LIFESTYLE OF ADOLESCENTS AND ITS ANALYSIS FROM THE PERSPECTIVE OF PRIMARY HEALTH DETERMINANTS

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Abstract
One of the important factors of a healthy lifestyle is a physical activity. The author of this contribution deals with the issue of the necessity of physical activities as a primary means of creating a healthy lifestyle. She points out the possibilities of leisure-time activities which include recreational physical education thus allowing students to form and enrich their current lifestyle. The findings of our research show significant differences in adolescents´ lifestyles in relation to gender in selected variables (physical activity, smoking, and sleep). From the main results of the research we state that there is a significant differences in the respondents´ lifestyles in relation to the level of education of their parents at the level of significance $p<0.001$.

Key words: Lifestyle, physical activity, educational level of parents, health, adolescents

1   Introduction

The way we live, eat, the amount of time we devote to a physical activity, the amount of sleep, the way we cope with demanding life situations, sense of responsibility, so called lifestyle takes a considerable part in the formation of human health. We live in a specific environment and social climate which influence us and determine our psychical and physical health condition.

Apart from the influences of the natural environment, nutrition and diet, social interaction and cultural aspects a balanced physical activity belongs to one of the most important factors that participate in forming a healthy lifestyle [1].

The physical activities are unsubstitutable part of a lifestyle because they provide a strong *stimulus* to spiritual and physical balance as well as to self-evaluation, and they make it possible for a person to a personal self fulfilment [2].

However, nowadays physical activities as a part of a healthy lifestyle are more and more absent. Various investigations and research in the field of physical activities implementation, correct diet and experience with addictive substances in elementary school pupils as well as secondary school students and university students confirm the fact that the current state in the investigated characteristics is far from satisfactory [3-5]. Based on the results of research [6, 7] claim that the standard of physical activity with regard to the improvement of health in the young generation is unsatisfactory. Adolescents prefer to spend time with computers, in cafés, and other leisure activities rather than doing sports. Physical activities are diminishing from the regular schedules of the young population. The technological and scientific accomplishments employ young people's cognitive constitution at the expense of their physical constitution. The current life experience of adolescents contain very few opportunities for any kind of a physical activity, and generally speaking, regardless of age or gender, students consume high calorie and unhealthy food. Sedentary type of life and poor and low quality nutrition in children as well as in adults cause propensity to metabolic disorders. Students´ overweight and subsequent obesity is a logical reaction to this challenge. This is confirmed also by the research of authors who dealt with this issue [6, 8-12]. Schools are one of the subjects which take part in the education of the young population mainly by directing students to the positive utilization of their free time [13]. With respect to humanization and democratization of education and teaching process it is

necessary to create suitable conditions for sports activities based on students´ interests and preferences.

If we want to prevent the clinically significant obesity and later metabolic diseases which are nowadays not only problems of adults but also of children, all sectors of society must collaborate in the support of the strategies leading to the change of the public opinion, advertisements, and the behavior of the whole society including the educational network.

2 Aim

The aim of the research surveillance was to find out the current status of adolescents´ lifestyles and to analyse it in relation to their address, gender, and the level of education of their parents, in selected elementary schools in the region of Trnava.

3 Cohort and methodology

The research was realized in to 15 year-old population of elementary schools in the region of Trnava. In the academic year 2012/2013. The cohort consisted of students from randomly selected secondary schools. The total number of respondents was 794, of which 398 (42.5 %) were boys and 396 (57.5 %) were girls.

In our case the primary source of gaining the information was the questionnaire method. All questionnaires were returned. We distributed them personally. The results achieved by the empirical research methods were elaborated and evaluated by qualitative and quantitative research methods. In order to elaborate and evaluate the data we used the basic methods of inductive statistics ($\chi 2$ test for independence) and descriptive statistics (graphic representation, percentage, and descriptive statistics).
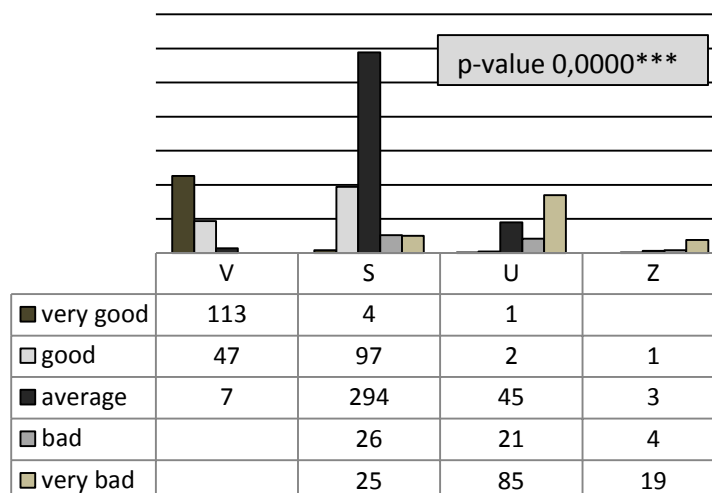
We interpret the results of the research separately for the set of boys and the set of girls in a mutual comparison. For better understanding we would like to say that the variable lifestyle was defined in terms of the frequency of physical activities realized during a week (the physical activity schedule), regularity in meals (number of meals per day and their regularity, consumption of fruit and vegetables, drinking), the length of sleep and risk factors of a healthy lifestyle (smoking, consuming alcohol). The individual items were marked by points and based on the summary of points they were categorized in respect to the level of implementation of a healthy lifestyle (very good, good, average, bad/insufficient, and very bad healthy lifestyle).

4 Results and discussion

The way of life our youth live depends to a great extent on the parents of adolescents. We were interested in finding out whether the level of education of parents is somehow related to the current lifestyles of the respondents. Based on the detailed analysis of the results of research and the statistical computation in a graphical representation we claim that there is a statistically significant dependency between the respondents´ lifestyles and the level of education of their parents at the level of significance 0.001 (figure 1, table 1).

Table 1 *χ^2 test of independence between the respondents´ lifestyles and the level of education of their parents*

current occurrences	113	47	7	0	0	167	expected occurrences	25	31	73	11	27
	4	97	294	26	25	446		66	83	196	29	72
	1	2	45	21	85	154		23	29	68	10	25
	0	1	3	4	19	27		4	5	12	2	4
	118	147	349	51	129	794						
p-value	0.0000											

	V	S	U	Z
■ very good	113	4	1	
□ good	47	97	2	1
■ average	7	294	45	3
■ bad		26	21	4
□ very bad		25	85	19

Legend: S – secondary with Maturita leaving exam, U – secondary without Maturita leaving exam, C – college, E – elementary; *** statistical significance for level p<0.001; ** statistical significance for level p<0.01; * statistical significance for level p<0.05.

Fig. 1 *The relation between the respondents´ lifestyles and the level of education of their parents*

From the figure it is evident that individual levels of education of parents have different representation of lifestyles. Since the occurrences in the individual levels of education are markedly different we present table 2 with percentages. The table shows that with the rising level of education of parents the quality of adolescents' lifestyle increases. Similar findings are brought by the research of [9].
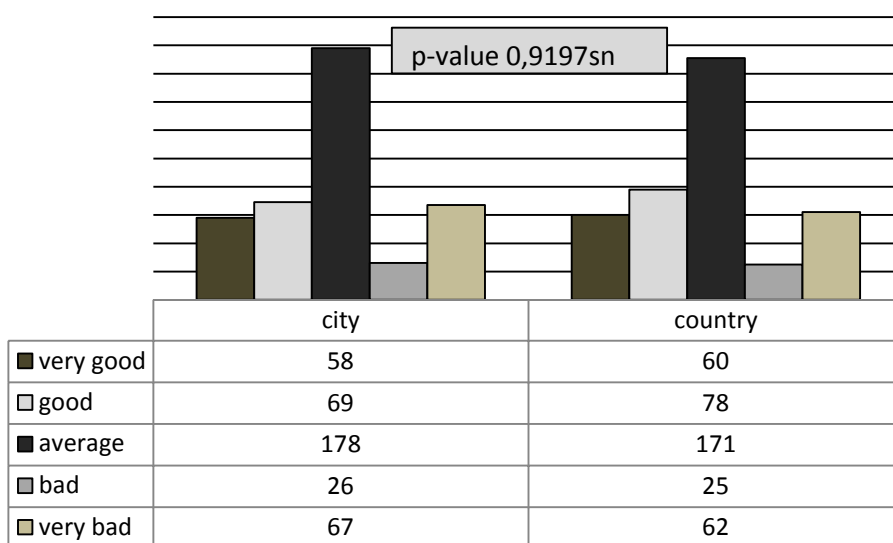
Table 2 *The relation between the respondents' lifestyles and the level of education of their parents*

Education of parents	Lifestyle					
	very good	good	average	bad	very bad	Total sum
C	67.66%	28.14%	4.19%	0.00%	0.00%	100.00%
S	0.90%	21.75%	65.92%	5.83%	5.61%	100.00%
U	0.65%	1.30%	29.22%	13.64%	55.19%	100.00%
E	0.00%	3.70%	11.11%	14.81%	70.37%	100.00%
Total sum	14.86%	18.51%	43.95%	6.42%	16.25%	100.00%

In the research we also concentrated on finding out whether there is any connectedness between the current lifestyle of the respondents and their place of living (figure 2, tables 3,4). The results of the research as well as the graphical representation show no statistically significant difference between the lifestyle and the living place of the respondents. In our opinion this may be caused by the fact that the current trend is to move from cities to the country. These people keep their original habits, their way of spending free time as well as their lifestyle which is typical for cities (sports, going to cinemas, theatres, galleries, knowing foreign countries, travelling, etc.).

Table 3 χ^2 *test of independence between the lifestyle and the living place of the respondents*

| current occurrences							expected occurrences					
	60	78	171	25	62	396		59	73	174	25	64
	58	69	178	26	67	398		59	74	175	26	65
	118	147	349	51	129	794						
p-value	0.9197											

Legend of statistical significance: *** statistical significance for level p<0.001; ** statistical significance for level p<0.01; * statistical significance for level p<0.05.

Fig. 2 *The relation between the lifestyle and place of living of the respondents*

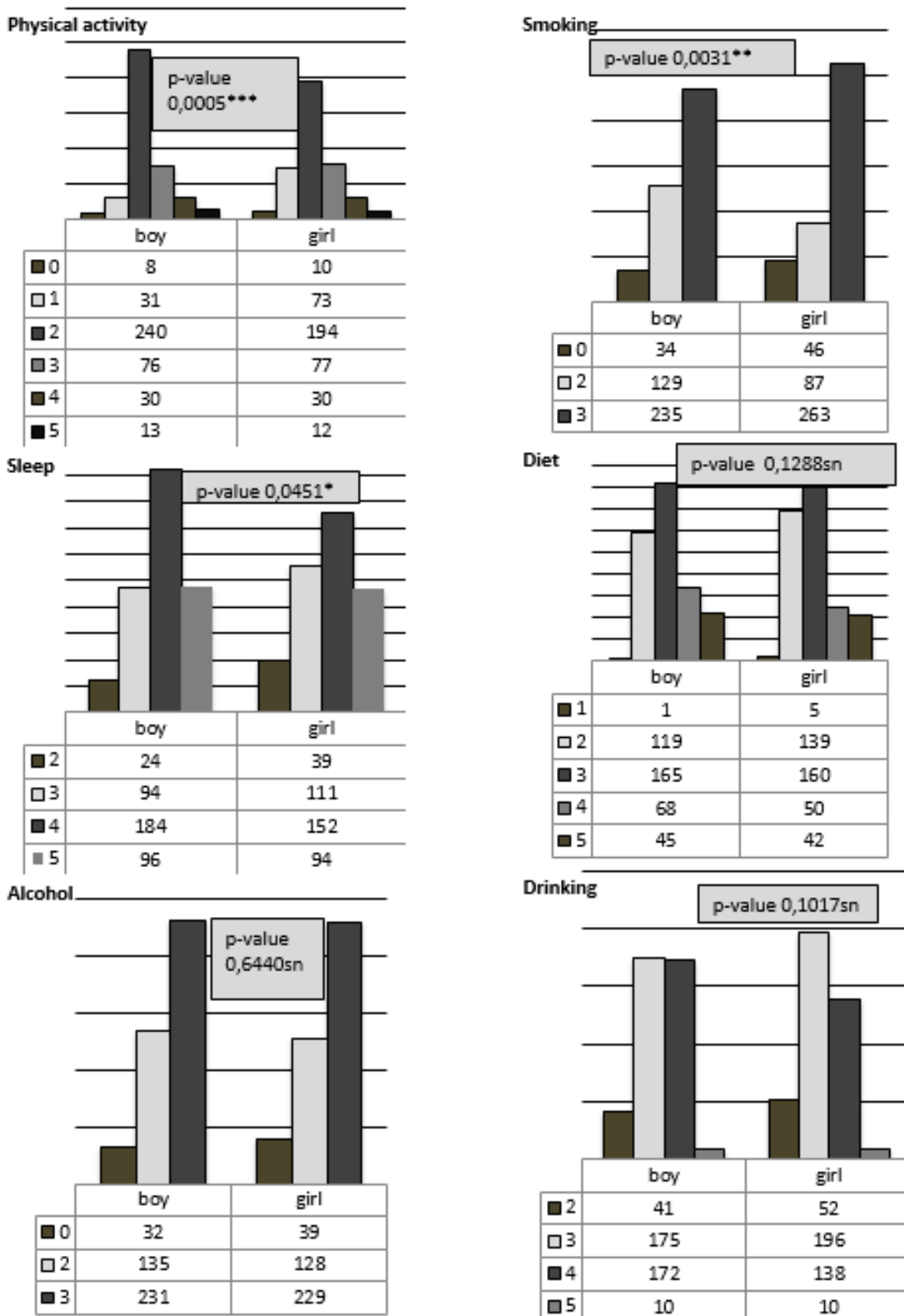**Table 4** *Relation between the lifestyle and the place of living of the respondents*

Place of living	Lifestyle					
	very good	good	average	bad	very bad	Total sum
Country	15.15%	19.70%	43.18%	6.31%	15.66%	100.00%
City	14.57%	17.34%	44.72%	6.53%	16.83%	100.00%
Total sum	14.86%	18.51%	43.95%	6.42%	16.25%	100.00%

Much research in the field of adolescents´ lifestyles and the application of physical activities in their daily regime bring the knowledge that boys practice a healthier lifestyle than girls [1, 14-17]. Therefore in our research we also investigated the relation between the current lifestyle and the gender of cohort. The above mentioned fact was not confirmed in our surveillance. Figure 3 and tables 5, 6 show that there is no statistically significant relation between the gender and a lifestyle of the respondents.
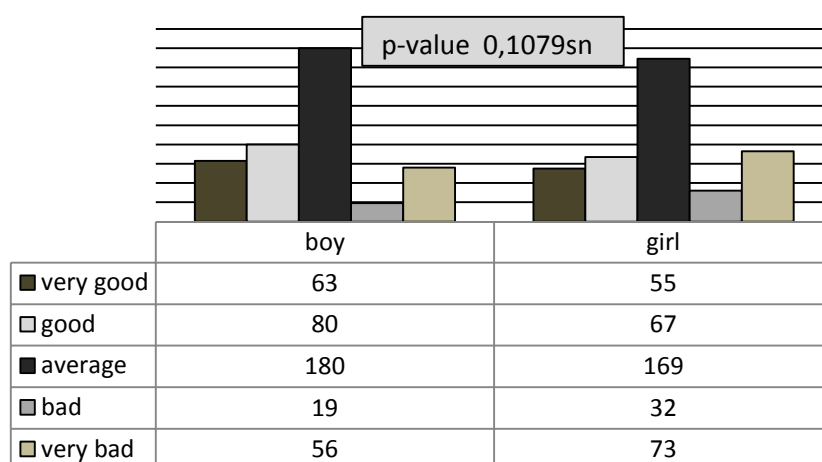
Legend of statistical significance: *** statistical significance for level p<0.001; ** statistical significance for level p<0.01; * statistical significance for level p<0.05.

Fig. 3 *Relation between lifestyle and gender*

Physical activity

p-value 0,0005***

	boy	girl
0	8	10
1	31	73
2	240	194
3	76	77
4	30	30
5	13	12

Smoking

p-value 0,0031**

	boy	girl
0	34	46
2	129	87
3	235	263

Sleep

p-value 0,0451*

	boy	girl
2	24	39
3	94	111
4	184	152
5	96	94

Diet

p-value 0,1288sn

	boy	girl
1	1	5
2	119	139
3	165	160
4	68	50
5	45	42

Alcohol

p-value 0,6440sn

	boy	girl
0	32	39
2	135	128
3	231	229

Drinking

p-value 0,1017sn

	boy	girl
2	41	52
3	175	196
4	172	138
5	10	10

Legend of statistical significance: *** statistical significance for level p<0.001; ** statistical significance for level p<0.01; * statistical significance for level p<0.05.

***Fig. 4** Relation between factors of a lifestyle and gender*

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Table 5 χ^2 *test of independence between lifestyle and gender of respondents*

current occurrences	55	63	118	expected occurences	59	59
	67	80	147		73	74
	169	180	349		174	175
	32	19	51		25	26
	73	56	129		64	65
	396	398	794			
p-value	0.1079					

Table 6 *Relation between lifestyle and gender of respondents*

	Lifestyle					
Gender	very good	good	average	bad	very bad	Total sum
girl	13.89%	16.92%	42.68%	8.08%	18.43%	100.00%
boy	15.83%	20.10%	45.23%	4.77%	14.07%	100.00%
Total sum	14.86%	18.51%	43.95%	6.42%	16.25%	100.00%

In this case we performed a detailed analysis of selected factors of a lifestyle. We investigated whether there is any relevance between the gender and individual factors which were considered when evaluating the lifestyle (physical activities, drinking, diet, alcohol, smoking, and sleep). We can confirm that in three of these variables (diet, drinking, and alcohol) there is no statistically significant difference between boys and girls. In other selected variables (physical activities, smoking, and sleep) we found perceptible differences between boys and girls conformed by the chi square test of independence whose p values show a statistically significant difference between the gender and these variables at different levels of significance (figure 4).

In the variable of physical activity it is the significance level of 0.001, in the variable of smoking the statistical difference is at the significance level of 0.01, and in the variable of sleep the level of significance was 0.05. The individual distribution of the sets and p values of chi square tests of independence are reported in figure 4.

5   Conclusion

This contribution deals with the lifestyle of adolescents in the region of Trnava related to the gender, living place, and level of education of their parents. Based on the research results in the area of selected factors of respondents´ lifestyle from the point of view of the intersexual differences we found out statistically significant differences in the variables of physical activities, smoking, and sleep. Very important is the knowledge that the level of education of their parents also significantly influences the lifestyle of the respondents.

With regards to the above mentioned facts and the results of the research it is necessary to secure proper care of the growing generation and to direct them towards a healthy lifestyle. Young people should be active from the very beginning and schools are suitable places where this activity should be continued. An early implementation of complex preventive measures such as education in a healthy diet, motivating students to a physical activity, and building habits beneficial to a healthy lifestyle has a significant meaning in the adolescent population.

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