



Adolescent Attitudes towards Sport Depending on School Level, Gender and School Sports Club Membership

by

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The aim of the study was to evaluate adolescent attitudes towards different aspects of sport activities, in relation to school level, gender and membership in a school sports club (SSC).

The Diagnostic Questionnaire for Testing Youth's Attitude towards Physical Education and Sport developed by Strzyżewski (1990) constituted the main research tool. The present paper analyzed responses to 11 selected questions, which reflect attitudes towards sport. Three aspects were studied (1) attitude towards sport as a social phenomenon, (2) attitude towards own participation in sports activities, and (3) attitude towards school sport. The survey was launched in 623 clubs, which were randomly selected from the database of the Polish Ministry of Sport. A total of 2704 correctly filled-in questionnaires were subjected to statistical analysis.

Respondents demonstrated positive attitudes towards all three variables of interest. Non-SSC pupils/students were not different towards sport. Such situations were observed among girls from all school levels and only in a small part of the boys. However, based on the obtained results, it can be concluded that school level does not cause significant differences in adolescent attitudes towards sport ($p=0.36$). The attitudes are influenced by gender (attitude towards own participation in sports activities and attitude towards school sport – $p<0.001$) and participation in sports club activities (attitude towards sport as a social phenomenon, attitude towards own participation in sports activities, and attitude towards school sport – $p<0.001$).

Keywords: adolescent, sport attitudes, questionnaire

Introduction

Developing a habit of regular participation in sport and recreational activities at school age is essential for proper health and development. However, participation in organized or spontaneous leisure-time competitions in various sport disciplines depends on a variety of movement skills and a positive attitude towards sport.

Research results seem to indicate that sport has a positive influence on the pupils' general perception of both work and school. Adolescents who engage in more than one sport discipline aspire to much more, are better motivated to face life's challenges, organise their school work more efficiently, and are more productive (Biddle et al., 1998; Kerr 1996; Kirk, 1992; Shephard et al., 1994; Sibley & Etnier, 2003; Whitehead & Corbin, 1997). Other research suggests that young people who participate in sport are, on average, more capable of resisting

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unacceptable behaviors than those who do not (Brettschneider & Heim, 1997; Brettschneider, & Klimek 1998; Tomson et al., 2003). Sport prevents socially deviant behaviors, including alcohol and drug abuse, vandalism, and violence (Brettschneider & Heim, 1997; Bush, 2001).

Practising sports was mentioned as a favorite leisure activity by 49.7% of the respondents, (i.e., adolescents and young people aged 15 to 24 years from the so-called old European Union member countries). Socializing with friends (73.4%), listening to music (63.7%), and watching television (62.3%) were the only categories of more popular pastimes. Gender dependent analysis revealed significant differences. Sport ranked third among boys (62.3%) and seventh among girls (36.5%). The percentage of respondents who were engaged in sport as a leisure activity increased with age, and was 39.6% and 57.7% among 15-year-olds and university students, respectively (The Young Europeans, 1997). Studies on causes of aggression and violence among Polish adolescent schoolboys and schoolgirls also showed that practicing sports was less popular than watching TV, listening to the radio, and socializing with friends. Reluctance towards sport was more frequent among girls than boys. Opposite to the tendency observed in old European Union countries, the popularity of sports decreased with the age of respondents: 60% of boys and 40% of girls aged 12-13 years participate in organized sport activities, while the corresponding percentage values among 17-year-olds amount to 45% and 28%, respectively (Report on the situation of the Polish families, 1998). More common participation of children and adolescents in leisure sports results from developing, and consequently, strengthening of positive attitudes towards sport in general.

An attitude can be defined as 'a relatively established structure of cognitive and emotional processes and behaviors related to a subject or a disposition to those processes and behaviors' (Mika, 1980), or 'a relatively enduring organisation of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups, events or symbols' (Hogg & Vaughan, 2005).

Several authors studied the attitudes of Polish children and adolescents towards physical education and sport (Kodura, 1989; Koj, 1992;

Marszołek, 1992; Skalik, 1992; Strzyżewski 1990), and compared their results to those obtained from investigations into instrumental goals (Górna, 2001; Skalik, 1996). Thus, the enthusiasm to participate in physical education and sports programs, as well as the efficiency of the programs, was also determined (Bukowiec, 1990; Frołowicz, 1994; Tomik, 2007). However, the studies also showed that respondents' attitudes were not fully established—they were much more rooted in the knowledge of physical education and sport than in the intention to practice prohealth behavior. More positive attitudes towards physical education and sport were observed among boys than girls, and among younger than older pupils. Participation in extracurricular and out-of-school sports activities favorably affected the attitude level.

The attitudes of school children and adolescents in other countries were also surveyed, via a variety of questionnaires. Results indicate that children with a positive attitude towards physical education (Ferguson et al., 1989; Ntoumanis, 2001; Trost et al., 1997) or physical activity (Barnekow-Bergkvist et al., 1996; Ferguson et al., 1989; Engstrom 1989) are more likely to regularly exercise in the future. Participation in sport after school was correlated with motivation in physical education (Goudas, Dermitzaki and Bagiatis, 2001; Koca and Demirhan, 2004). Some studies demonstrated that girls held less positive attitudes than did boys (Westerstahl et al., 2003; Shropshire et al., 1997; Koca et al., 2005). Sollerhed (2005) also showed a correlation between the sense of coherence among adolescents and their attitudes towards sport.

In Poland (1994), a project was started to organize School Sport Clubs (SSC) in primary and secondary schools. The clubs are sports associations with legal status, providing organizational, programming, and training programs for children and adolescents, including participation in competitions of all levels. In 2008, there were about 7000 such clubs all over the country (Tomik, 2008).

The aim of the study was to evaluate the attitudes towards different aspects of sport in adolescent. Attitudes towards sport as a social phenomenon, own participation in sports activities, and school sports were compared in groups defined by school level (primary school,

Table 1

School level (age)	Number of Non-SSC respondents		Number of SSC members		Total	
	Girls	Boys	Girls	Boys	n	%
	Primary school (12-13 years)	387	278	357	413	1435
Junior high school (13-16 years)	306	154	317	231	1008	37.28
Senior high school (16-19 years)	43	84	80	54	261	9.65
Total	736	516	754	698	2704	100.0
%	46.30		53.70		100.0	

junior and senior high school), gender and membership in a school sports club.

The following research questions were addressed:

1. How do adolescent attitudes towards sport differ depending on school level?
2. What are the differences between boys' and girls' attitudes towards sport?
3. Does membership in a school sports club cause differences in attitudes towards sport?

Material and methods

The presented results constitute part of an expertise carried out for the Ministry of National Education and Sport, regarding the activities of school sports clubs in Poland. The clubs are associations of physical education and sport, operating in a school and involving its pupils/students. Their activities are focused on recreation and sports competition (Tomik, 2006).

The survey was launched in November 2005; 623 clubs were randomly selected from the database of the Polish school sports clubs register at the Ministry of Sport. A cover letter was then sent with detailed instructions on how to fill in the questionnaire and a request to include the same numbers of SSC members and their unassociated peers. A total of 2704 correctly filled-in questionnaires were subjected to statistical analysis. Over 50% of respondents were primary school pupils aged 12-13 years (1435), 37% were junior high school students aged 13-16 years (1008), and the remaining 10% were senior

high school students aged 16-19 years (261). The gender distribution of the population was 1214 male (44.9%) and 1490 female (55.1%). School sports club members constituted 53.7% (1452) whereas their non-SSC peers 46.3% (1252) of the study population (Table 1).

The research tool used a diagnostic questionnaire that was developed by Strzyżewski (1990) (*Questionnaire for Testing Youth's Attitude to Physical Education and Sport*) (Strzyżewski, 1990), where the validity, reliability, and selectivity had been previously verified in various populations (Skalik, 1989; Witek, 1989; Strzyżewski, 1990; Górna, 2001). The questionnaire consisted of 67 questions. Respondents were asked to choose among five predefined responses (i.e., certainly YES, YES, I do not know, NO, and certainly NO). Each particular response was assigned a point value (4, 3, 2, 1, and 0, respectively).

The present paper analyses responses to 11 selected questionnaire items which reflect the respondents' attitude towards sport. Three areas were studied:

- **Attitude towards sport as a social phenomenon:** Question 18—Do you feel honored practicing sport in an SSC? Question 21—Is professional sport unnecessary? Question 37—Are there too many sports events in your school? Question 43—Do you think school sports clubs are unnecessary? Question 44—Do you prefer the school sports club to other school organizations? Question 48—Do you reckon that sport without competition events is useless?

- **Attitude towards own participation in sports activities:** Question 19–Is participation in sports training bothersome for you or could it be? Question 20–Do you practice sport in a school or out-of-school sports club? Question 22–Would you like to become a professional sportsman? Question 27–Do you prefer watching sport events to participating in them? Question 38–Is participation in sport events an unpleasant experience?
- **Attitude towards school sport:** Question 18–Do you feel honored practicing sport in an SSC? Question 21–Is professional sport unnecessary? Question 37–Are there too many sports events in your school? Question 43–Do you think school sports clubs are unnecessary? Question 44–Do you prefer the school sports club to other school organizations?

Some questions were used to investigate the perception of two areas because responses reflect attitude towards both issues. Individual scores were calculated as a product of all point values gained for a particular question set, and the number of set questions. Attitude strength was determined based on Gorna's (2001) range: 0 – 0.49 – highly negative; 0.5 – 1.49 – negative; 1.5 – 2.49 – neutral; 2.5 – 3.49 – positive; 3.5 – 4.0 – highly positive.

An analysis of differences between mean at-

titude scores of all respondents was performed using T-test for dependent samples. Subsequently, an analysis of variance was carried out. Dependent variables were mean attitude scores towards the three areas of sport; independent variables were school level, gender and SSC membership. The Kolmogorov-Smirnov test was used to check the consistency of sample strength distribution with normal distribution within the whole study population, as well as within different school levels, boys and girls, SSC-members and their non-SSC peers.

Distribution of fraction scores were significantly different from normal ($p < 0.01$; senior high schools $p < 0.1$). However, low skewness (minimum value -0.43 – SSC members' attitude towards sport; maximum value 0.17 – non-SSC respondents' attitude towards sport), kurtosis (minimum value -0.50 – junior high school students' attitude towards sport; maximum value 0.68 – non-SSC respondents' attitude towards sport) and the large number of study participants ($n=2704$) allowed the use of Analysis of Variance (Lindman, 1974).

The effect of independent variables (school level, gender, SSC membership) on attitudes towards different sport areas was analyzed using one-way Analysis of Variance for each dependent variable. Thus, it was assessed whether independent variables had a significant effect on mean values of dependent variables, (i.e.,

<i>Mean values of indices of attitude towards sport</i>									
School level	Gender	SSC membership	n	Sport – social phenomenon		Own participation in sport		Attitude towards school sport	
				\bar{x}	s	\bar{x}	s	\bar{x}	s
Primary school	Girls	Yes	357	2.80	0.46	2.94	0.60	2.95	0.55
	Girls	No	387	2.44	0.49	2.37	0.63	2.33	0.56
	Boys	Yes	413	2.75	0.54	2.96	0.65	3.00	0.60
	Boys	No	278	2.45	0.60	2.52	0.71	2.41	0.67
Junior high school	Girls	Yes	317	2.81	0.45	2.93	0.59	2.97	0.52
	Girls	No	306	2.44	0.45	2.28	0.58	2.27	0.53
	Boys	Yes	231	2.80	0.48	2.99	0.55	3.05	0.57
	Boys	No	154	2.50	0.54	2.61	0.70	2.47	0.66
Senior high school	Girls	Yes	80	2.90	0.40	2.97	0.53	3.10	0.49
	Girls	No	43	2.41	0.39	2.02	0.64	2.09	0.48
	Boys	Yes	54	2.67	0.51	3.01	0.63	2.98	0.55
	Boys	No	84	2.54	0.50	2.42	0.57	2.37	0.60
Total			2704	2.63	0.53	2.70	0.69	2.69	0.66

Table 3

The differences between mean scores of attitude towards sport

	Sport – social phenomenon	Own participation in sport	Attitude towards school sport
Sport – social phenomenon	–	p<0.001*	p<0.001*
Own participation in sport	p<0.001*	–	p=0.45
Attitude towards school sport	p<0.001*	p=0.45	–

mean attitude scores towards different sport areas). When the result reached the level of statistical significance ($p<0.05$), the means were considered to be significantly different in particular groups.

This study was approved by the Ethics Committee at the Academy of Physical Education in Katowice.

Results

Pupils/students of the majority of the study groups demonstrated positive perceptions among all three areas of sport ($\bar{x}>2.50$). The attitudes of some non-SSC respondents showed no differences ($\bar{x}<2.50$); the tendency was mostly observed among girls at all school levels and in some cases it included boys. Mean attitude scores towards sport as a social phenomenon, own participation in sports activities, and school sport were 2.69, 2.63, 2.70, and 2.69, respectively (Table 2).

The differences between mean attitude scores towards own participation in sport and towards school sport were not statistically significant ($p=0.45$), whereas the mean attitude score towards sport as a social phenomenon was significantly different ($p<0.001$) (Table 3).

School level did not show an impact on any of the above mentioned attitudes. There were no differences between boys' and girls' attitudes towards sport as a social phenomenon. However, boys demonstrated a significantly more positive attitude towards own participation in sports activities ($p<0.001$) and school sport ($p<0.001$). SSC membership significantly influenced attitudes towards all three areas analyzed; attitudes of SSC members were always more positive than those of their non-SSC peers (Table 4).

Discussion

Respondents from all school levels and

Table 4

Relationship between attitude towards sport and school level, gender and SSC membership (variance analysis)

Variables	n	Sport – social phenomenon		Own participation in sport		Attitude towards school sport	
		\bar{x}	s	\bar{x}	s	\bar{x}	s
School level							
Primary school	1435	2.62	0.55	2.71	0.70	2.69	0.67
Junior high school	1008	2.65	0.50	2.70	0.67	2.70	0.65
Senior high school	261	2.66	0.49	2.65	0.69	2.67	0.67
		F=1.03; p=0.36		F=0.93; p=0.39		F=0.15; p=0.86	
Gender							
Girls	1490	2.63	0.50	2.63	0.68	2.63	0.64
Boys	1214	2.64	0.56	2.79	0.68	2.76	0.68
		F=0.41; p=0.52		F=35.31; p<0.001*		F=25.01; p<0.001*	
SSC membership							
SSC members	1452	2.79	0.49	2.96	0.60	2.99	0.56
Non-SSC respondents	1252	2.45	0.51	2.40	0.65	2.34	0.60
		F=301.09; p<0.001*		F=527.05; p<0.001*		F=858.33; p<0.001*	

among male and female members of school sports clubs demonstrated positive attitudes towards all three areas of sport. Of particular importance is the fact that they also declared readiness to participate in sport activities and a positive perception of school sport events. However, the data of the Central Statistical Office show that in the 2006-2007 academic school year, extracurricular sports activities were attended by as few as 17.3%, 17.5%, and 9.4% of primary, junior and senior high school students, respectively (Education in the 2006-2007 school year). Thus, despite positive attitudes towards sport and readiness to participate in physical exercise programs, only a slight percentage of children and adolescents in Polish schools are offered the chance.

Although statistical analysis did not show school level to have an effect on attitudes towards sport, Central Statistical Office figures suggest sharp decrease in the number of senior high school students participating in sports activities when compared to other school levels analyzed. This does not reflect reluctance among the fraction of adolescents, but rather a poor infrastructure of physical activity programs in those schools. It also seems that there is a gap between senior high school students' declarations and their true readiness to engage in sport. A tendency of positive attitudes declining with age was observed by Stewart (1991), who compared attitudes towards physical education among junior and senior high school students. In all areas analyzed (fitness development, motor skill acquisition, cognitive, affective, and social development, attitude scores were higher in junior high school pupils than in senior boys, which is confirmed by studies on adolescent leisure time activities presented in the Introduction (Report on the situation of the Polish families).

Gender had a significant effect on attitudes towards own participation in sport and school sport. Boys presented more positive perceptions in this area than girls. Similar results were obtained by other investigators. Frołowicz (1994) also used Strzyżewski's Questionnaire to evaluate the efficiency of physical education process in primary schools; boys scored higher than girls in attitudes towards physical education.

Koca's results from single-sex and coeducational schools were highly comparable: boys scored significantly higher in all attitude components (Koca et al., 2005). Among high school subjects (Górna, 2001), 10- and 11-year-old primary school students (Shropshire et al., 1997), and 15-year-old athletes and non-athletes (Koca and Demirhan, 2004), boys demonstrated more interest in physical education and sport than girls. M. J. Stewart's (1991) comparison of attitudes towards physical education and sport among high school students yielded similar results. In order to strengthen positive attitudes in boys and foster those in girls, gender differences in interests and expectations should be seriously considered. Since gender plays an important mediating role in attitudes toward physical education, many studies have compared girls' and boys' attitudes. Boys were found to display more positive attitudes toward physical activities that were challenging and had an element of risk (Folsom-Meek, 1992; Smoll and Schutz, 1980), whereas girls showed more favorable attitudes towards physical activities emphasizing aesthetics (Birtwistle and Brodie, 1991; Folsom-Meek, 1992; Hicks et al., 2001; Smoll and Schutz, 1980).

As expected, attitudes towards all areas of sport were significantly more positive among SSC members than among their non-SSC peers. It should be emphasized that the result does not necessarily reflect the benefits of SSC training. SSC members were not surveyed at the moment of joining regular sports and recreation activities. However, it may certainly be presumed that positive attitudes towards sport constituted a stimulus to become an SSC member. Thus, we concluded that SSC membership strengthened positive attitudes towards sport among children and adolescents. Similar conclusions were drawn by Goudas (2001), who demonstrated a positive correlation between leisure sports and motivation to participate in physical education classes. A significant effect of strong engagement in sports activities on the attitude towards physical education and sport was also reported by Skof (2004), who analyzed the behaviors of children and adolescents with positive or negative attitudes. The underlying causes can be different. One was discussed by Sollerhed (2005) when trying to establish a relationship between

the sense of coherence among adolescents, and their attitude towards physical education. She concluded that the sense of coherence was a strong determinant of positive attitudes towards physical education. Participation in sport, training, and competitions enormously affects the emergence of strong positive relationships between team members, and between competitors and their coach. Considering the above results, it seems obvious that, irrespective of gender and school level, attitudes towards sport are always more favorable in SSC members.

Sport promotion among children and adolescents should start in schools, because one of the most important responsibilities of the education system is to provide practical and emotional support to families. Didactic and educational programs should incorporate tasks for creating opportunities to fulfill age- and interest-related pursuits. Extracurricular and out-of-school activities aimed at developing social and leisure time skills can serve this particular purpose. Extracurricular sport and recreation activities should be obligatorily organized in each and every school to enhance orientation towards physical activity. Between 1974 and 1995, Westerstahl (2003) studied secular trends in leisure sports and in attitudes towards sports activities and physical education in a representative sample of Swedish adolescents. She concluded that in order 'to promote positive attitudes towards physical activity among adolescents who are not regularly involved in sports

during leisure time, it is important to introduce and offer activities in school physical education that are accepted by the inactive adolescent. This may include support for the aforementioned activities, since these activities had become appreciated by both girls and boys, and by active and inactive subjects; some are also activities that could be performed throughout adulthood' (Westerstahl et al. 2003).

Sport undoubtedly has an effect on personality traits, and can thus be used with other educational disciplines. A significant relationship has been observed between participation in sport, a sense of self-esteem and high self-rating. Adolescents participating in high-level sports competitions have better self-esteem scores than non-competitors. Also, sports club members score higher on self-rating scales than those who engage in recreation but are not associated. The above concerns boys more than girls (Richartz, Brettschneider, 1996; Whitehead and Corbin, 1997; Brettschneider and Klimek, 1998; Brettschneider, 1999; Shields and Brede-meier, 1995).

Conclusions

Based on the study results, it can be concluded that school level does not cause significant differences in adolescent attitudes towards sport. On the contrary the attitudes are influenced by gender and participation in sports club activities.

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