

**A RESEARCH OF THE PARENTS' OPINION REGARDING THE PHYSICAL ACTIVITY OF THEIR CHILDREN (11, 12 AND 13 YEARS OLD)**

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Summary:

The active physical activity in optimal conditions favorably affects the biological, physiological, and psychological functions; it also assists the health strengthening, increasing people's capability and creative. The adolescents are most sensitive to the insufficient physical activity. The role of the family is leading at this age when it comes to encouragement and formation of a healthy lifestyle.

**Aim:** To research parents' opinion regarding the physical activity of their children.

**Materials and methods:** Sociological and statistical methods have been used (non-parametric tests for independent samples) by the development of a questionnaire for the parents, and the results were processed with the program package IBM SPSS Statistics 21. The sociological information was collected through an anonymous individual questionnaire which contains 16 open and closed questions.

**Results and discussion:** The research includes parents of students from 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade – 11, 12, and 13 years old, which research was done in two schools in the city of Plovdiv. The sex distribution of the parents included in the research shows that there are 82 % of female parents and 18 % of male parents. 40 % of all have a bachelor degree. 19 % of all play some sports. 56 % declare there is a relation between the health and the sports practices. The rest 44 % state there is no relation or they can't decide.

**Conclusions:** The higher students' physical activity is related and directly dependent on the parents' education and their personal opinion towards the sport.

*Keywords: Parents, school. Physical activity, sport, health.*

**Introduction:** The adolescence is a starting point for the formation of a healthy behavior which influences the whole life [4, page 14; 3]. The adolescence (teenage) is a

transitional period from the childhood to adulthood [9, page 32].

The healthy habits and lifestyle during the adolescence can prevent many diseases and damages in the adulthood and later [6].

The importance of the regular physical activity over the children and adolescents' health is very well realized and the medical professionals make a wide social promotion for the sports activity of the population [7]. After children start going school their physical activity significantly decreases. It is around 30-50 % lower in comparison to their physical activity in pre-school. The occurred physical activity deficit (as a result of the new conditions and requirements of the school regime) destroys the balance between the natural biological needs and the actual physical activity [1, page 42].

Many countries don't have written and designed documents with a focus on the physical activity especially among the children and adolescents [8]. The physical activity is related to the parents' support and the family but there are also fluctuating trends of the environment which influence the activity [2].

Our results / Ornelas I.J., K.M. Perreira, G.X. Ayala/ show the parents' style, characterized by warmth and support, until giving the adolescents the proper levels of independence, can be very important for achieving the recommended levels of physical activity. So, the family efforts to spend more time together, to communicate to each other and to build stable family relations are more likely to encourage self-respect and the physical activity among the adolescents. In relation to the results from other researches, our results show that an important element of promotion of healthy family environment is the well-functioning family system. The parents play an important role in the development of the children's' healthy lifestyle. The results from our research show the parents have a significant influence on the adolescents' physical activity [5].

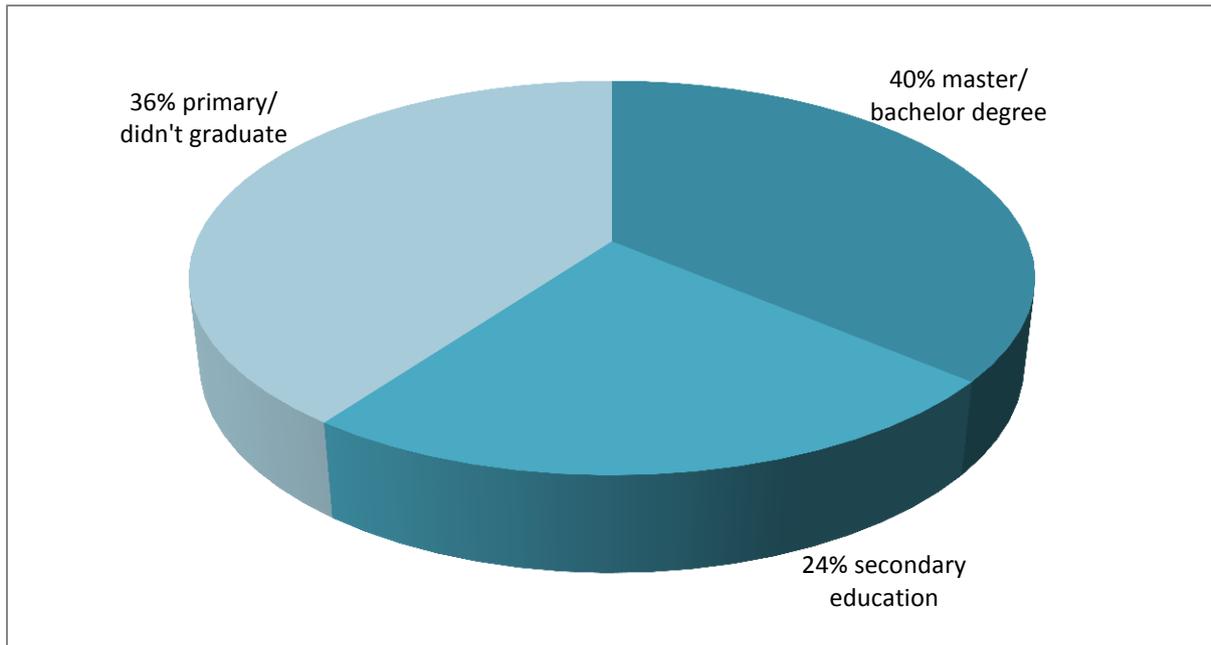
**Aim:** To change parents' opinion towards their children's physical activity.

**Material and methods:** Sociological and statistical methods have been used (non-parametric tests for independent samples) by the development of a questionnaire for the parents, and the results were processed with the program package IBM SPSS Statistics 21. The sociological information was collected through an anonymous individual questionnaire which contains 16 open and closed questions.

**Results and discussion:** The research includes parents of students from 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade – 11, 12, and 13 years old) from two schools in different Plovdiv regions. School №1, as we provisionally will designate the first school, is in a central residential area, and school №2 is in the suburbs.

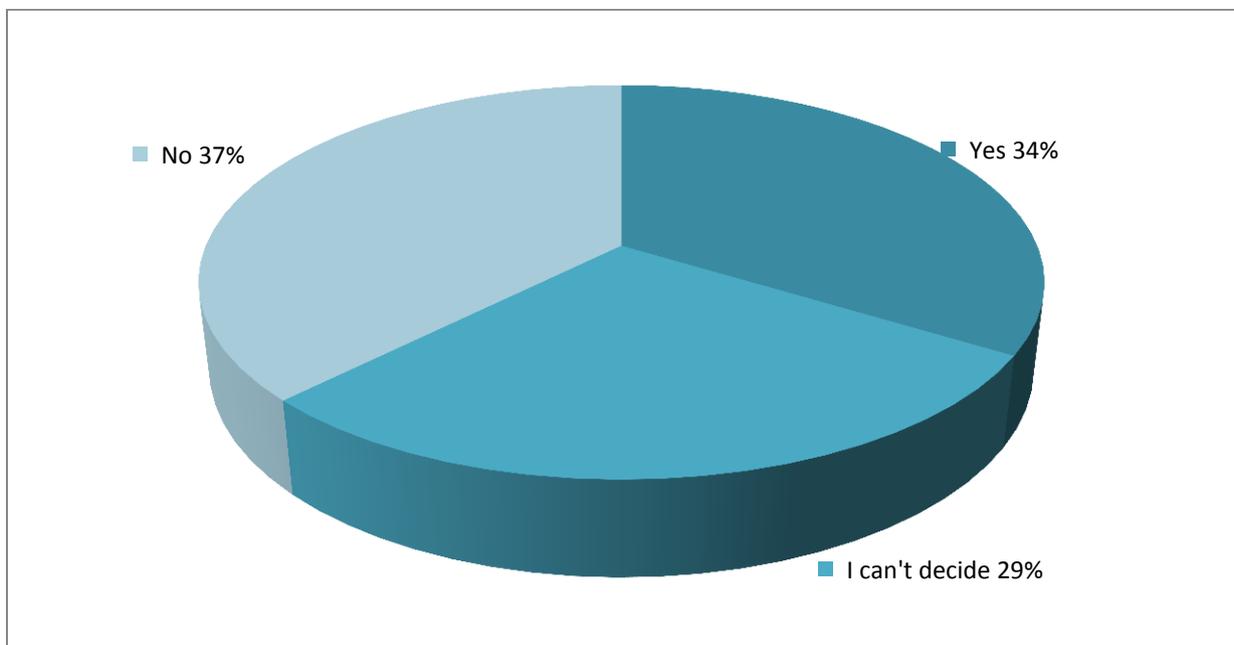
The total number of analyzed parents is 81 (82 % women and 18 % men). There are 40 % with a bachelor or master degree, 24 % have a secondary educations, and the rest have primary education or they didn't graduate at all (fig.1).

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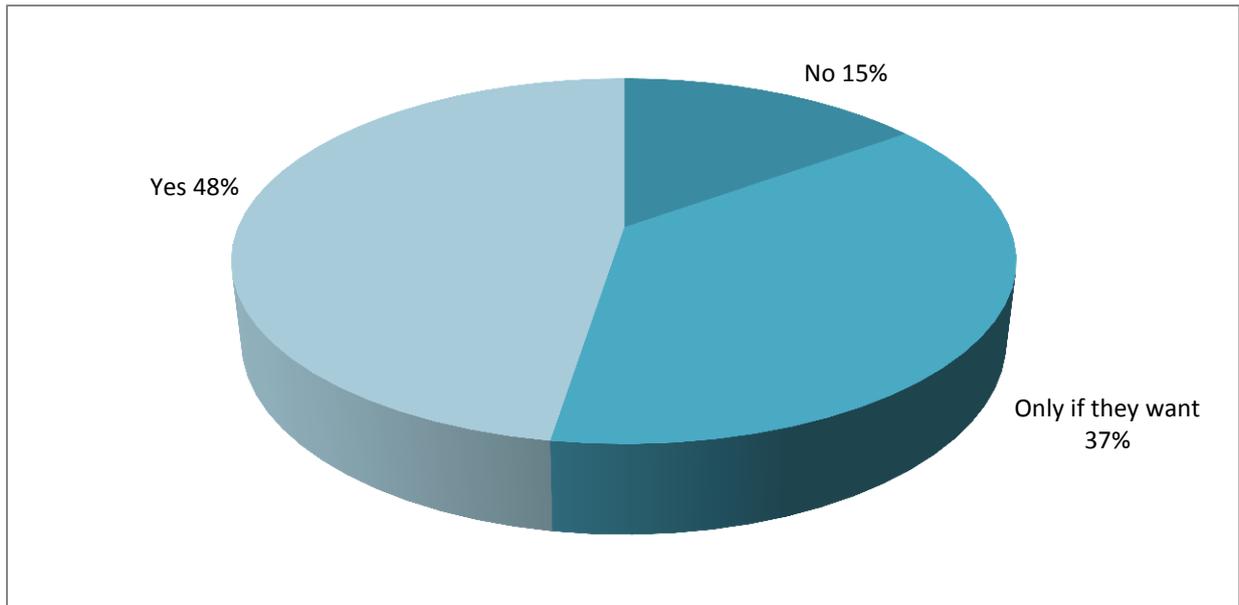
**Fig. 1 Percent distribution according to the educational level**

At the moment of the research, only 19 % of all respondents practice some sport. 52 % state they practiced some sport at school and 48 % said they didn't practice any sport at school. The following results are gained regarding the question for the number of the sports classes at school and the necessity of additional sports classes. Only 37% of the respondents are sure the sports classes aren't enough to increase the adolescents' physical activity (fig. 2) and 48 % say the children should additionally practice some sport after school (fig. 3).



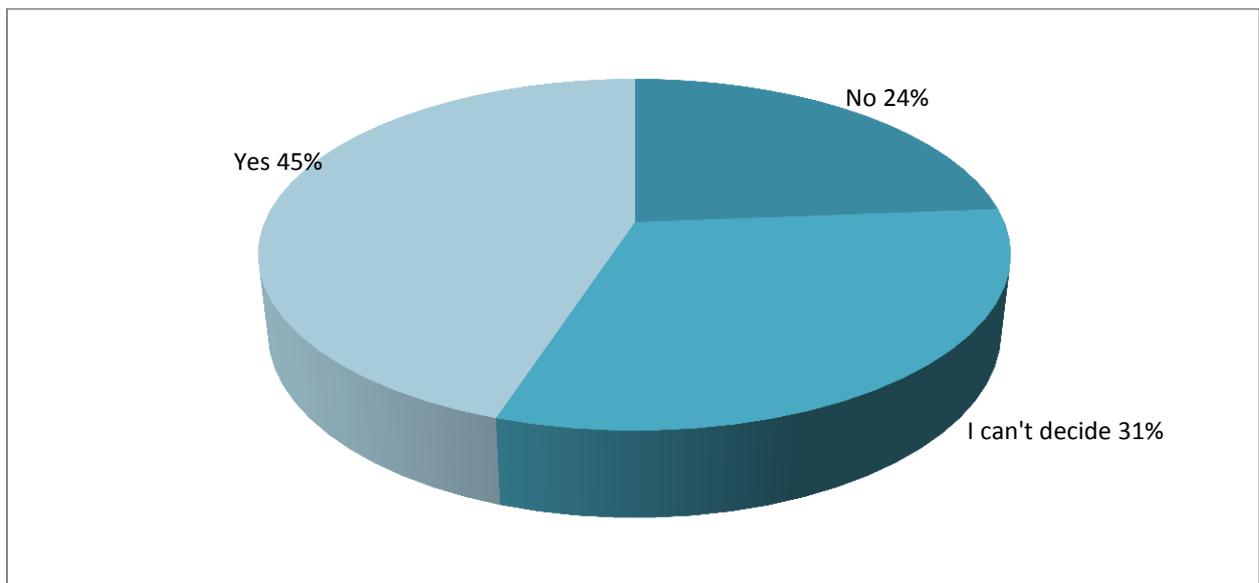
**Fig. 2 Parents' opinion whether the sports classes at school are enough**

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*Fig. 3 Parents' opinion whether the adolescents should practice additionally after school*

The research shows that 45 % of the parents think there is a relation between the time spent in front of the computer and the lack of desire to practice some sport. 24% are sure there is no such a relation and the rest 31 % can't decide (fig.4).



*Fig. 4 Parents' opinion on the relation between the time spent in front of the computer and the lack of desire for practicing some sport.*

The received data for the levels of the students' physical activity according to their parents are: 15 % say their children practice sport additionally after school 3-4 times a week, 14 % say the children practice 5 to 7 (every day) times a week, and 71 % declare their children practice sport only 1-2 times or even more rarely. 21 % think that this will complicate the children at their daily preparation for school and 57 % say that this will impede them. The parents point that most often the reasons that trouble the sport practicing are financial, transport issues and waiting for the children in front of the sports halls.

We have explored the influence of the surrounding environment over the students' physical activity considering different factors – social environment, sports facilities, after school sports practices which are offered close to the place of living. For Question № 9 (Vv9): *How many weekdays does your child practice some sport after school for more than 60 minutes per day*, the possible answers are: 0, 1, 2, 3, 4, 5, 6 or 7 days. We define answers 0, 1 or 2 days as low physical activity and code it with 1; 3 or 4 days for medium physical activity – we code it with 2 and 5, 6 or 7 days of intensive physical activity – we code it with 3. The percentage distribution according to the total number of respondents in both schools (1 and 2) regarding the sports practices after school can be seen in fig. 5.

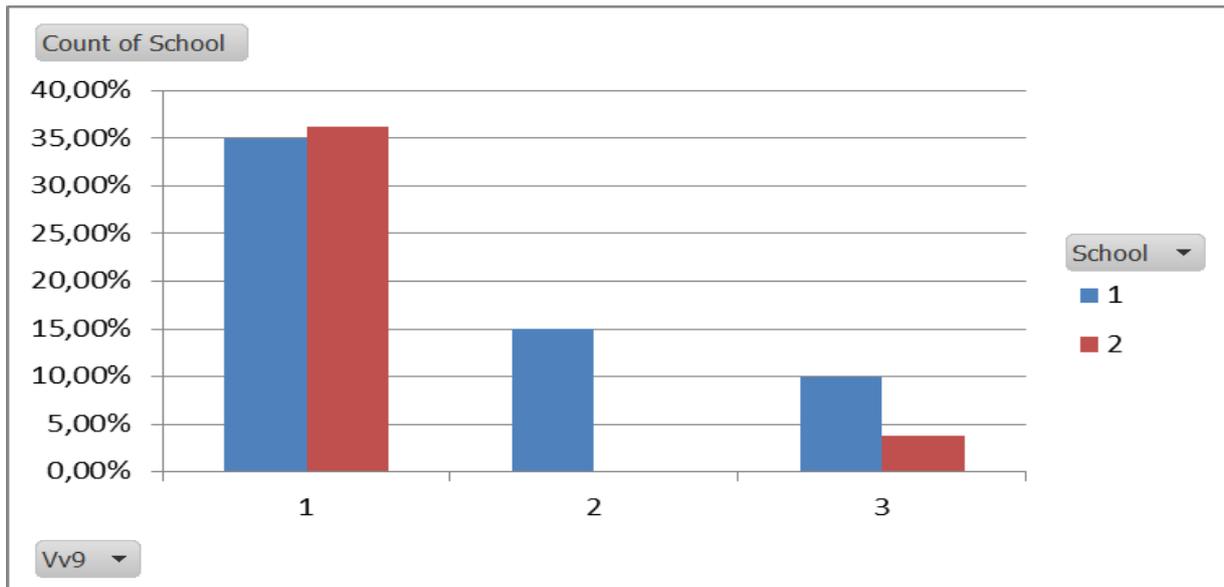


Fig. 5: Percentage distribution of the physical activity after school in School 1 and 2

We analyze the two independent samples with Mann-Whitney non-parametric U-test because its conducting doesn't require a special format of distribution for the explored variable Vv9. The results in Table 1 shows the children from the first school have significantly greater physical activity.

Table 1

	School	N	Mean Rank	Sum of Ranks
Vv9	1	48	45,29	2174,00
	2	32	33,31	1066,00
	Total	80		

Table 2

	Vv9
Mann-Whitney U	538,000
Wilcoxon W	1066,000
Z	-2,840
Asymp. Sig. (2-tailed)	,005

a. Grouping Variable: School

At a level of significance 0,05, there is p-value  $p = 0,005$  (Table 2) which shows the differences concerning the students' physical activity from the both schools can be assumed as statistically significant. Therefore, the students from the first school have higher physical activity.

We explore the students' level of physical activity according to another group variable and namely the parents' education. We use 1 for parents that didn't graduate or have a primary education; 2 is for parents with secondary education and 3 is about parents with a bachelor or master degree. The distribution is shown in fig. 6.

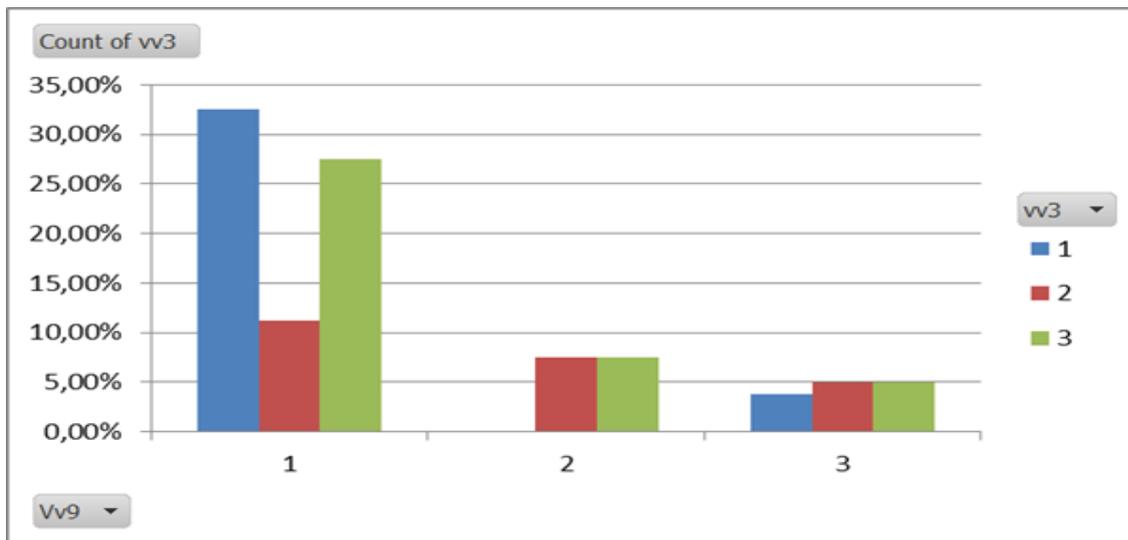


Fig. 6: Physical activity distribution according to the parents' education

We use the Kruskal-Wallis test for the three independent samples. Table 3 shows the highest physical activity is for the children whose parents have secondary education, then comes children whose parents have a university education, and the lowest physical activity is for the children whose parents have primary education. Since the p-value (Table 4) is  $p = 0,014 < 0,05$ , with a level of significance 0,05, we can assume that the differences are statistically significant.

Table 3

	vv3	N	Mean Rank
Vv9	1	29	33,76
	2	19	49,58
	3	32	41,22
	Total	80	

Table 4<sup>a,b</sup>

	Vv9
Chi-Square	8,494
df	2
Asymp. Sig.	,014

a. Kruskal-Wallis Test

b. Grouping Variable: vv3

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The following conclusions have been made as a result of the researches and analysis done:

- It was determined a low level of physical activity and sport among the parents – only 1/3 those who practiced some sport at school do sports practices at the present moment – i.e. the parents' personal example and engagement for their children's physical activity are missing.
- A small part of the parents think the sports classes are insufficient and children's necessity to practice sport additionally in their free time. The rest of the respondents think the students don't have to practice a sport after school which doesn't correspond to the recommendation of the World Health Organization for the adolescents' required level of physical activity.
- The parents are not convincing regarding their children's sports activity and this influences adolescents' attitude and opinion towards the sport.
- There is low parents' educational level which corresponds with their children's lower physical activity.
- The results show the parents' personal opinion and judgment influence the encouragement of the adolescents towards the sport and establishment of positive health behavior which results in better health.

## REFERENCES

1. Bayram N., N. Yordanova The physical activity as a factor for optimizing the coordination-motion capabilities of students from 1-4 grades Faculty of pedagogics and arts 1999:42.
2. Bobev D., E. Genev „Pediatrics” „ ARSO“ Sofia 2000, 820 p., 32,810
3. Biddle S.J.H., S.H. Whitehead, M.E. Nevil Original Research Correlates of Participation in Physical Activity for Adolescent Girls: A Systematic Review of Recent Literature J Phys Act Health 2005;2:423-434
4. Fernandez Alvira J.M., I.De Bourdeaudhuij ,A.S. Singh, F.N. Vik, Y. Manios, E. Kovacs et al. Clustering of energy balance-related behaviors and parental education in European children: the ENERGY-project International Journal of Behavioral Nutrition and Physical Activity 2013;10:5.
5. Jarvelaid M. Health damaging risk behaviours in adolescence 2004 May : 13-4.
6. Ornelas I.J., K.M. Perreira, G.X. Ayala Parental influences on adolescent physical activity: a longitudinal study International Journal of Behavioral Nutrition and Physical Activity 2007 Feb, 4:3.
7. Saffari M, Amini N, Eftekhar Ardebili H, Sanaeinasab H, Mahmoudi M, Piper CN Educational intervention on health-related lifestyle changes among Iranian adolescents Iran J Public Health 2013;42(2):172-81.
8. Samuel C .D., D. P. Gigante, M. R. Domingues, H.W. Kohl. Physical activity change during adolescence: a systematic review and a pooled analysis Eligibility criteria International Journal of Epidemiology Volume 40; 3: 685-698.
9. <http://www.scsepf.org/doc/2011/01-JESF-2010-063.pdf>