Psychosocial Correlates of the Need for Physical Education and Sports in High School

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Abstract: Problem statement: Sports and movement activities play an important role in the harmonious development of children. Special attention should be paid to the factors influencing their involvement in sportive activities. The aim of this study was related to identifying possible psychosocial correlates of the need for physical education and sports in Romanian society and increasing awareness on the importance of sports in everyday life. Approach: 1100 high school students from the North-Eastern part of Romania answered a series of questionnaires that measured level of sports and movement appreciation, passion for sport, leisure and systematic sport practices, attitude towards bullying, instrumental and final values and, several socio-demographic variables: gender, parents’ level of education, type of high school attended and bullying. Results: The data showed that sport is more associated to boys, to students with low socioeconomic status and, to students attending centrally-located high schools; students who are passionate about sports manifest a negative attitude towards bullying. Conclusion: The results emphasized the need to reconsider Romanian academic curricula in order to stimulate competition activities in schools and to increase the number of sportive clubs and associations.

Key words: Sports and movement appreciation, bullying, instrumental and final values, leisure and systematic sports practices

INTRODUCTION

Sport is considered to be a universal phenomenon in the time and human space. Technically, sport represents any form of physical exercises and movement games which may be spontaneous or competitive, having their origin in the traditional games and in the founding myths of civilization and with a specific founded on the values of the contemporary society (Dauzat, 1971). The functions of sports, as inherited from the Antiquity, emphasize the values within the aforementioned definition. The most important of these functions: the competition function (satisfying the need to compete, maximizing the performance, the connotative function (the need for physical effort), the socializing function (the need for integration, social dialogue and social affirmation), the cultural and the economic function. In this perspective, sport leads to psycho-physical performance, rules, institutionalization and competition, as well as to great leisure activity. There is a complex relationship between sports and society; describes two perspectives on sports. The idealist perspective defines sport as a free, spontaneous activity, separated from everyday life. The instrumental one states that sport is the ideological image of the dominant interests within the current society.

As regards the school curriculum, physical education and sports represent the only discipline within the curriculum which addresses the problem of physical and psychological health of the pre-school, school and university students. By definition, sports activities concern three main components of the human being (biological, psychological and social) and, of course, three finalities: The harmonious development of the body, the psycho-physical balance and the social integration of the individual. Thus, physical education and sports have clear objectives and by practicing them we create a support for the individual’s activities at all ages (Curelaru et al., 2010).

Most of the researches investigating the involvement of teenagers and young people in sports’ activities analyzed psychological factors, such as motivation and will, corporal scheme, social-cultural and demographic variables: age, gender, social-economic status, level of parents’ education, type of...
school, stereotypes and, values. Due to the fact that sport is an important field within the main life competences, we believe that investigating the predicting factors of sports and movement should be an important objective for sports psychologists.

Developmental psychology has showed that every stage of our life has its specific tasks and characteristics; adolescence, the transition stage between childhood and adulthood, confronts the individual with five psycho-social types of issues: identity, autonomy, intimacy, sexuality and competency (Erikson and Erikson, 1997). The difficulties encounter in achieving the different tasks specific to this stage, as well as the individual particularities may sometimes lead to risk behaviors (substances abuse, violence, delinquency).

Recent studies by Danish et al. (2000) underline the importance of teaching healthy behaviors such as sports in preventing risky behaviors, like the ones mentioned before. Sports can be an important resource that can help teenagers to learn abilities necessary to an effective functioning within the family, school and community: responsible behaviors, internalizing rules, courage, effectiveness, perseverance or tolerance to frustration. Thus, studies regarding bullying and its prevention show that a certain degree of aggressiveness within sports may have positive effects upon controlling bullying at school (Miller et al., 2006; Cashmore, 2008).

Numerous studies have, also, underlined the positive connections between sports participation and high levels of well-being and self-esteem, well-developed teamwork and leadership skills, lower dropout rates, strong academic motivation and discipline (Chu, 1989; Marsh, 1993; Whitley, 1998; Eccles and Barber, 1999; Simons et al., 1999; Videon, 2002).

The social contexts influencing teenagers’ development, the family, peer groups, school and leisure groups, mark directly or indirectly, their lifestyle, through the beliefs that they inspire.

In the last decades, there has been a special preoccupation for developing the field of sport psychology and, also, for increasing the public awareness on the importance of physical education, as a discipline, in the school curriculum. In Great Britain, for example, new educational policies related to lifelong learning and the progress of learning communities, have increased the importance of physical education in the academic curriculum. Thus, adopting the new „physical education and sports” terminology extends the learning space of this domain of competence outside the school (Penney, 2007).

During the past years, researches on sport psychology have focused their attention on the relationship between gender and sport and the need to motivate young people for sportive activities. Wellard (2007) states that, even though there are various evidences regarding the benefits of movement and sports, many young people, especially girls, do not allow more time for these essential and entertaining activities. One of the possible explanations is related to the belief that men are more inclined towards sports then women.

Physical education within school is viewed as an instrument for building one’s identity and establishing gender roles. Many parents and teachers still believe that girls should not get involved in sports as much as boys and these expectations influence the degree of motivation and participation (Lumpkin, 1984; Shakib and Dunbar, 2004). Other studies underline that the motivation for the involvement in sports and physical activities is different for boys and girls (Uhlir, 1982; Blinde, 1989; Hill, 1993; Sadker and Sadker, 1994; Festle, 1996).

The Australian Statistics Bureau showed that, although the participation rate is comparable for boys and girls (72% for girls and 74% for boys), the reasons are different: all of them are motivated by their parents and their coaches and by winning different prizes, but only boys say they are irresistibly motivated by competition and by the desire to fight the others (Cashmore, 2008).

Gill (1988) investigated the differences regarding the competitive achievement orientation and the participation to sport. Results showed that boys registered higher scores on orientation towards competition and they reported more competitive activities than girls. In exchange, women had higher scores on non-competitive achievements and they reported an interest for the non-sportive and sportive non-competitive activities similar to those of men.

Further studies (Hargreaves, 1994; McRobbie, 1978, 1991; Gill, 1999, 2000) offer evidence concerning the influence of the social context upon the gender roles in sports, the differentiated treatment of evaluating the sportive performance and the trust regarding the sportive performance possibilities.

Several studies, also, emphasized the relationship between demographic factors (age, gender, socio-economic status, socio-cultural factors, the family participation to sport, educators) and children and teenagers’ participation in sportive activities (Lin Yang, Telama and Laakso, 1996; Raudsepp and Vira, 2000; Lareau, 2002; Darling et al., 2005; Kamphuis et al., 2008). A complex study, realized on a population in
Portugal (Seabra et al., 2008) underlined that age has no influence on the level of involvement in sports activities, but the socio-economic status determines the level of participation; thus, children with average or high socio-economic status participate more frequently in sportive activities than those with a low socio-economic status. Children belonging to families that practice sports are more involved in sports than the others. Also, boys are more involved than girls and the mother’s involvement in sports influences in different ways the practice of sport for boys and girls; thus, girls have the tendency to participate more if their mothers practiced a sport while boys register the same level regardless of their mothers’ involvement or not.

Romanian psychological research lacks studies on sports psychology, especially on the relationship between sports and some psycho-social characteristics of students. In regard to the infrastructure, Romanian sportive bases are poorly developed and offer little chances for students to participate in sportive activities or competitions. Furthermore, Romanian society sees women as less fitted for sportive competitions which decrease their level of involvement in sports activities. In addition, Romanian academic curriculum gives priority to more important disciplines, like mathematics and literature and minimizes the role of physical education; thus, physical education has a marginal position in the school curriculum, has a low value share and little social importance is given to teachers/professors specialized in the field. These aspects have given us support in formulating several hypotheses.

Thus, the study below presents the results of an inquiry undertaken on large group of students from the North-Eastern part of Romania (BASS project, CNCSIS grant, financed by the Ministry of Education, Research and Innovation (ID 1146/2007-2010)). The study investigated the relationship between practicing sports (appreciating movement and sports, passion for movement and sportive activity, practicing a leisure sport and participating to physical education and sports classes during high school) and several socio-demographic variables of students, such as gender, family type, type of high school, the teenagers’ values and their attitude towards bullying.

**Subjects:** The study included 1100 students with an average age of 17.44, from 35 high schools located in the North-Eastern part of Romania. 48% of the participants were boys and 52% were girls; 72.8% came from urban areas while 27.2% were from rural areas; 89.6% of the participants are Orthodox and 10.4% other Christians. Also, 78.3% of the students belong to central high schools and 21.7% to peripheral ones (Carifio and Perla, 2010).

**Hypotheses:** The first hypothesis stipulates that boys will appreciate sports more than girls. We, also, believe that passion for sports, leisure sports and systematic sportive practice are more associated to boys than to girls.

The second hypothesis concerns the family: students coming from highly-educated and wealthy families will appreciate less sports and movements in comparison to the less wealthy or educated families.

According to the school type, students coming from schools with theoretical profiles will appreciate less sport than those students coming following vocational or technological schools.

Students coming from central schools (with a great number of students) will give more credit to sports than those coming from peripheral high schools (fewer students).

The systematic practice of a sport is more likely associated with a central high school, while lack of practicing is mostly related to peripheral high schools.

Another hypothesis concerns the relation between sport and the teenagers’ adherence to values. Students that practice in a systematic manner some type of leisure sport will enjoy more sports action and will adhere to instrumental values. On the contrary, students who are not passionate about sports will adhere less to these instrumental values. Finally, the students that cannot attend physical education and sports classes for medical reasons will also appreciate sports less.

The passionate sportive students will have more negative attitude towards school violence than the students who don’t practice any sports.

**MATERIALS AND METHODS**

We elaborated a series of items in order to measure: The passion for sport, leisure sports practices, systematic practice of a sport, the level of sport and movement appreciation, value adherence and, attitude towards school violence.

In order to evaluate the passion for sport, participants had to choose between several types of passions (sport, music, film, computer games, reading, walking). Afterwards, for statistical purposes, we divided the students into two categories, according to their choice: those who chose sport (31.9%, N = 308) and those who chose other passions (68.1%, N = 678).
Practicing leisure sports: Students had to choose their favorite leisure activity out of several options, such as: spending time with friends, in front of the computer, practicing sports, reading, walking, etc. Again, for statistical purposes, we divided the students into two categories, according to their choice: those who chose sport (11.9% (N = 127) and those who chose other leisure activities (88.1% (N = 936).

In order to evaluate the systematic practice of a sport during the year previous to the inquiry, we elaborated a question which divided the students into three categories: those who did not systematically practice any sports (N = 511), those who practiced it within a club and participated to competitions (N = 330) and, those who systematically practiced a sport, but not in an organized manner (N = 206). Later on, we assimilated the two last categories (N = 536) and we compared it to the first one (N = 511).

Values were measured using D-modified form of the Milton Rockeach Questionnaire (1973). In the original questionnaire, there were two dimensions (instrumental and final values), each having 18 items. The instrumental values included values such as competent, brave, independent and, responsible; the final values (ultimate purposes) included lifestyle, personal accomplishment, happiness, social recognition. In the original questionnaire, subjects had to classify the 18 items according to their importance. In our study, we kept the form and hierarchy of the items, but we used 4-Likert scale (1 - little important, 4- very important in life). The modifications are based on several studies undertaken by Moore (1975) and Rankin and Grube (1980) evaluating the efficiency of the two evaluating proceedings: the ranking and rating procedure. Cited authors indicate comparable validation and fidelity values, without great differences between the two measuring types (Rankin and Grube, 1980). According to Moore’s results, the rating procedure is more rapid and attractive for students and, offers various data for analysis (Moore, 1975). In addition, we added another item which evaluated the importance of sport and movement, on a scale similar to the other values (Q40.23).

The attitude towards school violence was measured with a homogenous 23 items-questionnaire using a 4-Likert scale (1-I agree; 4- I disagree). The items were elaborated upon two dimensions: causes and solutions to violence (Parents are not sufficiently involved in reducing the violence - q8; The teachers should be more severe with the less disciplined students - q15; School regulations should be more restrictive - q16). Lower scores indicate a more negative attitude towards violence, while the higher scores indicate a more favorable attitude, expressing less disapproval, fear or worry. We obtained a 0.72 Alpha Cronbach coefficient for this questionnaire.

All instruments were filled in during classes by a member of the research team accompanied by the principal or the school counselor.

RESULTS

Sport in relation to the gender variable: Results showed that boys give more credit to sport than girls \[M_1 = 3.27, M_2 = 2.83, t (1083) = 8.485, p<0.001\] (item Q40.23). There are, also, differences concerning sport as being the main passion. As we can see in Table 1, the passion of practicing sport is more likely associated to boys and there is a great difference between these two categories \[\chi^2 (1) = 136.332, p< 0.001\].

Table 2 shows the results for leisure time and their distribution between genders. According to the data presented in Table 2, practicing leisure sports is more likely associated with boys than girls \[\chi^2 (1) = 59.222, p<0.001\].

Table 3 shows differences related to the systematic practice of a sport. Performance sport is more frequently associated to boys than girls; most of the girls don’t practice any sport, not in a systematic manner \[\chi^2 (1) = 83.416, p<0.001\].

The results above confirm all the statements within our hypothesis.

Family, sport and movement: In order to analyze the family impact, we divided the students into three categories, according to parents’ studies (var. F9MODIF). In the first category, we included the parents with industrial high school degrees (N = 327), in the second, the parents with high school degrees (N = 513) and, in the third, parents with higher education degrees (N = 187).

Table 1: Students’ passion and their distribution according to gender

|                | Boys | Girls | Total |
|----------------|------|-------|-------|
| Other passions | 254  | 462   | 716   |
| Sport as passion| 250  | 88    | 338   |
| Total           | 504  | 550   | 1054  |

Table 2: Students’ leisure time and their distribution according to gender

|                | Boys | Girls | Total |
|----------------|------|-------|-------|
| Other ways of spending time | 403  | 526   | 929   |
| Leisure sports | 100  | 25    | 125   |
| Total           | 503  | 551   | 1054  |

Table 3: Systematic practice of a sport and the distribution according to gender

|                | Masculine | Feminine | Total |
|----------------|-----------|----------|-------|
| Not practicing a performance sport | 174       | 336      | 510   |
| Practicing a performance sport    | 332       | 200      | 532   |
| Total                           | 506       | 536      | 1042  |
Fig. 1: The graphical representation of the results on parents’ degrees and its influence on sports appreciation

Fig. 2: The graphical representation of the results on type of high school attended and its influence on sports appreciation

Table 4: Practicing a performance sport and the distribution according to the gender variable

|                         | Central | Peripheral | Total |
|-------------------------|---------|------------|-------|
| Not practicing a performance sport | 247     | 94         | 341   |
| Practicing a performance sport   | 339     | 65         | 404   |
| Total                      | 586     | 159        | 745   |

The three categories were compared using ANOVA one-way variance analysis. Results, as represented in Fig. 1, show significant differences between the three groups of students and their appreciation for sports and movement (Q40.23) \( [M_1 = 3.13, M_2 = 3.05, M_3 = 2.91, F(2, 1024) = 3.534, p = 0.03] \).

Further analyses, post-hoc Hochberg GT2 test, underline equal dispersions and very unequal groups. A significant average difference (mean_dif = 0.2148) was found between the students whose parents have industrial high school and higher education degrees. The latter, according to our hypothesis, appreciate less sports and movement. On the other side, data shows no differences concerning parents’ income \( [F (2, 987) = 0.099, p = .90] \) which invalidates the second part of our hypothesis.

**The impact of the high school type:** In order to analyze the influence of types of high school on sports and movement appreciation (Q40.23), we divided the students into three categories (F22.MOD variable): students attending high schools with theoretical profiles (N=346), students attending technological high schools (N=165) and, students from vocational/ sportive high schools (N = 160). Figure 2 shows significant differences among the three groups \( [M_1 = 2.92, M_2 = 3.03, M_3 = 3.31, F (2, 668) = 10.261, p<0.001] \).

Further analyses, post-hoc Hochberg GT2 test, underline equal dispersions. Data indicate an average difference (mean_dif = 0.3848) between students attending high schools with theoretical profiles and those attending vocational (sportive) high schools. These results confirm only partially our hypothesis, according to which students from vocational high schools will appreciate more sports than those attending theoretical profiles and, technological high schools.

In addition, there are no significant differences concerning the size of the high school but, the location of high schools, central or peripheral, does imply differences. Students attending centrally located schools appreciate sport more than those attending high schools from peripheral areas. \( [M_1=3.08, M_2=2.85, t (780) = 3.019, p = 0.003] \).

Data, also, showed significant differences related to systematic practice of a sport between students in centrally-located high schools and those in peripheral high schools. The performance sport is more likely associated to centrally-located high schools \( [\chi^2 (1) = 14.509, p<0.001] \) as can be seen in Table 4.

**Sports and values for teenagers:** We investigated the relationship between the level of sports and movement (Q40.23) and other dimensions, such as passion for sports, using leisure time for sports and practicing a sport (in a systematic manner). As expected, students who chose other aspects as passions, also, had great value differences regarding sports appreciation and being passionate about it \( [M_1 = 2.81, M_2 = 3.50, t(1060) = -13.056, p<0.001] \).

Results showed that the passionate about sports group reported higher scores on instrumental values \( [M_1 = 62.57, M_2 = 61.57, t (1016) = 2.337, p = .02] \) and final values \( [M_1 = 58.60, M_2 = 57.21, t (1014) = 3.006, p = 0.003] \). The practicing sports group has a greater appreciation on the value scale \( [M_1 = 2.96, M_2 = 3.67, t (1061) = -11.130, p < .01] \). Students choosing sport as leisure activity give more credit to values, both to the instrumental \( [M_1=63.24, M_2=61.79, t (1021) = 2.502, p = 0.013] \) and to final values \( [M_1 = 59.73, M_2 = 57.54, t (1019) = 3.432, p<0.001] \).
The difference analysis regarding the systematic practice of a sport underline that those practicing some type of sports appreciate more sports and movement \[ M_1 = 2.77, M_2 = 3.31, t(1045) = -10.224, p < .001 \].

In what concerns, the Rokeach Value Questionnaire, we had different results for the two scales. Thus, for the instrumental values we had great differences between the group that practiced a performance sport and the group that did not, the first giving more credit to values than the latter \[ M_1 = 62.38, M_2 = 61.47, t(1002) = 2.372, p = 0.018 \].

We were, also, interested in the relationship between physical education and sports classes' attendance and sports appreciation (Q40.23). No differences was found, except, for those who do not attend these classes because of medical issues who seem to appreciate less sports \[ M_1 = 2.80, M_2 = 3.07, t(1072) = -2.876, p = 0.004 \].

**School violence (bullying) and sport:** There is a significant correlation between bullying and sport appreciation \( r = -0.10, p < .001 \). The relation is negative and not very strong, showing that the tendency to appreciate sports more, also, implies having a more negative attitude towards school bullying.

Students 'attitude towards bullying vary according to their preference for sport. Thus, those who state that sport is their main passion are more negative about bullying than the other category \[ M_1 = 50.12, M_2 = 48.40, t(984) = 2.731, p = .006 \].

The same situation applies when analyzing the group spending their leisure time practicing a sport and the other group \[ M_1 = 49.82, M_2 = 47.65, t(990) = 2.429, p = 0.015 \].

**DISCUSSION**

The studies we presented in the theoretical part of this article indicated that sport is more associated to boys, who are more involved in physical movement and sportive activities than girls. There is, nevertheless, a tendency towards reducing these differences, as seen in the analysis of Australian Statistics Bureau, showing that there are no significant differences between the two groups.

As we can see from our results, in Romania there are great differences regarding the passions for sports, the leisure sports and the systematic practice of a sport. This situation is explained by the traditional gender separation, as within the Romanian traditional society. From childhood, individuals learn that boys are more likely to practice a sport as they are more dynamic and spectacular than girls. Sport is more associated to muscles, aggressiveness and competition. On the contrary, it is said that girls are not fit for sports, as they should rather be sensitive, light-hearted and kind. Sport is associated to several selective biological and social characteristics and less with the health and harmonious development of the human being. The efforts made by school are mostly insignificant, at least as regards practicing a sport, as they come with certain ideas from home. There are no effective strategies showing the girls that sport is very important for the harmonious development of their physical appearance. Later, once the girls become wives and mothers, the differences are even more pronounced.

In what concerns the family, we formulated the hypothesis, contrary to the results of the studies in other countries, that students coming from families with higher education and incomes will appreciate less movement and sports. Regularly, the two statistical variables should positively evaluate the attitude towards sport. Our observations, confirmed by the results, show us that, in our country, students associate success with hard learning including spending the leisure time studying. The Romanian educational system is centered upon theoretical exams and individual study; children from wealthier families, are encouraged to study during their leisure. On the contrary, children from less wealthy families do not give that much time to learning and they have more free time, which they spend practicing sports.

We were, also, interested in the influence of the type of high school upon movement and sports appreciation; we took in consideration, the high school’ profile (theoretical, technological and vocational), the high school size and its location (central, peripheral). We estimated that students within vocational high schools will appreciate more sports than the other students. The hypothesis was confirmed for vocational/theoretical high schools; these results show the high appreciation that sports have in technological high schools which are characterized by a mixed curriculum allowing them to give more time to movement and physical activities.

We, also, formulated the hypothesis according to which the centrally-located high schools will appreciate more movement and sports in comparison to peripherally-located high schools, as they are far better equipped; this means a more intense participation in sportive activities, at competitions and, implicitly, it leads to a more accentuated appreciation. The hypothesis was confirmed, as the results show differences between the two types of high schools. Beyond the better infrastructure basis, centrally-located high schools have better trained teachers, a better institution management, more competition initiatives and a more favorable attitude of teachers towards sports.
In what concerns the Rokeach value questionnaire, we assumed that students passionate about sport, as well as those practicing leisure sports in an organized manner will evaluate more positively the instrumental values than the other students. We considered that the instrumental values, as means of attaining the ultimate life goals, are related to the concrete, practical, applied dimension of the human existence. Practicing a sport is related to a concrete vision regarding life, through the nature of this activity and through the attention/focus upon the self that it implies. Our hypothesis was confirmed at this level.

Results, also, showed that the students evaluate differently values final. This may be explained by the fact that sportive students have higher values and expectations.

The hypothesis according to which students who do not attend physical education and sports classes for medical reasons appreciate it less was confirmed, as well. In fact, the majority of these children do not suffer from a temporary or permanent inability, but they are rather full of fears and not fully adapted and, thus refuse to participate in physical education classes.

In addition, we believed that students who practice and are passionate about sports have a more negative attitude towards bullying, in comparison to the others; sport reduces the general psychological tension, it disciplines, it teaches fair play, it organizes life and, cultivates the respect for the other. We obtained different results for the groups practicing leisure sports and for the ones passionate about sports; it seems that practicing sports doesn’t automatically reduces violence but, moreover, a certain view about sport, a philosophy associated to it, an appreciation which comes from an option rather than an organized type of practice.

**CONCLUSION**

In conclusion, the results of the study allow us to describe the role and importance given to movement and sport by high school students and to relate them to the internal and external factors involved. We can synthesize the results around two main ideas. On one side, we can see that appreciating sports and movement is more likely associated to boys than to girls. These findings confirm other results obtained in traditional countries such as ours. We did not have the possibility to directly compare the results, in order to see the significant differences between our country and others.

The second conclusion regards the perception of certain parents, especially those with higher education degrees but, also, of people who responsible for the educational policies in Romania; thus, there is a general tendency to over appreciate the theoretical study and to neglect practical and sportive activities. Sport is seen as a high discipline in school and parents are more motivated to encourage their children to study more in order to pass the theoretical exams rather than engage in movement activities.

In conclusion, we have to reconsider the curricula in order to stimulate the competition activities in schools and to increase the number of sportive clubs and associations. Local authorities and teachers should, also, do their best in order to change the parents’ views on sports and to increase awareness of the fact that movement is indeed important for the adequate physical and psychological development of children and teenagers.

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