# SPORTS ACTIVITIES AND LIFESTYLE PATTERNS OF SLOVENIAN CHILDREN AND YOUTH DURING THEIR SUMMER HOLIDAYS

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**Summary** - The main objective of the research was to analyse the differences in spending summer holidays of Slovenian children and youth in different periods of schooling. The research covered 10,030 tested individuals from Slovenian primary and secondary schools and from the university. The tested individuals answered a special questionnaire at home. The data were analysed by means of Pearson's  $\chi^2$ coefficient.

The analysis has shown that there are certain differences in spending leisure time during summer holidays among different groups of tested individuals.

Going to bed rather late, after 1 o'clock in the morning, among the majority of secondary school children is quite worrying. They tend to sleep longer or lie in, so that there is a general impression that many young people even sleep too long during summer holidays.

Slovenian children and youth mostly watch TV during summer holidays. School children aged 11 to 14 spend up to 3 hours in front of TV daily. Students watch TV the least, they spend much more time than others in front of computer screens. Surprisingly, between 40% and 50% of Slovenian young people are not occupied by any computer activities during summer holidays.

The comparison of sports activity frequency between certain groups of subjects shows that with age the frequency of sports activity decreases. The analysis of sports contents indicates that through growing up practising children's ball games goes down as well as football, roller-skating, and cycling, but on the other hand, practising certain individual sports activities is increasing. The analysis of frequency of getting involved in organised sports activities shows that holiday sport programmes are most often frequented by school children between 11 and 14.

Discovered trend of spending summer holidays and developmental characteristics of each subject sample should be considered when planning and preparing holiday sports activities.

*Key words*: school children, students, primary school, secondary school, university, sports activity, summer holidays, leisure time

#### **INTRODUCTION**

Social influences and new, educationally not yet covered factors of socialisation of young people in modern societies of plenty and hedonism are causing several educational problems. The decrease of sport participation after the age of 14 (Brettschneider & Naul, 2007; Currie et al., 2004; Laakso, Telama, & Yang, 1996; Riddoch et al., 2004; Rychtecky, 2007), as a consequence of physical and psychological changes during adolescence is additionally getting worse with the absence of good sports programmes. Quite often violent offer of media and informational technology, providing an instant and easy satisfaction, encourage children and young people to choose mostly sedentary activities (Brettschneider & Naul, 2007). They have more and more difficulties in choosing sports activities (Jurak, 2006; Kršnjakova & Pavlovičova, 1995; Novak et al., 1993; Rychtecky, 2007).

We have tried to find certain differences in spending summer holidays of Slovenian young people of different age. Being familiar with the ways of spending holiday leisure time and with other factors influencing sport participation during summer holidays we are in position to propose certain measures to improve the situation.

#### **RESEARCH METHODS**

The sample of tested individuals covers 5,240 primary school children, aged between 7 and 10, 2,104 primary school children aged between 11 and 14, 2,369 secondary school children aged between 15 and 19, and 317 university students. The tested samples were selected randomly, and they volunteered to participate in the research. All the parents of primary and secondary school children and all students signed a written consent to the use of the collected data for scientific purposes.

We used the questionnaire, based on the questionnaire constructed by Strel et al.(1991). Primary school children answered the questionnaire at home with the help of their parents and others answered it at home by themselves.

The variables dealt with later on are presented in Table 1.

BEDTIME	Going to bed time		
GETUPTIME	Getting up time		
SLEEPTIME	Number of sleeping hours		
TV_HRS	Number of hours in front of TV		
COMPUT_HRS	Number of hours spent on computer		

 Table 1. The variables and their abbreviations

HOMESPENT	Summer holidays spent at home	
DAILYOBLIG	Daily working obligations	
WHENSPTIME	Part of the day when a tested person has spare time	
SPACTIVFREQ	Frequency of sport participation during holidays	

The basic statistics were calculated with the standard procedures and data on the distribution of implemented variables were obtained. The differences between groups of different variables connected with spending holidays were analysed by means of Pearson's  $\chi^2$  coefficient. An alpha level of 0.05 was adopted.

## **RESULTS AND DISCUSSION**

**Table 2.** Analysis of differences between groups of tested individuals according to the variables of spending holidays

Variable	N	χ²	df	p-level (2-sided)
BEDTIME	10,030	5025.576	21	0.000
GETUPTIME	10,030	1518.539	21	0.000
SLEEPTIME	10,030	2097.596	39	0.000
TV_HRS	10,030	492.1543	21	0.000
COMPUT_HRS	10,030	177.3102	21	0.000
HOMESPENT	10,030	124.1875	12	0.000
DAILYOBLIG	10,030	1634.259	21	0.000
WHENSPTIME	10,030	1489.396	15	0.000
SPACTIVFREQ	10,030	276.1362	9	0.000
HRSSPORT	10,030	254.5381	21	0.000

The analysis with Pearson's  $\chi^2$  of separate variables has shown that the differences between groups are statistically significant in all selected variables (Table 2). Hereinafter we are describing the differences among them.

The comparison between the tested groups as regards the variable of bedtime shows that, with age, the curve becomes more and more asymmetric to the left, which means that the older group goes to bed much later (Figure 1).



Figure 1. Going to bed

During summer holidays children between 7 and 10 go to bed at 10 o'clock in the evening, children between 11 and 14 go to bed at 10 to 11 p.m., secondary school children a few minutes before midnight, and students at a quarter past midnight. We should point to the curve of the distribution of this variable for secondary school children, as the frequency increases to the highest value. We see the reasons in the trend of spending leisure time of secondary school children and their personal interests at that age. »Rave« culture, which is followed by many young people in their leisure time, requires the rhythm of night life (Jurak, 2006).

The distribution of "getup time" variable is not so much diverse. During summer holidays children aged between 7 and 10 get up at twenty to 9, whereas children between 11 and 14, secondary school children and students get up at nine fifteen (Figure 2). It should be noted that a relatively big proportion of secondary school children (12.3%), get up almost at noon during summer holidays. We can assume that such distribution of variables is a result of the above-mentioned life style.



Figure 2. Getting-up time

As a consequence of the differences in bedtime and getup time between certain groups of tested subjects there are also expected differences in the number of slept hours between groups. The most hours, namely on average 10 hours and 37 minutes is the sleeping time of children aged between 7 and 10. Children aged between 11 and 14 sleep slightly less: 10 hours and 24 minutes, and secondary school children sleep the least: 9 hours and 20 minutes. In total students sleep the least: a little less than 9 hours, which has also been confirmed by Statistics Office of the Republic of Slovenia (Podkrižnik, 2001) which gives data about the average sleeping time of a typical Slovenian (men 8h39', women 8h43').

Speaking of children's developmental needs, we can ascertain that Slovenian children and youth have enough sleeping time during summer holidays, some even too much. Parents of children, who lie in, should consider the organisation of their children's holiday time. One possible good alternative could be holiday sports programmes.

Comparison of watching TV among different tested groups shows that TV screens are mostly stared at by the children aged between 11 and 14, who spend up to 3 hours daily in front of TV. Secondary school children follow with slightly less than 2 and a half hours, next we have children between 7 and 10 with 2 hours and fifteen minutes, and finally students who watch TV the least: one hour and forty-five minutes (Figure 3).



Figure 3. Watching TV

Many European sports experts call our attention to the fact that young people spend too much time in front of television (Brettschneider, Naul, Bünnemann, & Hoffmann, 2007; Rychtecky, 2007), and we therefore find the encouragement of parents to reduce the time their children spend in front of TV or computer screens as one of the objectives of the draft declaration of the Council of Europe.

The analysis of computer-based activities of Slovenian children and young people during summer holidays gave us surprising results. We have learned that 40% to 50% of children and young people do not perform any computer-based activities at all (Figure 4), furthermore, the analysis of correlation between sports and computer-based activities during summer holidays shows that children of

better educated parents work more on computers. Parents' education also influences sports activity of their children, therefore we have not found any negative correlation between sports and computer activities (Jurak, Kovač, & Strel, 2003).

We assume that leisure time computer-based activities (computer games, Internet) have been replaced by mobile telephoning with a whole array of services (telephoning, SMS messages, WAP, phone games, etc.)





Figure 4. Using computer

The average value of the variable in all groups ranges at about one hour of computer activities per day, yet, there are statistically significant differences among groups. During holidays we find students sit by the computer most often, and children between 7 and 10 the least, whereas children between 11 and 14 find themselves in front of the computer more often than secondary school children.

Secondary school children spend most of their time at home during summer holidays. When we analysed the influences on sports participation frequency during summer holidays we found out that time spent at home stands in negative correlation with sports activity (Jurak, Kovač, & Strel, 2003). It seems that children who stay at home do not have organised leisure time, which is the reason why children lie in and watch TV, rather than being physically and mentally active. Besides, quite often there are no adequate sports facilities near their place of residence offering sports activities (Sallis, Prochaska, & Taylor, 2000).

As expected, students have the most working obligations during summer holidays (on average 3 hours and a quarter), and children from 7 and 10 have the least (1 and a half hour) (Figure 5). The results of the analyses about the influence of working obligations on the frequency of sport participation show (Jurak, Kovač, & Strel, 2003), that obligations only have influence on the frequency of sports activity of students.



#### **Daily work obligations**

Figure 5. Daily work obligations

We have also been interested in what part of the day children and young people have spare time during holidays. Between 0.3% and 2.3% of them claimed not to have any spare time. As expected children between 7 and 10 have the most spare time, as almost half of them are free the whole day, while only 20% of students may say so. Primary school children of upper classes are free for the whole day or at least in the afternoon, whereas secondary school children are free in the afternoon and in the evening. The answers of students show that they mostly have spare time in the evening.

When we compare those answers with the analysis of holiday sports programmes (Jurak, Kovač, & Strel, 2003), we find out that the timing of sports activities suits primary school children the most. If we want to increase sports activity of children and youth during holidays we have to prepare interesting programmes exactly at the time which is most convenient to the target groups of children and young people.



Figure 6. Comparison of sports activity frequency in regard to the tested group

The comparison of sports activity frequency among different tested groups shows that the participation decreases with age, and that the most active children are the ones aged between 7 and 10, while students are the least active (Figure 6). The same trends have also been noted in the developed countries (Brettschneider & Naul, 2007; Currie et al., 2004; Laakso, Telama, & Yang, 1996; Riddoch et al., 2004), and have been confirmed by other variables of holiday spending.

Differences among the tested groups can be explained by physical and psychological changes in the development of children and youth.

	% involved in organised holiday sports activities			
	Total	Boys	Girls	p (2-sided)
Pupils aged 7 to 10	18.1	23.5	13.4	0.000
Pupils aged 11 to 14	22.5	30.9	16.5	0.000
Secondary school children till 19	13.2	24.6	10.2	0.000
Students	8.8	11.2	8.4	0.410

 Table 3. Proportion of children and youth involved in organised holiday sports activities according to separate tested group

The overview of the proportion of young people involved in organised sports activities during holidays shows that children at the age from 11 to 14 participate most frequently in holiday sports programmes (Table 3). The trend of participation seems to be equal to the trends elsewhere. The majority of developed countries notes an increase of participation until the age of 12, when most young people are involved in organised sports activities, and then a rapid fall is noted after the age of 14 (Armstrong, 2007; Brettschneider, Naul, Bünnemann, & Hoffmann, 2007; Riddoch et al., 2004). Namely, that is the age when we note the change in the interests of young people, which gets stabilised again at the age of 18. Young people, therefore, experiment in the period of secondary schooling, trying to find other activities. Some authors (Wankel, & Mummery, 1996; Buisman, & Lucassen, 1996) ascertain that young people reject sports activities due to negative experiences with the leadership of adult sports team leaders. Social changes following technological development put adolescents in position where they can no longer rely on traditional links; therefore, they refer more and more on their schoolmates to find new values. Sports activities led by adults are thus losing their attractiveness.

All the way to the student age we note a larger participation of boys in the holiday sports programmes. This has also been noted by other authors (Wankel, & Mummery, 1996; Laakso, Telama, & Yang, 1996; De Knop et al., 1996). Gender differences can be explained by differences in personal interests (Pavlikova, 1995, Majerič, Strel, & Tušak, 2001). What is worrying is the decrease of secondary school girls' participation in holiday sports programmes.

A decrease of organised sports activity of students may be assigned to the increased level of individualisation of modern society (De Knop et al., 1996; Jurak, 2006), which has been expressed in the more informal sports activities of students or sports exercises done at home. Laakso, Telama and Yang (1996) ascertain that the organised sports activities are participated less by those who practice individual sports. Those prevail in the case of Slovenian students, which is the additional reason that they participate even less in holiday sports programmes. Another important reason is also the lack of up to date topics and weak organisational, material, financial and other conditions of organisations offering sports programmes for students (Majerič, Strel, & Tušak, 2001). A large decrease of boys' participation in sports activities is surprising. The fall is so big that there are no more gender difference at this age.

Despite the fact that sports programmes are one of the most frequented organised ways of holiday spending, there are large reserves in the participation of children and youth in sports programmes. The comparison between the data on organisations offering holiday sports programmes and the ways of their organisation, contents and leisure time spending on one hand, and the interests of separate tested groups on the other hand, shows that it is necessary to change certain programmes (to specialise activities), and to adjust the duration and time of the activities during the day, and above all to improve available information on sports activities during holidays.

Comparison of sports activities participated most often by our children and youth (Table 4) shows expected trends. With the process of growing up participation in children's (elementary) ball games such as football, roller-skating and cycling is decreasing and participation in other individual sports activities is increasing: walking, fitness, mountaineering, swimming etc. The results confirm the authors' findings about the increased individualisation of sports participation at later stages of teenage period (De Knop et al., 1996; Kovač et al., 2007; Majerič, Strel, & Tušak, 2001).

	Primary school children	Secondary school children	Students
Aerobics	0.03	0.68	0.97
Badminton	2.50	2.23	2.24
Basketball	8.08	10.92	8.70
Beach volley	0.01	0.29	1.01
Chess	0.04	0.00	0.57
Children's ball games	3.35	0.00	0.00

**Table 4.** Comparison of selected sports activities of primary school children, secondary school children and students during summer holidays (in percentage)

	Primary school children	Secondary school children	Students
Cycling	21.92	18.34	17.39
Dancing	0.26	1.09	0.83
Diving	0.21	0.18	1.14
Fitness	0.03	0.41	1.41
Football	14.33	10.06	4.39
Gymnastics	0.18	0.43	0.00
Handball	0.74	1.07	0.22
Horseback riding	0.35	0.61	0.44
Karate	0.19	0.31	0.00
Mountaineering	0.53	1.71	3.29
Roller-skating	10.76	7.14	4.96
Running	7.34	8.72	11.46
Sports Climbing	0.14	0.19	0.92
Swimming	15.66	15.50	20.42
Table tennis	0.65	1.21	0.75
Taekwon-do	0.01	0.07	0.70
Tennis	2.85	3.49	3.73
Volleyball	4.10	8.79	3.78
Walking	2.45	3.79	4.87

#### CONCLUSION

The daily rhythm of children and youth during summer holidays is worrying, especially considering the fact that many young people get up late, they mostly watch TV during the day and go to bed late. Young people thus spend too much of their holiday time passively, lying in bed or sitting in front of TV screens. They spend too little time being physically and mentally active. The data on the decreased motor potential during summer holidays also point to that conclusion (Strel et al., 1993).

Children and youth participate in sports activities during holidays mostly for the sake of their personal satisfaction and for social motives, which both belong among the so called intrinsic values, and less for the investment motives, as for example competition success and better performance of motor or sports tasks (De Knop et al., 1996; Kovač et al., 2007). Those who plan and prepare holiday sports activities should consider these elements more seriously. Children and youth should be offered more choice and flexibility, and more co-operative than competitive sports activities. Here we have in mind sports activities which would give advantage to motor abilities and sports skills rather than to hedonism. They should be based on the principle of fair play endorsing equal possibilities, reflected as a wish to participate, to understand each other, based furthermore on friendship and tolerance, and not so much on the principle of competition emphasising victory, which is reflected in the wish for a better result, in effort, productivity, determination and self-discipline. We think that the first orientation is decisive for the sports activity of young people, particularly adolescents in the actual social situation.

The findings of several studies (Strel et al., 1991, 1993, 2003; Jurak et al., 2003) can be expressed in a number of starting points and were considered by government organisations in the formation of national policy for this area.

- Children with better academic results participate in sports activities during their summer holidays more frequently. Their parents have higher education and also participate in sport often. The education of parents increases participation in sport also as a result of financial potential, as there is strong correlation between the education of parents and their willingness to finance the organised sports activity of their children. Children who participate in sports activities more often also use their holiday time more actively as they get up earlier and rest less.

- There are differences between the sexes in sports participation during summer holidays. Boys participate in sports more often. They also prefer team sports, whereas girls prefer individual sports activities in which there is less physical contact and less muscular exertion. The differences between genders are decreasing, especially as the interest of girls in football is growing. Football is in the second place behind volleyball in the popularity of team sports.

– Primary school pupils have a lot of time during the whole day and would like to take part in sports activities in the school gym during the summer holidays, yet only 10% of programmes organised during the summer holidays take place in school gyms. We have therefore proposed a programme at the national level which would enable the use of gyms during the summer holidays. We have suggested organising late afternoon sports activities in school gyms at a very reasonable price acceptable for all children regardless of their socio-economic status and logistical support of their parents. The proximity of schools enables children to be independent in their activities. A well-organised informational support communication system provided by the schools could result in the positive response of children. Expert leadership and a good quality sports kit and equipment would reduce the possibility of injuries. In 2003, the project Hurrah Free Time!, which includes such activities and is largely financed with public funds, successfully started at the national level. During the first year of the programme 18% of primary schools in Slovenia opened their sports gyms during summer holidays. - Youth's participation in sports activities is mostly influenced by their former experiences with sport acquired at home (activity of their parents) and at school (opinion, self-esteem and their mark in physical education at school). The same characteristics also mostly differentiate young people during summer holidays when being involved in organised sports programmes. Therefore, physical education in schools has an important role in influencing how young people spend their free time.

- The way of searching for one's personal identity has a decisive influence on youngsters' sports participation. The function of role-models is very important, as are previous experiences from physical education and the organisation of freeinterest school sport. Sport with its top athletes can create positive initiatives for spending one's leisure time, but the commercialisation of sport can, with its elements of violence and nutrition misuse in order to have a perfect body shape, provide negative influences especially in the sensitive period of secondary schooling. Young people therefore adopt, under the influence of their contemporaries, a lifestyle of their own to be manifested through different opinions, various leisuretime activities and cultural orientations. They wish to increase their personal responsibility and autonomy so sports activities led by adults are no longer attractive to them. Since secondary school children wish to participate in open-area sports activities, which are quite often linked with other activities, we suggested the introduction of a national programme to install lights at outdoor sports facilities and sports areas so as to enable secondary school children to organise sports activities during evenings by themselves with the assistance of their mentors. By demonstrating new alternative sports activities at the abovementioned sports grounds and encouraging young people to more actively participate in the creation of sports activity programmes, we could offer young people alternative ways of spending their evenings compared to what they currently do. A further benefit would come from opening the sports areas up to all potential users regardless of their social status, since we know that certain children have limited material resources and thus cannot access certain sports activities. This programme has also successfully started within project "Hurrah free time!"

– The importance of sports activity in the system of life values is significant for a student's sports activity. The financial situation of students has only an indirect impact on their sports participation. Students mainly seek organised course-type activities of different sports. Considering this and other characteristics of participation in sports activities during summer holidays, we suggest preparing a programme of organised and subsidised different course-type sports activities. These should be organised away from the place of their studying, along with regular ways of sports exercises in their home town, while the possibility of cheaply hiring sports equipment should also be provided.

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