sex (men were two-thirds of students of the University of Technology, and one-fourth of the Akademia students) both men and women studying at the university of technology are

the most active in sport. On the other hand, men and women studying at the Akademia Świętokrzyska are the most active participants in tourism.

Selected factors determining students' readiness for participation in physical culture

The subjects' declaration of practising sport was related to self-assessment of their sport skills, the range of mastered skills related to different sports, friendly atmosphere of physical education classes, feeling the need to practise sport and their negative comments on physical education organization at the universities.

Respondents with a high and very high level of self-assessment of their sport skills (74.6%) express their willingness to practise sport after graduation. Over half of those who are not satisfied with their sport skills still are planning to practise sport (53.9%).

The more different sports the students have mastered, the more likely they are to express their willingness to practise sport in the future. A comparison of two extreme groups of the empiric distribution yields a conclusion that 77.6% of the students who are more skilled than the average ones are going to be active in sport; while only every third subject of those who with lower skills than the average student expresses such an intention (34%). In both cases statistically significant differences occurred, however not related to each other closely.

Young students enjoying friendly atmosphere during physical education classes tend to adopt a more positive attitude towards physical culture than students who do not regard these obligatory classes as a pleasant experience ($p < 0.01$). Equally important, when deciding on possible sport activity,

Table 2. Students' sport skills and declarations of participation in physical culture

Declaration Determining Factors	Declarations of participation in physical culture (%)	Differences Significance		Relationships Measure	
		chi ²	p	C	V
self-assessment of sport skills:					
very high	76.2	24.93	0.001	0.27	0.16
high	74.3				
poor	53.9				
quantity of mastered sport skills:					
0-2	34.0	29.92	0.001	0.29	0.17
3-6	64.0				
7 and more	77.6				

are the students' unfavorable comments on physical culture organization at their universities ($p < 0.05$). Dissatisfaction with P.E. classes discourages the students from voluntary participation in sport. The figures of 23.46% of complete variance of the level of participation declarations level and 16.78% of those feeling pleasant atmosphere during physical education classes may be explained by the differences between the groups of students who perceive physical education favourably and those who do not.

The students who express critical comments on physical culture organization at the universities are less likely to declare their willingness participate in tourism than those who fail to notice these shortcomings ($p < 0.05$), and these differences explain 21.48% complete variance of the tourism participation declarations' level.

The fact that students feel the need to practise sport does not guarantee this involvement in future, but still provides a significant difference ($p < 0.001$) between different declarations of respondents concerning their sport activeness after graduation. 68.7% of those who feel the need to go in for sport are planning to practise it, while 25.9% of the students who do not feel such a need declare their readiness to participate in sport actively. The relationship mentioned above is characterized by high intensity ($C = 0.59$).

Friendly atmosphere created by the teacher during physical education classes provides a significant statistical difference ($p < 0.001$) in feeling the need to practise sport by the students. The students who do not express negative comments on physical culture organization at university are more likely to feel such a need ($p < 0.05$). The correlation ratio amounts to 9.04% regarding the atmosphere experienced by students during physical education classes, and 24.04% in the case of critical assessment of university physical culture.

With regard to the development of the positive attitude towards physical activeness the educator's conduct is really important. The results obtained from the questionnaires prove that the images of teachers, regardless how positive they are, statistically do not really influence feeling the need to practice sport by their students. It is only when this general perception of the teacher becomes more specific due to focusing on the motivation activities performed by the teacher during classes when his or her image starts to strongly affect the student ($p < 0.05$) and the relationship index (η^2) amounts to 20,81%. The number

of physical education classes which the students attend during their studies does not have a strong influence on their positive attitude towards practising sport. However, further analysis may reveal that the motivating contents of PE classes is a successful solution. Students in this situation tend to feel the need to take care of their own bodies through practising sport more often than students who have the same number of PE classes but a teacher who fails to apply motivation activities during the lessons ($p < 0.05$). This is a high intensity relationship ($C = 0.67$).

Similarly to the declarations of readiness to practice sport, young students aware of their need to take care of their fitness through practising sport, become involved in sport activity much more frequently (51.9%) than those who do not feel such a need (7.4%). These differences are statistically significant ($p < 0.001$), but this relationship intensity is low ($C = 0.32$).

Participation in sport life is related to the self-assessment of sport skills ($p < 0.001$), but the value of these relationships is low ($C = 0.32$). The more sports are considered by the students, the more free time they spend on practising sport. ($C = 0.27$).

The students took part in physical education to a different extent, and the number of PE terms during studies affects significantly the statistics of their decision about practising sport in the future ($p < 0.001$), and the value of the contingency index C amounts to 0.36. The respondents who have the lowest number of curricular physical education classes (three terms) practise sport least frequently (14.8%). In the group of students who have obligatory physical education classes twice as long, the percentage of those who practise sport is much higher (38.2%).

The more the contents of the physical education classes is based on the teacher's activeness and motivation activities, the better the results of the educational process. Every second student affected by his or her educator's strong motivation activities practises sport, while those who feel less affected by these activities practise sport in 39.1%. These are not, however, statistically significant differences.

In the examined group, first-year students practice sport more frequently (45.8%) than fourth-year students (30.8%); students from small towns (61.1%) more often than those from big cities (43.2%) and villages (47.5%); and women more

frequently (47.4%) than men (35.7%). However, these differences are not statistically significant.

After finishing physical education 31% students practiced tourism, and 57.1% of these students had not participated in this form of activeness before, when they had attended PE classes. The students who participate in forms of tourism organized at their universities constitute 97.3% of the group of people taking an active part in tourism and 15.1% are those who participate in curricular and extracurricular forms of tourism.

The lower the subjects' parents' education level, the more often the students participate in tourism ($p < 0.05$). Over 40% of the students whose parents have vocational or primary education participate actively in tourism. One third of students with parents with secondary education and only 9.1% with parents with higher education take parts in forms of tourism. The most willing to participate in tourism are second-year students

(45.2%), and the least willing are first-year students (16.9%). In both cases the relationship intensity measured with contingency index C does not exceed the value of 0.3.

In the sample female students are more likely to participate in tourism (32.8%) than male students (26.2%). Students from Kielce (34.1%) and from villages (32.8%) are more likely to take part in tourist activities than those from small towns (27.8%), but these differences are not statistically significant.

From the obtained results we may conclude that the longer physical education, the more frequently students participate in tourism after graduation in their free time ($p < 0.05$, $C = 0.24$).

Table 3 contains factors which significantly affect the effectiveness of students' preparation for physical culture after graduation – declarations to practice sports in the future, recognition of the need for practising sport care to maintain a healthy body

Table 3. Selected factors determining the effectiveness of students' preparation for participation in physical culture

Factors determining preparation for participation in physical culture	physical effectiveness rate		
	declarations of practising sport	positive attitude towards practising sport	practising sport in college
pleasant atmosphere of PE classes	$p < 0.01$ $\eta^2 = 16.78\%$	$p < 0.001$ $\eta^2 = 9.08\%$	$p < 0.01$ $\eta^2 = 4.78\%$
negative reception of physical culture organization at the university**	$p < 0.01$ $\eta^2 = 23.46\%$	$p < 0.01$ $\eta^2 = 24.04\%$	no data
number of terms with physical education classes***	no data	$p < 0.05$ $C = 0.67^*$	$p < 0.001$ $C = 0.36$
physical education classes contents	no data		no data
motivation activities of PE teacher	no data	$p < 0.05$ $\eta^2 = 20.81\%$	no data
feeling the need to take care of one's own body through practising sport	$p < 0.001$ $C = 0.59$	no assessment	$p < 0.001$ $C = 0.32$
Self-assessment of sport skills	$p < 0.001$ $C = 0.27$	no assessment	$p < 0.001$ $C = 0.32$
range of sport skills learnt at a good level	$p < 0.001$ $C = 0.29$	no data	$p < 0.001$ $C = 0.27$

* positive attitude of young students towards practising sport is achieved during interaction of two factors: motivating contents of PE classes and a large number of physical education classes during college education,

** also statistically significant in tourism declarations ($p < 0.05$, $\eta^2 = 21.48\%$),

*** also statistically significant also in tourism declarations ($p < 0.05$, $C = 0.24$).

and, as a result, voluntary participation in sport activity as soon as possible after finishing obligatory physical education classes.

DISCUSSION

The condition of positive attitudes towards the care of human body in Polish society, including Polish students, is unsatisfactory. The students appear to consider practising sport as a positive contribution to the good care of their bodies, and a significant percentage of them feel the need to practise sport. However, we are aware that there may be wide discrepancies between the declared and actual attitudes [10, 14].

The results of the research show a tendency which, in view of studies conducted so far, is not surprising. The students' responses follow the pattern: a large number of students are of the opinion that all the adults should take care of their own fitness through practising sport, a slightly smaller group feels the need to take part in sport, a smaller number of students declare that they would practise sport in the future, and the smallest group practised sport during the last academic year.

Every process of education is based on a certain educational relationship [13]. Despite the fact that most of the presented relationships are characterized by low intensity, it should be mentioned that a significant majority of determinants of the students' behaviour expected by us is connected with the respondents' perception of well-organized and properly performed obligatory PE classes, of the PE teacher or of direct results of the teacher's actions. The physical education teacher, his or her contacts with students, creation of pleasant atmosphere of the classes is a key factor for achieving success in the educational process of preparation for physical culture. The quality of the link between the participants in the educational process greatly influences the development of certain attitudes of young people towards practising sport in their free time.

A low level of adults' sport skills constitutes one of the barriers to participating in physical recreation. A slight percentage of adults have skills useful for recreation during their whole life, e.g. skiing, swimming, playing tennis [12]. Similar conclusions may be drawn from the other studies. The stronger the subjective feeling of their own sport skill level, the more mastered skills of different sports disciplines in their own subjective

opinion, the more frequently the students are planning to take active part in physical culture.

Only active participation guarantees one's involvement in physical culture [3]. The final measure of the physical education teachers' work effectiveness consists of their students' attitudes towards physical culture, adopted after graduation [4, 5].

The complete diagnosis of educational attitudes cannot be based on the results of individual studies. It is excluded even by the impossibility of determining its durability. The surveys do not enable judgment of the attitudes altogether, and they may be only used as a tentative opinion polls [11].

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