

FREQUENCY OF PRACTICING PHYSICAL AND SPORTS ACTIVITIES AND THE SELF-ESTEEM AT THE STUDENTS

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ABSTRACT. In this paper we are looking at the influence of physical and sports activities on self-esteem among students from Babeş-Bolyai University in Cluj-Napoca. For this purpose, 465 questionnaires were applied to students from 13 faculties. Respondents were aged between 18 and 40, most of them aged 19-21. The statistical data was processed using the statistical analysis program SPSS 20, and for the graphic representations we used the Microsoft EXCELL 2007 version. Students' perception of their own person outlines a rather positive image of how they see themselves and esteem themselves. Analysis of a more frequent or rare participation in physical activity and sport that there is a significant difference between the mean scores of self-esteem measured on the entire sample. By gender, there was a distinction between girls and boys, data suggesting that girls who reported greater self-esteem are more often involved (several times a month or several times a week or daily) in motric activities, and the boys, just only those who practice very often (several times a week or daily) reported a greater self-esteem.

Keywords: *self-esteem; physical activity; gender; students; the frequency of physical activity.*

REZUMAT. Frecvența practicării activităților fizice și sportive și stima de sine la studenți. În lucrarea de față se urmărește influența pe care o are practicarea activităților fizice și sportive asupra stimei de sine în rândurile studenților din Universitatea Babeş-Bolyai din Cluj-Napoca. În acest scop au fost aplicate 465 de chestionare la studenți din 13 facultăți. Respondenții au avut vârsta cuprinsă între 18 și 40 de ani, majoritatea lor având vârsta cuprinsă între 19-21 de ani. Datele statistice au fost prelucrate cu ajutorul programului de analize statistice SPSS 20, iar pentru realizarea reprezentărilor grafice am folosit programul Microsoft EXCELL, versiunea 2007. Percepția studenților despre propria persoană conturează o imagine mai degrabă pozitivă legată de modul în care respondenții se autopercep și se stimează. Analiza influenței unei participări mai frecvente sau mai rare în activitățile fizice și sportive arată că există o diferență semnificativă între

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scorurile medii ale stimei de sine măsurate pe întregul eșantion. În funcție de sex, s-a constatat o diferențiere între fete și băieți, datele sugerând că fetele care au raportat o stimă de sine mai mare se implică mai frecvent (de câteva ori pe lună sau de câteva ori pe săptămână sau zilnic) în activități motrice, iar băieții doar cei care practică foarte frecvent (de câteva ori pe săptămână sau zilnic) au raportat o stimă de sine mult mai mare.

Cuvinte cheie: *stima de sine; activități fizice; gen; studenți; frecvența practicării activităților fizice.*

Introduction

From a psychological point of view, self-concept and self-esteem are essential components of human life. Their influence on man is felt during childhood when it can intervene in the modelling of its development and in the adult period of the individual by affecting its formation. The development of the two concepts begins during childhood and adolescence. As a result, the development of a positive self-esteem concept and a high self-esteem in adolescents is their chance to have a maturity of quality and happiness. Self-esteem is the individual's perception of his own value, how much he means to himself or to others, therefore it refers to the extent to which a person values his/her abilities and appreciates himself/herself. A great self-esteem depends on attitudinal factors and, because it addresses emotions and feelings, can fluctuate throughout the life of an individual. This change can be influenced by different events and circumstances that occurred in life. Research over time has revealed a link between high self-esteem and positive outcomes at different stages of life and low self-esteem and negative experiences experienced during it (Brown, Bifulco, Veiel and Andrews, 1990, Apud Omarsson 2013).

In adolescents, self-esteem expresses their opinion about themselves, under the influence of their feelings of success and competence, their abilities, their colleagues, and how much they approach the ideal they have for their own person (Blascovich and Tomaka, 1991; Bowker, 2006, Omarsson, 2013). The practicing of sports activities, in the opinion of many specialists who have been studying over the years, positively influences self-esteem. The results of our study, that highlight a higher self-esteem at students who practice physical or sports activities more frequently, are argued by research by Wagnsson, S., Lindwall, M., Gustafsson, H. (2014) on adolescents, who have emphasized that the perception of sports competence has the role of mediator in the association between sports participation and self-esteem, being evident both in the aspect of physical development and skill as well as in the perspective of self-improvement.

Hypothesis

1. There is a relationship of association between the frequency of physical and sports activities and self-esteem.
2. There are differences in self-esteem among the genders, depending on the frequency of participation in physical activities.

Methods and materials

Researching the level of self-esteem at the students was based on a questionnaire through which several objectives were pursued. Some of these goals aimed at the purposes for which students participate in physical activities in their free time depending on the respondents' genre and the faculty they come from.

The Rosenberg Self-Esteem Scale consists of a questionnaire, developed in 1965 by American sociologist Morris Rosenberg (Self-Esteem Scale - RSES), which measures the self-esteem of a person. Its use is recommended by specialists due to ease of administration, scoring and conciseness, providing a simple estimate of positive or negative feelings about oneself (Bagley, Bolitho, Bertrand, 1997). The scale was designed as a Guttman scale model, in which the items were designed to represent a continuum of statements of self-worth that draw from statements that are endorsed even by people with low self-esteem, statements that are only approved by highly self-esteemed people (Schmitt, Allik, 2005). Rosenberg (1965) set a 10-question scale, which had four variants of response starting from a strong-disagreeable agreement as a six-element Guttman. Rosenberg has demonstrated that his scale was a Guttman scale through which he achieved sufficiently high reproducibility and scalability coefficients. Initially, thought like a Guttman scale, the Rosenberg of Self-Esteem scale is currently organized as a Likert scale. The answers to the 10 established questions are distributed on a four-point scale, with variants between strong agreement and strong disagreement. Studies have shown that the scale structure is both one-dimensional and two-dimensional (self-confidence and self-disapproval).

Each of the 10 questions (items) received value as follows:

- The questions 1,3,4,7,10: Total Agreement (TA) = 3, Agreement (A) = 2, Disagreement (D) = 1 and Total Disagreement (TD) = 0.
- The questions 2,5,6,8,9 (reverse): Total Agreement (TA) = 0, Agreement (A) = 1, Disagreement (D) = 2 and Total Disagreement (TD) = 3.

Results

The descriptive analysis of the self-esteem indicators (Figure 1) outlines a rather positive picture of how respondents self-perceived and respect self.

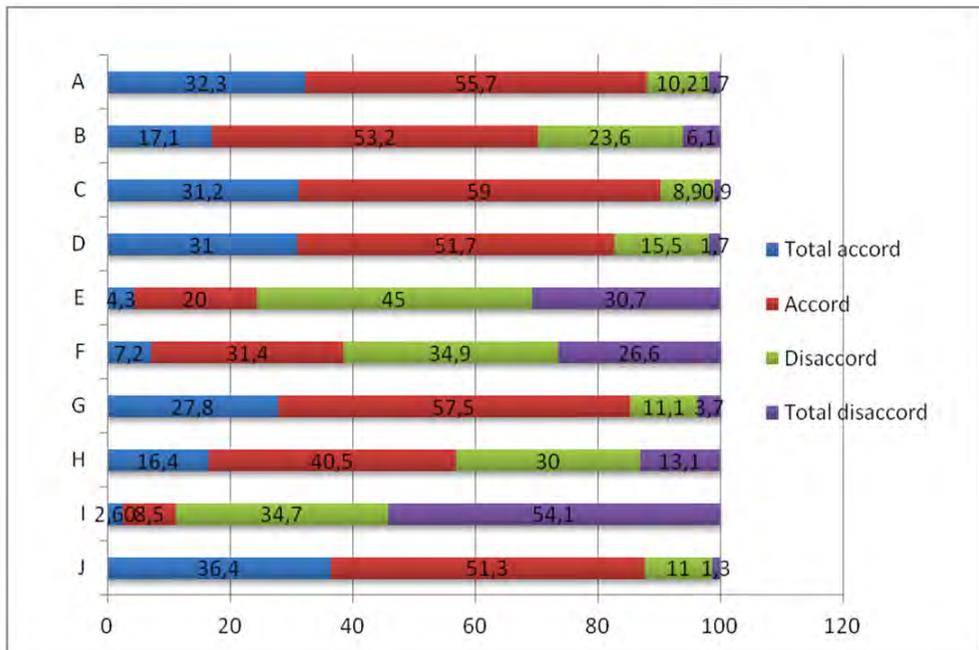


Figure 1. Student perception of one's own person

- A. On the whole, I am pleased with myself.
- B. Sometimes I think I'm not good at all things.
- C. I feel like I have a number of good qualities.
- D. I'm able to do things like most the other people.
- E. I feel that I do not have much, that to be proud of myself.
- F. Sure sometimes I feel useless.
- G. I feel like I am a valued person, at least on an equal footing with others.
- H. I wish I could have more respect for myself.
- I. Overall, I'm inclined to think I'm a failure.
- J. I take positive attitude towards myself.

Thus, 87.7% (agreement and total agreement) have a positive attitude towards themselves, 88.8% do not think about them that are a failure, 56.9% would like to have more respect for their own person, 85.3% 71.7% do not think they are unnecessary, 75.7% do not feel that they have no reason to be proud of them, 82.7% think they can do things like most other people, 90.2% feel that they have a good number of good qualities, 70.3% admit that sometimes they are not good at all things and 88% say they are happy with themselves. Analyzes show that there are no statistically significant differences in self-esteem among students who practice individual or team sports.

The association between the frequency of practicing physical and sports activities and self-esteem

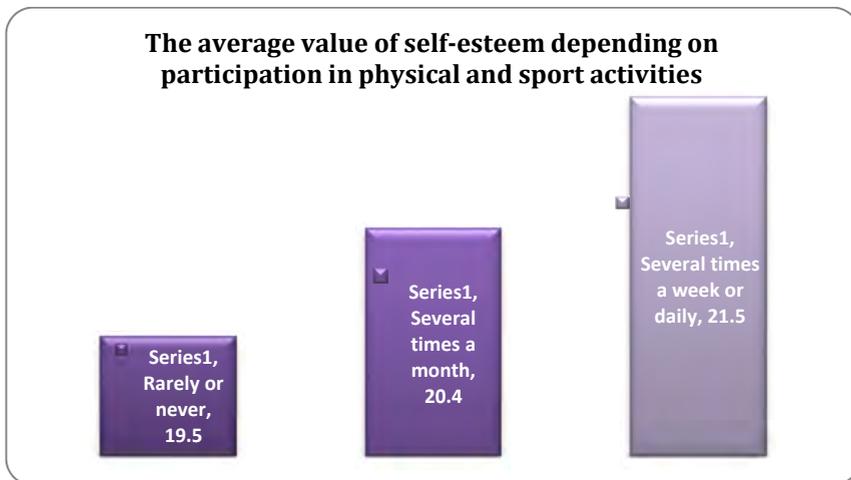


Figure 2. Self-esteem and participation in sports activities

Table 1. The average value of self-esteem based on the frequency of participation in physical and sports activities

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
The self-esteem score	Between Groups	(Combined)	98,948	2	49,474	2,543	0,080
	Within Groups		8539,082	439	19,451		
	Total		8638,029	441			

The value of the coefficient $F = 2,543$ at a significance threshold $p = 0,080$ shows that there is a significant difference between the average scores of self-esteem depending on the frequent or rare practicing of physical and sports activities.

The factorial analysis presents a number of 10 items that refer to how much the research respondents appreciate themselves. The distribution of respondents by the number of valid answers to the 10 items is given in the following table.

Table 2. Distribution of valid answers to self-esteem items

Number of valid responses	Persons	%
10 from 10	440	95,7
9 from 10	19	4,1
8 from 10	1	0,2
Total	460	100,0

We used all 460 cases to identify the factors (the few invalid responses will be replaced by the arithmetic mean of the responses valid for that item). The KMO value (Kaiser-Meyer-Olkin) for the suitability of the 10-item system for a factorial analysis is very good (0.828), also, and individual, the items have a high suitability measure (between 0.745 and 0.879). From the statistics of own values (Table 3), we find that the unifactorial model explains 34.6% of the item variance (on average), the model with two factors has an explanation power of 48.4%, the one with three factors 57.4%, etc.

Table 3. Own Value Statistics

Nr.	Own value	Variance explained	
		Individual	Cumulative
1.	3,460	34,6	34,6
2.	1,381	13,8	48,4
3.	0,902	9,0	57,4
4.	0,810	8,1	65,5
...
10.	0,399	4,0	100,0
Total	10,000	100,0	

Besides the unifactorial model, we find adequate the model with two factors, when one of the factors correlates very well and positively with the items with positive enunciation, and the other factor correlates very well and positively with the items with the negative enunciation. In the unifactorial model, the general factor of self-esteem (GSSF) positively correlates with the items with positive enunciation and negatively correlates with the items with the negative enunciation (Table 4).

Table 4. Correlations between factor and items and variance explained by the unifactorial model

The item	Factor-item saturation	Factor-item correlation	The variance explained
I feel that I do not have much, that to be proud of myself	-0,743	-0,745	55,3%
Overall, I'm inclined to think I'm a failure	-0,732	-0,733	53,6%
I take a positive attitude towards myself	+0,653	+0,653	42,7%
Sure sometimes I feel useless.	-0,645	-0,649	41,6%
On the whole, I am pleased with myself.	+0,634	+0,634	40,2%
I feel like I have a number of good qualities.	+0,596	+0,596	35,6%
I feel like I am a valued person, at least on an equal footing with others	+0,545	+0,545	29,7%
I wish I could have more respect for myself.	-0,523	-0,524	27,4%
I'm able to do things like most the other people	+0,348	+0,349	12,1%
Sometimes I think I'm not good at all things	-0,283	-0,283	8,0%
Total 10 items (mean)			34,6%

In the table, the saturations and correlations between factors and item appear separately, the difference between them results from the number of cases for which they are calculated: for example, the correlation between the first item in the table and factor ($r = -0,745$) is calculated for 458 cases and the saturation ($R = -0,743$) for 460 cases used in factorial analysis, when in the two non-responding cases the mean of the item was used for the 458 cases with a valid response. The small differences between saturations and correlations are explained in the small number of cases with no response to the elements of the factorial analysis.

The distribution of the factor ($M = 0$, $SD = 1$) is very good in the sense that it closely resembles the normal distribution (Gauss's bell), so the general self-esteem factor (GSSF) can be used in statistical tests.

In the bifactorial model, the two factors have almost equal explanation power (25.0% and 23.3%), and factors saturation with the items proves close and very close links between factor and the factor's items. (Table 5.).

Table 5. Correlations between factors and items and the variance explained by the bifactorial model

The item	Self-esteem factors saturation		Explained variance
	Positive	Negative	
I feel that I do not have much, that to be proud of myself	-0,743	-0,081	55,9%
Overall, I'm inclined to think I'm a failure	-0,613	-0,305	46,9%
I take a positive attitude towards myself	-0,607	-0,152	39,1%
Sure sometimes I feel useless.	-0,598	-0,293	44,4%
On the whole, I am pleased with myself.	-0,582	+0,111	35,1%
I feel like I have a number of good qualities.	+0,175	+0,760	60,8%
I feel like I am a valued person, at least on an equal footing with others	-0,230	+0,660	48,9%
I wish I could have more respect for myself.	+0,435	+0,625	58,0%
I'm able to do things like most the other people	+0,157	+0,597	38,1%
Sometimes I think I'm not good at all things	+0,458	+0,587	55,5%
Total 10 itemi (mean)			48,3%

Gender self-esteem

Table 6. Comparison of factors of self-esteem among the gender

Gender	N	GSSF	PSSF	NSSF
Female	346	+0,029	+0,061	-0,024
Male	113	-0,087	-0,186	+0,073
Together	459	0,000	0,000	0,000
Significance threshold		0,285	0,023	0,373

On the graph, it can be clearly seen how male students have a lower self-esteem than girls, but the difference is not significant ($p = 0.285$). On components, however, we notice a significant difference between male and female in the positive factor of self-esteem (PSSF), i.e. in the 5 positive items, female respondents agree more strongly than male responders ($p = 0.023$), and at the negative items (the negative factor of self-esteem / FNSS), male are more in agreement with, comparatively with females, but not significantly different ($p = 0.373$).

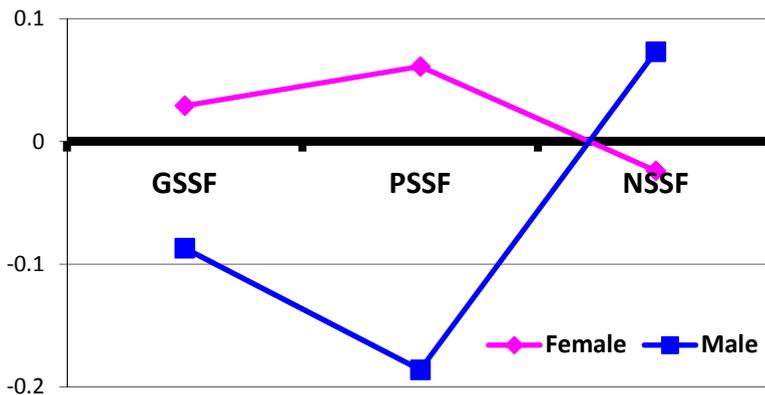


Figure 3. Gender profile of self-esteem

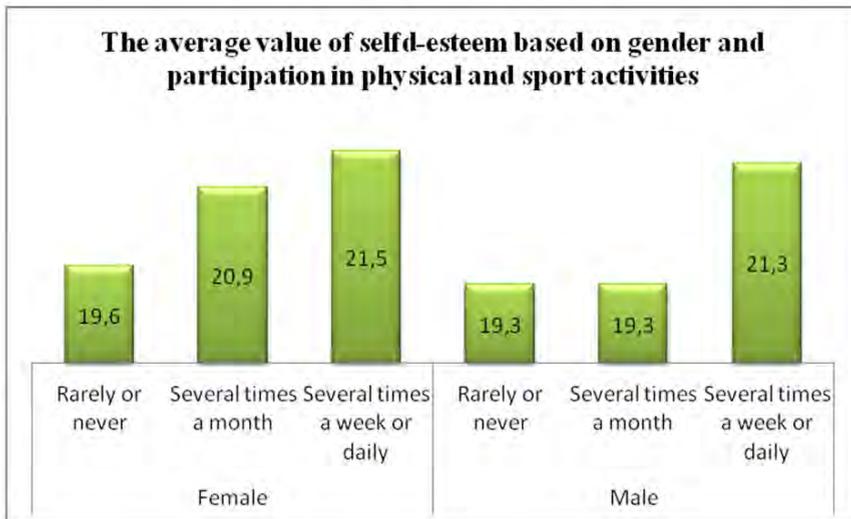


Figure 4. Self-esteem and participation in sports activities by gender

In the case of the separate sample on girls and boys, although the data suggest the same trend, the difference was not statistically significant, possibly due to the relatively small number of cases. Instead, there is a distinction between the relationship of self-esteem and the frequency of sporting activities by gender. From the data, the plausible assumption is that in the case of girls the higher values of self-esteem correspond to higher frequencies of practicing physical and sports activities. In the case of boys, there is no difference between those who rarely practice sports and those who practice on a monthly basis, but self-esteem is much higher for those practicing a few times a week or daily.

Conclusions

Self-assessment is considered to be essential for mental and social well-being because it influences aspirations, personal goals, and interaction with others, in other words self-esteem can lead to better health and social behavior. Students' perception of their own person outlines a rather positive image of how they are self-perceived and esteem themselves. Analysis of the influence of more frequent or rare participation in physical and sports activities shows that there is a significant difference between the average scores of self-esteem measured across the sample. Depending on gender, there was a distinction between girls and boys, data suggesting that girls who reported greater self-esteem are more often involved (several times a month or several times a week or daily) in motric activities, and boys only those who practice very often (several times a week or daily) reported a greater self-esteem.

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