

Changes in the Behaviour of School-aged Children: new or old Educational Challenges

Spremembe v vedenju šoloobveznih otrok: novi ali stari vzgojni izzivi

Helena Jeriček

Summary

Helena Jeriček, PhD, Institute of Public Health of Republic of Slovenia, Trubarjeva 2, 1000 Ljubljana, helena.jericsek@ivz-rs.si

The article presents a result comparison of the international study Health Behaviour in School-aged Children, relating to children aged 11-, 13- and 15- (n=5130). The purpose of the research study is to gain insight into and to increase understanding of children's and adolescent's health, well-being, health of behaviour and social context. The article focuses on some important differences between the years 2002 and 2006 regarding leisure time, school-related stress, bullying, physical fighting and risk behaviours – alcohol, tobacco and cannabis use among children and adolescents. It ascertains that children spend their leisure time more passively, they are less physically active, are less sociable and more aggressive in

their behaviour and feel more burdened with school than back in the year 2002. Moreover, the use of tobacco and cannabis is less frequent, while alcohol consumption remains more or less the same. These changes present new – old educational challenges for social pedagogues.

Key words: *leisure time, television use, computer use, socializing, violence, school-related stress, tobacco, alcohol and cannabis consumption.*

Povzetek

Članek predstavi primerjavo rezultatov mednarodne študije Z zdravjem povezano vedenje v šolskem obdobju med 11-, 13- in 15-letniki pri nas ($n = 5130$). Namen raziskave je dobiti vpogled ter bolje razumeti vedenja otrok in mladostnikov. Članek se osredotoči na nekatere pomembne razlike med letoma 2002 in 2006 v preživljanju prostega časa, obremenjenosti s šolo, trpinčenju, pretepanju in tveganih vedenjih: uporabi alkohola, tobaka in marihuane pri otrocih in mladostnikih. Ugotavlja, da otroci preživljajo svoj prosti čas pasivno, se manj gibljejo, manj družijo z vrstniki, se bolj nasilno vedejo in se čutijo bolj obremenjeni s šolo kot leta 2002. Poleg tega jih manj uporablja tobak in marihuano, medtem ko pri opijanju ni bistvenih razlik z letom 2002. Te spremembe so za socialne pedagoge novi – stari vzgojni izzivi.

Ključne besede: *preživljanje prostega časa, gledanje televizije, uporaba računalnika, druženje z vrstniki, nasilje, obremenjenost s šolo, uporaba tobaka, alkohola in marihuane.*

Introduction and purpose of the research study

Children and adolescents are the group most frequently dealt with and discussed by social pedagogues in their educational, preventive, consultative and group work (e.g. Poljšak Škraban, 2003, Rozman, 2003, Plajnšek, 2004). That is why it is important to be familiar with typical features of their lifestyle and habits, as well as with the changes having occurred within this population group over the recent years. In this way we can gain a better understanding of their world and emotional responding, be better prepared to work with them, gain target training for certain skills, and react more adequately in case of problems.

The article presents results of the international study Health Behaviour in School-aged Children: a WHO collaborative Cross-National Study (acronym HBSC). This is an international research project taking place every four years; Slovenia first participated in the year 2002, and the second round was made in 2006 (including forty-one states). The aim of the research is to gain more profound understanding of life and health of children and adolescents in the broadest sense. The notion of health in this research study is not understood as absence of disease in individual, but rather as his prosperity, full use of personal potentials, as satisfaction and successful tackling everyday problems, good relations, communication skills, etc. The research study includes different indicators, i.e. demographic data, nutrition habits, oral health, physical activity, smoking, alcohol and cannabis consumption, life satisfaction, self-rated health, stress in school, violence, injuries and other behaviour types, reflecting children's and adolescent's lifestyle. My article refers only to a certain types of behaviour, relevant for the work of a social pedagogue and pointing to educational shifts and possible directions of future activities.

Methods

HBSC is a research project, carried out every four years in schools and based on data, acquired by a questionnaire, completed by elementary/secondary school pupils in classrooms. The age of

target groups is 11,5, 13,5 and 15,5 years, respectively. According to international standards, the sample includes about 1.500 representatives of each age group in every participating state.

The research project applies quantitative methodology, i.e. a standard international questionnaire, based on the questions from former rounds, each round also going through a few corrections. The questionnaire results from cooperation between members of the HBSC research network, including all the member states. The questionnaire should imply all the obligatory questions in the sequence and form, prescribed by the research protocol, except for some inevitable translation adjustments.

As Slovenia has been going through a reform of the school system in recent years – the introduction of a nine-year elementary school – the sampling was more difficult than in the schoolyear 2001/2002. The sampling unit was class/department; a sample numbering over 6000 children and adolescents (about 2000 from each age group) was randomly selected from the list, comprising 280 classes. The final structure of the base was 5130 children and adolescents, about half of them were boys.

The anonymous opinion poll took place in classrooms, during classes. It was carried out by the consultative workers we contacted when preparing class lists. After examination of the collected questionnaires and data insertion, the base was organized in accordance with international standards and sent to Norway for purification. When it came back cleaned, it was submitted to the SPSS program processing.

Results

As already mentioned, a limited number of behaviour types will be discussed, i.e. leisure time activity, violence, school-related stress and risk behaviours.

Leisure-time activity

Leisure time is the time when an individual is free to do whatever he likes, i.e. engage into activities he enjoys and finds interesting as well as relaxing. Research studies indicate that the way how

children and adolescents spend leisure time largely depends on sex, age, school success, socio-economic status of their families, as well as on schoolmates and friends (Derganc, 2004). The data on family structure show that in the year 2006 statistically significant lesser number (2,6 %) of respondents lived with both parents (84,3 %). On the other hand, the share of children and adolescents living with one parent only (mostly mother, 86%) increased (by 1,5 %), as compared to the year 2002.

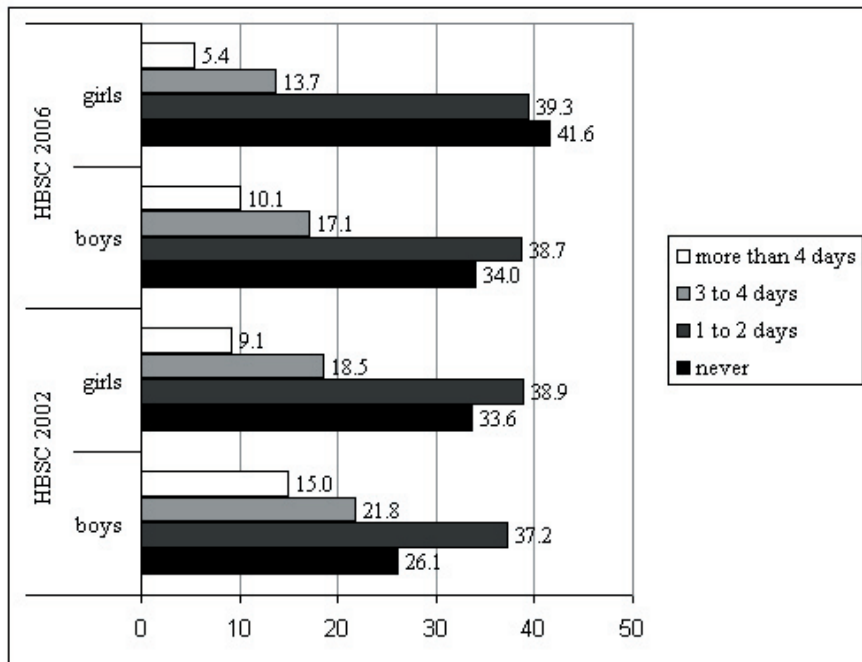
Different research studies referring to the youth of Slovenia ascertain (Ule, 1995; Ule, 1996; Ule & Rener, 1998; Ule, 2000; Ule & Kuhar, 2002; Gril, 2004) that their leisure time is mostly dedicated to associating with friends, TV watching, listening to music and sports. These activities were also included into the HBSC research study, where our main interest was how much of their after-school time was spent on social activities, TV watching, games, computer use and physical exercise.

a.) Associating with friends

Associating with friends is an important aspect of adolescence and emancipation, affecting child's and adolescent's identity, self-image, emotions, behaviour, social contacts, etc. Children and adolescents were inquired about size of peer group affiliation – about numbers of close friends, about frequency of meeting them, as well as about other forms of communicating – by phone, SMS messages and email.

Compared to the year 2002, in the year 2006 there was a significant increase in the share of adolescents (by 8 %, HBSC 2002 29,8 %, HBSC 2006 37,8 %) never associating with friends in their leisure-time (in the evenings). The share of adolescents getting together with friends more often than 4 days a week decreased by almost 5 % (HBSC 2002 12,1 %, HBSC 2006 7,8 %). This means that the youngs are now less sociable than in the year 2002 (graph 1). Likewise, it is interesting that the number of respondents without any friends appears to be slightly higher than in 2002, although this difference is not statistically significant. Compared to boys, girls have less friends of both sexes. The share of 15-year olds spending 4 or more evenings a week with friends (14,9 %) is higher than with 13-year olds (11,7 %) or 11-year olds (10,8 %).

Graph 1: Proportion of young people, associating with friends in leisure-time in the evenings, comparison between HBSC 2002 and HBSC 2006 by gender (HBSC 2002, n=3956; HBSC 2006, n=5064, p<0,05).



Peer contact in the evening frequency	HBSC 2002				HBSC 2006			
	Boys		Girls		Boys		Girls	
	F	%	F	%	F	%	F	%
Never	520	26.1	657	33.6	854	34.0	1061	41.6
1 to 2 days	740	37.2	761	38.9	972	38.7	1003	39.3
3 to 4 days	434	21.8	361	18.5	430	17.1	349	13.7
More than 4 days	298	15.0	179	9.1	256	10.1	145	5.4

Majority – 80 % of boys and 88 % of girls – communicate with friends at least once a week by phone, written messages or internet; 39,6 % of girls and 30,8 % of boys do that every day, and 10,1 % of male and 13,1 % of female respondents do that five or six times a week. The use of electronic communication media increases with age. Compared to the year 2002, the share of adolescents having daily communication with their friends increased by almost 2 %.

b.) Physical activity

Contemporary way of life with all the social, cultural and technological changes is leading to an increasingly sedentary lifestyle, so with young people as with adults (Elgar, Roberts, Moore and Tudor-Smith, 2005; Koprivnikar, 2005), despite the fact that regular physical activity appears to be a significant protective factor against bad health and development of different noncontagious diseases. One of the questions of our research study was how many days per week – before answering the questionnaire – were you physically active of at least moderate intensity for at least 60 minutes per day?

Compared to the year 2002, respondents were less physically active than in 2006. The number of boys and girls who were not physically active in the week before questioning was higher (3,2 % of boys and 5 % of girls in the year 2006; 2,9 % of boys and 3,8 % of girls in the year 2002); on the other hand, the number of those having at least one hour of physical exercise every day decreased (21,9 % of boys and 13,3 % of girls in the year 2006, 29,0 % of boys and 16,4 % of girls in the year 2002). The average number of active days per week (see table 1) thus decreased. 15-year olds were the least and 11-year olds the most physically active among our respondents.

Table 1: Mean number of days when adolescents are physically active per week – comparison between HBSC 2002 and HBSC 2006 by gender (HBSC 2002, n=3859; HBSC 2006, n=5063, p<0,05)

Year	Gender	
	Boys	Girls
HBSC 2002	4.59	3.83
HBSC 2006	4.26	3.62

c.) Television and computer

TV and computer are the favourite media of young people. Children and adolescent use these two mostly at home, which is why family environment plays decisive role in one’s susceptibility to a sedentary lifestyle (Salmon, 2005). Our research study focused on the amount of leisure-time dedicated to television and computer games, as well as to chatrooms, internet, email and homeworks, during weekends and through the week.

The data indicate (table 2) that the number of young people not watching television during the week was higher in 2006 (4,6 %; boys 3,4 %, girls 5,7 %), although, on the other hand, the number of those watching TV more than 6 hours a day was also higher (4,6 %; boys 5,6 %, girls 3,4 %). Slightly less than half of the respondents watch TV two to three hours a day, so during the week as during the weekends, whereby the share of during-the-week decreased by almost 4,0 % (HBSC 2002 49,8 %, HBSC 2006 46,1 %), while the weekend share increased by almost 2 % (HBSC 2002 43,1 %, HBSC 2006 45,0 %). There are no other significant differences regarding weekends between 2002 and 2006. It is interesting, though, that boys are keener TV viewers and game players than girls.

Table 2: Frequency of television watching among young people during the week and during weekends by gender – comparison between HBSC 2002 and HBSC 2006 (HBSC 2002, n=3956; HBSC 2006, n=1530, p<0,05)

Television use on weekdays	HBSC 2002				HBSC 2006			
	Boys		Girls		Boys		Girls	
	F	%	F	%	F	%	F	%
None at all	42	2.1	85	4.2	86	3.4	146	5.7
30 minutes to 1 hour	526	26.5	566	29.0	771	30.4	866	33.9
2 to 3 hours	998	50.2	968	49.5	1195	47.2	1150	44.9
4 to 5 hours	341	17.1	294	15.0	336	13.2	310	12.1
6 hours or more	82	4.2	43	2.2	144	5.6	88	3.4
Television use on weekend	Boys		Girls		Boys		Girls	
	F	%	F	%	F	%	F	%
	None at all	46	2.3	61	3.1	55	2.2	64
30 minutes to 1 hour	286	14.5	366	18.8	412	20.7	389	15.2
2 to 3 hours	830	42.0	862	44.1	1090	43.0	1201	47.0
4 to 5 hours	572	29.0	491	25.1	661	26.1	670	26.2
6 hours or more	242	12.3	172	8.8	314	12.4	232	9.0

d.) Watching television during weekends

The 2002 – 2006 comparisons regarding game playing and the use of computer for chatting, internet, email and homeworks are not possible as these very questions were not posed in 2002. The data for 2006 indicate (table 3) that boys are more frequent game players than girls; on the other hand, the share of girls using computer for internet, chatting, email and homeworks is higher than with boys. Almost half of the girls (49,5 %) don't indulge in playing computer

games on weekdays, this percentage being considerably lower with boys, i.e. 15 %. Game playing is more frequent on weekends, so with boys as with girls. There are 12 % of boys playing games for six hours or more on weekends. The highest share of those not playing computer games is among the 15-year olds.

It is interesting that on weekdays 31,4 % of boys and 28,4 % of girls do not use computer for chatting, internet, email and homeworks. The corresponding shares for weekends are 31,2 % and 26,8 %, respectively. The highest share of children not using computer for these activities is among the 11-year olds.

Table 3: The frequency of computer use for playing games and for chatting, internet, email and homeworks among young people on weekdays and weekends in 2006 by gender (HBSC 2006, n=5130, p<0,05)

Playing computer games	HBSC 2006 - on weekdays				HBSC 2006 - on weekend			
	Boys		Girls		Boys		Girls	
	F	%	F	%	F	%	F	%
None at all	379	15.0	1267	49.5	274	10.9	944	36.9
30 minutes to 1 hour	1004	39.9	975	38.1	641	25.4	1008	39.4
2 to 3 hours	756	29.2	246	9.4	885	35.2	421	16.5
4 to 5 hours	239	9.5	57	2.2	416	16.5	138	5.4
6 hours or more	146	5.7	17	0.6	301	12.0	44	1.7
Using computer for internet, chatting,...	Boys		Girls		Boys		Girls	
	F	%	F	%	F	%	F	%
	None at all	794	31.4	726	28.4	787	31.2	684
30 minutes to 1 hour	977	38.6	1060	41.5	750	29.7	816	31.9
2 to 3 hours	812	19.6	540	21.1	657	22.5	645	25.3
4 to 5 hours	156	6.2	251	6.1	231	9.1	276	10.8
6 hours or more	80	4.3	72	2.8	190	7.5	131	5.1

Violence (bullying, physical fighting and victimization)

Violence and its growth – so among schoolmates as within family (Kordič, 2007) – is nowadays a very widely discussed topic (Dekleva, 1996; Antončič, 2006; Chapell et al., 2006). The HBSC research study also focuses on this kind of violence, i.e the frequency of fighting, bullying and victimization. The latter was defined as violence which can either be verbal (pricking, abuse), or

psychological (intimidation, threats, exclusion from the peer groups or rejection), and physical (kicking, boxing, beating), including unbalance of strength between victim and attacker.

According to the obtained results, violence among young people is increasing. The share of children and adolescents involved in bullying over the last 12 months increased by almost 4% in 2006. The increase is higher with girls than with boys. Thus, 45,1 % of the respondents were involved in fights in 2006 (61,5 % of boys and 28,7 % of girls). There were 14,3 % of frequent bullies in the sample (20,6 % of boys and 8 % of girls). The share of frequent bullies was highest among 13-year olds (16,7 %) and lowest among 15-year olds (10,6 %).

The increase was also observed in the share of children and adolescents having responded they were victims of bullying over the last few months, i.e. by 2,2 % (from 22,4 % to 24,8 %). The share of respondents who had taken part in bullying also increased by over 4 % (from 23,1 % to 27,8 %, see table 4). Those most often involved in bullying were 13-year olds.

Table 4: Proportion of young people who bully others and who are being bullied – comparison between HBSC 2002 and HBSC 2006 (HBSC 2002, n=3956; HBSC 2006, n=5130, p<0,05)

Being bullied	HBSC 2002		HBSC 2006	
	F	%	F	%
Never	3054	77.6	3790	75.2
1 or 2 times	603	15.3	781	15.5
2 or 3 times a month	99	2.5	141	2.8
About once a week	81	2.1	144	2.9
Several times a week	99	2.5	182	3.6
Bullying others	F	%	F	%
Never	3009	76.9	3634	72.1
1 or 2 times	692	17.7	1033	20.5
2 or 3 times a month	86	2.2	158	3.1
About once a week	60	1.5	123	2.4
Several times a week	67	1.7	89	1.8

School pressure

Apart from family school has a major role in child's and adolescent's development (Samdal, Nutbeam, Wold and Kannas, 1998).. Out of the cluster of questions concerning school we selected the question on whether and to what degree respondents consider themselves pressured with and how they like school. According to the HBSC research results, Slovenian parents' expectations regarding school success are high, as 97 % encourage their children to work well at school.

According to our findings respondents feel they are now more pressured with school than in the year 2002. The share of respondents claiming they find school rather burdensome increased by almost 5 %; on the other hand, the number of respondents not suffering from school pressure at all decreased (Table 5). There are no statistically significant differences regarding sex, but only age. 11-year olds are the ones least pressured by schoolwork.

Table 5: »How pressured do you feel by the school-work you have to do?« - comparison between HBSC 2002 and HBSC 2006 (HBSC 2002, n=3912; HBSC 2006, n=5115, p<0,05)

Pressured by schoolwork	HBSC 2002		HBSC 2006	
	n	%	n	%
Not at all	444	11.3	370	7.2
A little	1656	42.3	2113	41.3
Some	1245	31.8	1864	36.4
A lot	567	14.5	768	15.0

Girls like school better than boys (34,8 % of girls and 28,3 % of boys responded they like school very much); 13-years olds are most and 15-year olds are least happy with school. Compared to the year 2002, respondents enjoyed school less in the year 2006. The share of respondents who do not like school at all increased (from 9,7 % to 10,3 %), same as the share of those who do not like it very much (from 11,1 % to 19,3 %).

Risk behaviour (tobacco, alcohol, cannabis)

The use of tobacco, alcohol and psychoactive substances is one of the behaviour forms helping adolescents find their place, understanding and approval within their generation. However, such behaviour can become dangerous if it starts too early in child's development, if it becomes habitual and is no longer limited to occasions and special events, and also if it involves a lifestyle that is unsuitable for an adolescent, aggravating and preventing constructive activities (Tomori et al., 1998), or even leading to addiction. That is why it is highly important to have control over the use of these substances. Children and adolescents were asked if they ever smoked tobacco, got drunk or tried cannabis; we were also interested in their favourite alcohol drinks, etc.

Table 6 presents data on tobacco smoking and alcohol intoxication. According to these data, the share of those who have already smoked tobacco decreased by 5,4% in the year 2006; regarding alcohol intoxication there were no essential differences between the two years.

Table 6: Proportion of adolescents who had contact with the listed risk behaviour types – HBSC 2002 and HBSC 2006 comparison by gender (HBSC 2002, n=3956; HBSC 2006, n=5130, p<0,05)

Risk behaviours	HBSC 2002				HBSC 2006			
	Yes		No		Yes		No	
	F	%	F	%	F	%	F	%
Have you ever smoked tobacco?	1437	36.4	2541	63.6	1584	31.0	3538	69.0
Have you ever had so much alcohol that you were really drunk?	1243	31.6	2693	68.4	1576	31.0	3501	69.0

The question on the use of cannabis was only posed to 15-year olds. According to the obtained data, the share of those who didn't tried it yet, is higher in 2006 than in 2002. Boys are more frequent consumers of cannabis than girls.

Table 7: *The frequency of cannabis use anytime in life among 15-year olds – comparison between HBSC 2002 and HBSC 2006 (HBSC 2002, n=1059; HBSC 2006, n=1524, p<0,05)*

Cannabis use in lifetime	HBSC 2002		HBSC 2006	
	F	%	F	%
Never	759	71.7	1252	82.2
Once or twice	92	8.7	117	7.7
3 to 5 times	49	4.6	41	2.7
6 to 9 times	26	2.5	33	2.2
10 to 19 times	40	3.8	23	1.5
20 to 39 times	27	2.5	16	1.0
40 times or more	66	6.2	42	2.8

The importance of the HBSC research study for the work with young people

The HBSC research study provides an insight into behaviour, emotions and views of children and adolescents in Slovenia. Moreover, data resulting from such representative studies, attempting to simulate longitudinal studies, provide ground for:

- keeping abreast with development trends of certain behaviour types among young people,
- comparing data according to sex, age, socioeconomic status, etc.
- comparing data with other states (with some time difference).

All this is a highly valuable information for experts dealing in one way or another with children and adolescents, especially for those engaged in preventive and promotional activities, based on population approach. These experts use the acquired data for priority setting, planning, intervention evaluation and activities aimed on entire population. Such approach is reflected in the activities, embracing all or most schools, like children's parliament, healthy schools, compulsory optional subjects, etc. Unfortunately, behaviour of concrete individuals or groups cannot be foreseen on the basis of such and similar studies.

People are alive, unpredictable, unique, constantly changing and free in their choice of lifestyle, responding and understanding.

The work with people (including children and adolescents) is very unpredictable, evading generalizations and demanding a high degree of adaptability and flexibility. An expert has to deal separately with each individual, and get to know his emotions, thinking, actions, wishes, problems, etc. Yet even an expert can never be quite familiar with another person's emotions and reactions, nor can he foresee the nature of interaction. This uncertainty is a cause of permanent tension and fear on the part of experts, generating a wish for clear standards, rules and recipes for action. But, is this (rules, standards, set procedures) really a way to get rid of insecurity, or is it just shifting responsibility for our actions on other people or external factors?

Personally I believe such quantitative research studies to be useful, especially if they are international and carried out periodically.

Conclusions

The HBSC research study includes 11-, 13- and 15-year olds, categorized, according to some theories, into preadolescent and early adolescent period. This is a difficult period of adolescence, often characterized by psycho-social crisis and identity confusion, when the adolescent is neither sure who he is nor what he would like to become. Children are more sensitive and emotional in this period, having conflicts inside themselves and with others. Apart from physical and emotional changes, their thinking and behaviour is also affected by family patterns, social climate, media and society values. Development trends and changes of certain behaviour types and emotional responses of children and adolescents, proceeding from the research study, therefore also reflect wider trends in families and society, which are not altogether new. Considering the contemporary trends of social, technological and economic development, generally accepted values, as well as increasing career- and school-pressure, the acquired data are no longer so surprising. The increasing use of contemporary technologies generates an ever more sedentary lifestyle, as well as passive leisure-time spending in the safe shelter of home. This is the probable cause of less frequent »in vivo« associating with friends and classmates, as well as of growing popularity of phone contacts, internet chatrooms

and email. Since certain types of behaviour are group related only – smoking, alcohol consumption, cannabis use – this might be the reason of their decrease in the year 2006. Another surprising trend is the increase of violence, especially among girls. On the one hand, violent behaviour can result from increasing burdens and pressures (so in school as from parents), and on the other hand it can also serve as a kind of defence. However, a more detailed research study would be necessary to confirm or disprove these hypotheses.

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