



# Social and pedagogical conditions for increasing the role of the family in increasing the physical activity of school-age children

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## Abstract

**Objective of the study** was to identify the socio-pedagogical components of family influence on the level of physical activity of school-age children.

**Methods and structure of the study.** A survey was conducted of 2555 schoolchildren aged 11-16 years (1287 boys and 1268 girls), during which schoolchildren answered questions related to their physical activity and characteristics of family life.

**Results and conclusions.** The survey results showed that in families where its members engage in physical exercise and sports, there are relationships of cooperation, mutual assistance and support, family members spend a lot of time communicating and interacting together, children grow up with a conscious attitude towards physical activity, they are involved in physical activities culture and sports, they feel protected.

**Keywords:** *physical activity, school-age children, high and low levels of physical activity, family influence on the physical activity of schoolchildren.*

**Introduction.** Sociological studies of the physical activity of school-age children, which have been conducted by the St. Petersburg Research Institute of Physical Culture since 1990, show that the level of involvement of schoolchildren in physical education and sports is largely influenced by socio-pedagogical factors, and in particular, family [1-3]. Despite the growing trends in liberal discourse about the weakening role of the family and the state in the development of society, which prevails in Western countries, in Russia, on the contrary, processes associated with strengthening the family as the most important unit of society are intensifying.

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**Methods and structure of the study.** A survey was conducted of 2555 schoolchildren aged 11-16 years (1287 boys and 1268 girls), during which school-

children answered questions related to their physical activity and questions regarding the characteristics of family life [4]. Based on the results of answers to questions on physical activity, all respondents were divided into two groups - with a high level of physical activity (HPA) and a low level of physical activity (LPA). The criteria for dividing into these groups were the respondents answers to the following questions. The HPA group included respondents who reported that: 1) they had been physically active for at least an hour on 5 to 7 days during the past week; 2) outside of school, in their free time, they usually engage in intense physical exercise 4-7 days a week; 3) those who reported that they take part in organized activities in team or individual sports. The second group (LPA) included the remaining respondents who did not meet these criteria.

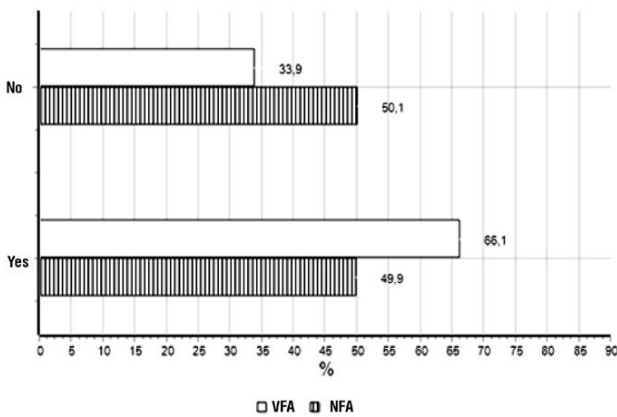
Thus, two samples of HPA (n=1817) and LPA (n=738) were formed. Next, a comparative analysis



was conducted of how respondents in these samples answered questions regarding intrafamily interaction; the significance of differences in answers in groups was assessed using the nonparametric chi-square test at  $p < 0,05$  or  $p < 0,01$ .

**Results of the study and discussion.** To control the conscious attitude towards physical education, a comparative analysis of the answers of respondents from two groups to the question of how they assess their knowledge in the field of physical education was carried out. 83,6% in the HPA group and 61,8% in the LPA group know a lot or enough. This result indicates a conscious attitude towards physical education in both groups, but in the HPA group it is significantly ( $p < 0,01$ ) higher.

To assess whether the family is physically active, an analysis was carried out of respondents answers to the question of whether any family members do exercises (running, gymnastic exercises, etc.). In the HPA group, a positive response was given in 66,1% of cases, in the LPA group - in 49,9% of cases (see figure). The differences are significant ( $p < 0,01$ ).



*Results of responses of respondents from the VFA and NFA groups to the question of whether any family members do exercises (running, gymnastic exercises, etc.) (%)*

Differences in answers to this question between boys and girls were also analyzed. Boys answered this question positively in the HPA group in 63,3% of cases, and in the LPA group in 44,8% of cases. The differences are significant ( $p < 0,01$ ). Girls answered this question positively in the HPA group in 69,4% of cases, and in the LPA group in 53,2% of cases. The differences are significant ( $p < 0,01$ ).

Respondents answers to the question of whether family members play outdoor games were analyzed. And again it was revealed that in the HPA group the

family is more physically active than in the group of LPA schoolchildren. These are 62,6% and 42,7%, respectively (differences are significant,  $p < 0,01$ ). For boys, this figure was 61,5% and 37,3%, respectively. The differences are significant ( $p < 0,01$ ). For girls in the HPA and LPA groups, this figure was 64,0% and 46,1%, respectively. The differences are significant ( $p < 0,01$ ).

To assess the level of family cohesion, a number of questions were analyzed, the answers to which are given in Table 1-4. In all cases, families of schoolchildren from the HPA group show a significantly higher level of cohesion, mutual understanding, interaction and mutual assistance than in the LPA group.

**Table 1. Important family relationships**

Question	Completely agree		Significance of differences
	HPA	LPA	
In family... Important issues are discussed	48,6%	34,8%	$p < 0,01$
When I speak, they listen to me	47,3%	34,7%	$p < 0,01$
We ask questions when we don't understand each other	45,4%	33,0%	$p < 0,01$
When there is any misunderstanding, we discuss it until the situation becomes clear	42,5%	27,4%	$p < 0,01$

**Table 2. Joint activities in the family**

Joint action	Daily or almost daily		Significance of differences
	HPA	LPA	
Food intake	77,8%	68,1%	$p < 0,01$
Walks	38,2%	18,2%	$p < 0,01$
Attending events	38,8%	19,1%	$p < 0,01$
Sports activities	24,6%	6,5%	$p < 0,01$

**Table 3. Ease of communication with dad (very easy or easy to communicate on important topics)**

Gender	HPA	LPA	Significance of differences
Both genders	62,5%	44,0%	$p < 0,01$
Boys	70,8%	51,4%	$p < 0,01$
Girls	53,0%	39,5%	$p < 0,01$

**Table 4. Ease of communication with mom (very easy or easy to communicate on important topics)**

Gender	HPA	LPA	Significance of differences
Both genders	78,6%	71,1%	$p < 0,01$
Boys	81,3%	70,4%	$p < 0,01$
Girls	75,4%	71,6%	$p < 0,01$



Additionally, the self-assessment of quality of life was analyzed using an 11-point scale («Cantril's Ladder»), where 10 points means the best possible life, and 0 points means the worst. This indicator at the level of 7-10 points in the VFA group was 63,3%, and in the NFA group – 47,7%.

**Conclusions.** Thus, the study showed that in families where its members engage in physical exercise and sports, there are relationships of cooperation, mutual assistance and support, family members spend a lot of time communicating and interacting together, children grow up with a conscious attitude towards physical activity, they are involved in physical education and sports, they feel protected.

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