

Thematic Article

Interrelations between Sport and Leisure Activities among High School Students

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Abstract

Research on the education, upbringing and habits of high school students is extremely varied and diversified across all areas of education. In our case, we would like to investigate students' sporting and leisure habits, as several studies have found possible breakpoints in students' lifestyles during this period, which is particularly true for sporting habits. Our research focuses on the leisure habits of students learning in Nyíregyháza and Debrecen. We were looking for answers to the following questions: What is the most common form of leisure time activity among the students investigated? and, what social and sport-related variables are associated with differences in leisure time use? We conducted a questionnaire survey in secondary schools in the two cities (N=450) to answer our questions. The analyses showed that screen-time activities continue to play a dominant role in the leisure time of the age group studied, followed only by activities that can be linked to active leisure.

Keywords: leisure time, high school students, sporting habits

Introduction

Keeping our bodies healthy through physical activity is a vital part of our life. Due to the rapid development of civilisation and urbanisation, through the use of machines and other innovations, Mankind seems to have forgotten about staying healthy. Though in many cases these innovations make our lives easier, we need to be aware of and take care of our physical and mental health (Pavlik, 2015). Physical inactivity is a serious problem in many countries in the European Union, though the problem appears mostly in the South and East, in places like Hungary. According to international research, 5 million people die every year due to the side effects of a sedentary lifestyle. In the European Union alone, that average annual number is 600,000 (Lee et al., 2012). Inactivity is an important dimension of research when looking at the cause of illness (Anish et al., 2010, Katzmarzyk & Janssen, 2004) and health deterioration (Vitai et al., 2015). It (inactivity) increases the risk of lifestyle-related diseases and, in turn, their burden on the human body. In addition to health, research on the subjective well-being of different target groups has come to the foreground as well (Diener 2009, Diener et al. 2009, Diener-Ryan 2009, Angner 2010, Lengyel et al. 2019, Szerdahelyi 2020).

According to the results of a representative Eurobarometer survey in 2010, 77% of the Hungarian population has a sedentary lifestyle and is physically inactive. Since then, this alarming figure has shown a significant decrease, down to 46% in 2020, according to Eurobarometer data, yet needs to be reduced even further. The proportion of the population suffering from health problems due to sedentary lifestyles and the worrisome level of physical inactivity could even affect the entire national economy (Ács et al., 2011; Gabnai et al., 2019; Ács et al., 2020). Thus, studies highlighting factors that influence physical activity are important,

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especially those conducted among school-age children, who can be influenced in formal settings to become active, sedentary, health-conscious adults (Fintor, 2019; Rétsági, 2015; Pluhár et al., 2003).

In this context, our study aimed to explore the patterns of active and passive leisure time activities of students going to school in Nyíregyháza and Debrecen, their social background and their relationship with sporting habits. We were looking to answer the question: What is the most common form of leisure time activity among the students investigated? We also wanted to know whether we could distinguish types of leisure activities and which social and sport-related background variables influence the resulting factor groups.

National and international characteristics of young people's leisure time

Over the last decade and resulting from the post-adolescence period, we have witnessed significant changes in the lifestyles of young people. Their leisure time has increased, and new types of leisure activities have emerged (Pluhár et al., 2003). The way young people spend their free time is an important component of the frame of their life, which occurs as a style and shapes the development of other stages of their lives. The system of leisure activities also has a significant impact on young people's identity development too. As part of their lifestyle, it is closely linked to their values and goals (Hendry et al., 1993). Concerning this age group, the forms of freetime activities are also closely related to the development of their sporting habits. Witt (1971) made a distinction between recreational sports, forms of leisure with peers, leisure in nature and the artistic-intellectual types. Hendry and colleagues (1993) also made distinctions, but into three dimensions: organised leisure activities (e.g. sports), casual leisure activities (e.g. vagrancy) and consumption-oriented activities (such as the cinema). West and Sweeting (1996) analysed Scottish secondary school students' leisure activities and identified five factors or types: street activities, sports and games, consumer culture activities, home activities, and arts/hobbies. Young and colleagues (2001) added an additional factor to this list, the so-called traditional-conservative style. Roberts and Parsell (1994) spoke of sports, and leisure styles with adults and peers.

The studies of Fekete (2015), and Bocsi & Kovács (2018) show that leisure is closely related to economic, developmental and inequality levels in society. According to Fekete (2015), the structure of freetime time use has changed since the Change of Regime. The change led to the emergence of a new economic and social era, which in turn created structural changes in society. The social strata gradually drifted apart, and the gap between the lower and the most marginalised strata of society widened, both economically and culturally. This has had an impact on material opportunities, on leisure and cultural habits and on the amount of leisure time available (Fekete, 2015). According to Bocsi & Kovács' study, access to certain activities or the opportunity to cultivate them are not the same for people from different social strata. Thus, as mentioned by Fekete, the development of stratification is perfectly observable. Moreover, both studies conclude that certain leisure activities can only be the privilege of certain social groups. For example, sailing and tennis may rank among the leisure activities of those of higher social status, while passive leisure activities at home (reading or playing board games) are typical of individuals of lower status, e.g. those with manual work (Bocsi & Kovács, 2018; Vásárhelyi, 2005).

The research of the Hungarian Youth shows a very complex picture of the leisure time habits of young Hungarians. Already, the data from Youth (Ifjúság) 2000 and 2004 show that young people have little leisure time. In addition, the concept of leisure time itself is not clear to the age group surveyed, and they think differently about how to use it, since a young secondary school pupil understands leisure time as idleness. Therefore, the Hungarian Youth Research uses a comprehensive questionnaire to investigate where and how young Hungarians spend their leisure time (Bauer-Szabó, 2009). The research shows that the younger the respondents, the more free time they have on weekends. The 2012 Hungarian Youth Survey shows that young people have an average of 3.5 hours of free time per day on weekdays and 8 hours on weekends. This should be enough time for sports. But the results do not show that young people prefer sport. 76% of young people spend their free time at home and prefer passive activities. It is worth looking at how much internet use has gained ground in the space of four years. Even though it was not included in the 2008 survey results, it has become one of the dominant leisure activities in recent years. Home-based leisure activities also account for a high percentage of leisure activities. 66% and 49% of young people respectively use computers or watch TV as a leisure activity, a huge difference compared to 16% who do sports as a leisure activity. And unfortunately, hiking and trekking were marked by so few respondents that they could not be evaluated. The results show that the use of electronic tools (computer, TV, video games) has become a dominant element of youth leisure compared to previous years. They are also highly influenced by the use of social media on the Internet, which only reinforces the use/

exploitation of electronic articles and has a very negative role in the development of personality, social relationships, and in the socialisation of young people (Nagy, 2012).

After examining the survey results conducted in 2016, it is clear that young people's leisure spaces have not changed significantly compared to 2012. Compared to previous years, the survey has changed because the researchers did not ask young people where and how they spend their leisure time on weekdays and weekends in the 2016 data collection. Unfortunately, further study of the results does not reveal how much free time they have on average after school, work or other tasks. In the absence of these data, the possibility of a longitudinal study, which could have been an option based on data from previous years, is lost (Fekete-Tibori, 2016). After analysing the data, it turns out that young people continue to spend most of their free time at friends' houses or at home, with watching copious amounts of TV (77%) and spending many hours on the computer and internet (70%). Those who choose to get out of their passive environment at home tend to go hiking and on a trip, with almost a third of young people going on weekends and 27% choosing sports activities. Although, very small proportions of young people choose some kind of (active) hobby activity in their free time (Fekete-Tibori, 2016).

After analysing these studies, it can be observed that sport is only one segment of the opportunities available to young people and that leisure time is currently trending towards passive activities (TV watching, social media, video games) (Murányi, 2010). Laoues et al., in several studies on leisure activities and sporting habits of students with disabilities aged 8-18, confirm the dominance of passive leisure activities (watching TV, listening to music) in the target group studied. While young people with disabilities also need to participate in sports, they do so mostly in a school environment. Here too, boys were more active, with a higher frequency of sporting than girls. Their motivation to exercise is similar to that of boys without disabilities, i.e. they exercise to improve their health, for fun, to increase fitness or to look stronger for the girls (Laoues et al., 2019; Laoues et al., 2020). In this regard, our aim is to explore the frequency and patterns of leisure activity participation and investigate differences in socio-cultural and sporting habits.

Research design and Methods

We conducted a questionnaire survey among secondary school students in Nyíregyháza and Debrecen to answer our research questions. The database had 450 respondents. The questionnaire was filled out before the COVID-19 epidemic, so the survey was not affected by the restrictions, though the research was interrupted. We are currently in the process of visiting further institutions to gather a representative sample of counties, settlement types, school types and of school authorities. Accordingly, our research is a pilot study with limited validity, and our analyses will be carried out on the full sample (N= approx.. 1800) in order to generalise our results. The questionnaire used for this research can be divided into four sections: socio-cultural background, sporting habits, leisure time, and physical education. The questions on leisure activities were analysed using factor analysis. Principal component method and varimax rotation were used. The KMO is .790, and the explained variance is 59.200%. We investigated differences in leisure-time habits along with sporting and social factors (gender, type of school, type of municipality, parental education, objective and subjective financial situation, sporting habits) using analysis of variance. The questionnaires were processed using SPSS 21.0. To facilitate the interpretation of the results, we tried to combine the explanatory variables' response options into a trivalent form.

Results

After calculating the basic statistics, we can see from the results in Table 1 that the students surveyed gave a score of only 1.65 and 1.68 for cultural activities (on a scale of 1-10), which confirms the problems raised in the literature review that young people very rarely visit cultural facilities. Respondents gave above-average scores to the sport as a leisure activity (3.90) and to running or walking (4.90), which is favourable, as it shows that sporting activities play an above-average role in their lives. The highest scores were given to TV watching and screen-time activities (5.36-6.3), supporting the research findings that they are the dominant factors in young people's leisure activities.

Table 1. Mean scores for leisure activities on a 5-point Likert scale of (N=450, own edition)

Leisure activities	Average values of responses
Watch TV or movies online	5.36
Playing games on a computer or console	3.55
Playing sports	3.90
Reading	3.23
Doing creative artistic activities	2.52
Running or walking	4.95
Swimming	1.95
Extreme sports	1.73
Attending sporting events	1.94
Attending sports matches or competitions	2.45
Cycling	4.33
Meeting friends	5.70
Facebook, Instagram, Messenger	6.30
Listening to music, concerts	5.27
Partying, going to the pub	2.93
Shopping, mall	3.27
Cinema	2.58
Theatre	1.68
Exhibition or museum	1.65
Working	2.15
Going to private classes	1.94

The factor analysis created four factors: sporting activities, light entertainment activities, high culture consumption, and individual activities (Table 2). Sporting activities included attending sporting events or matches, extreme sports, playing sports and swimming. Based on these activities, naming the first factor was easy because all sport-related questions were included in this factor. In the case of light entertainment activities, the activities where students can spend their free time actively with friends, schoolmates and peers were dominant. Cultural activities such as theatre, visits to museums, reading, etc., were included in the high culture factor. When examining the averages, we have seen that students give a low value to the frequency they do these activities. In the fourth group are the individual activities that students do mostly on their own (using Facebook, running, visiting malls).

Table 2. The pattern of leisure activities (N=450)

Factor analysis on leisure time activities				
Leisure activities	Sporty activities	Light entertainment	High culture	Individual activities
Attending sporting events	0.756			
Attending sports matches or competitions	0.741			
Extreme sports	0.535			
Playing sports	0.504			
Swimming	0.436			
Theatre		0.621	0,438	
Partying, going to the pub		0.565		
Cinema		0.509		
Exhibition or museum		0.439	0.382	
Working		0.413		
Reading			0.66	
Doing creative artistic activities			0.542	
Facebook, Instagram, Messenger				0.516
Shopping, mall				0.479
Running or walking				0.475
Listening to music, concerts				0.458

Source: own research

First, we examined the differences in leisure time factors across the forms of sport (Table 3). From our previous analyses, we have seen that 236 out of 425 respondents do sports regularly, which is more than 50%. This is certainly a positive result compared to the results presented in the literature review (Eurobarometer, Hungarian Youth Research). Using Anova, we have explored the differences in leisure activities and forms of sport. The only significant difference in the groups according to the frequency of sporting activities was found in the factor of sporting activities. Unsurprisingly, students who play sports regularly are the most likely to engage in this type of leisure activity; it is less typical for those who rarely play sports and not at all characteristic of those who never play sports.

Table 3. Differences between the sporting groups in the factor of sporting activities

Factor statistics				Anova			
Sporting habits		N	Mean	SD	F	Sig.	N
Sporty activities	I never play sport	73	-0.34	0.78	15.592	0.000	425
	I rarely play sport	116	-0.19	0.88			
	I regularly play sport	236	0.2	0.85			

Source: own research

Next, we examined parental sporting habits and education concerning the factors (Tables 4 and 5). It can be concluded that the more regularly the mother participates in sports, the higher the probability that the students choose sports, high culture consumption and individual activities in their free time. Concerning the father's sporting habits, a significant relationship was found only between the sporting activities ($p=.001$) and individual activities ($p=0.023$). These results confirm the indispensable role of the family as the primary socialisation area in sport socialisation: children adopt the behaviours and patterns of behaviour seen from parents or other relatives by imitation, which is confirmed by several national studies in a sample of kindergarten children

(Müller et al. 2019) and school children (Herpainé et al., 2017). In families where sports are a popular activity among parents or extended family, where sports, the results of sporting events, or the discussion of upcoming or recently played sporting events are frequent topics of conversation, children are more likely to participate in sports and sporting leisure activities. (Kovács, 2020). Herpainé also confirms the positive influence of grandparents in supporting children and grandchildren's sporting activities, in addition to the role of parents in sport and in communicating values (Herpainé, 2018, Herpainé et al., 2017). It is also evident that the social and economic situation of the family limits the sport in which the family is interested, as well as the choice of the sport itself. The process is quite similar to the socialisation process, with the family being the first arena, followed by educational institutions, peer groups and the media (Földesiné Szabó et al., 2010).

Table 4. Comparison of factors based on the parents' sporting habits

Factor statistics					Anova	
Mother sporting habits		N	Mean	Standard deviation	F	Sig.
Sporty activities	Never	124	-0.22	0.79	9.333	0
	Rarely	132	-0.007	0.83		
	Often	95	0.27	0.92		
	Overall	351	-0.005	0.86		
Light entertainment	Never	124	-0.02	0.75	1.289	0.277
	Rarely	132	-0.03	0.70		
	Often	95	0.12	0.96		
	Overall	351	0.01	0.80		
High culture consumption	Never	124	-0.12	0.80	6.311	0.002
	Rarely	132	-0.03	0.68		
	Often	95	0.24	0.85		
	Overall	351	0.005	0.79		
Individual activities	Never	124	-0.12	0.92	3.736	0.025
	Rarely	132	0.09	0.66		
	Often	95	0.13	0.73		
	Overall	351	0.03	0.79		

In terms of parental education, the higher the educational level of the parent, the more likely the student is to choose a sport or leisure activity related to high culture, which is in line with the results of Herpainé's (2018) study, where she found higher sport participation rates for children of parents with higher social status, in addition to parental education. For the father, this association was only for leisure activities related to private culture ($p=0.01$). As highlighted in the literature, this suggests that the mother has a greater role in family socialisation and the development of sporting and leisure habits. An example of this is the forms of family leisure activities; if a child has spent a lot of time in playgrounds or sports fields as a child, he or she will likely take his or her own child to these places as an adult (Nagy & Trencsényi, 2016).

Education and self-education play a crucial role in the successful socialisation of individuals. The primary arena for this process is the family. Family relationships and attachments, conflicts and their solutions, customs and rules are the most effective ways of shaping people's needs and values, personality and social belonging. This is why it is important to address this issue in any research where socialisation can be traced back to the

family level (Somlai, 1994). In our case, the family's perception of the sport, the family's sporting frequency and the attitudes towards sport transmitted during childhood will be decisive.

Table 5. Comparison of factors according to the parents' educational attainment

Faktor statistics					Anova	
	Mother education	N	Mean	Standard deviation	F	Sig.
Sporty activities	Primary school or less	87	-0,17557	0,814696	7,136	0,001
	School-leaving exam	259	-0,05071	0,821169		
	Diploma	79	0,297213	0,964633		
	Overall	425	-0,0116	0,86043		
Light entertainment	Primary school or less	87	0,043114	0,957798	0,659	0,518
	School-leaving exam	259	-0,03767	0,719665		
	Diploma	79	0,068768	0,989472		
	Overall	425	-0,00135	0,826714		
High culture consumption	Primary school or less	87	-0,17461	0,738984	5,529	0,004
	School-leaving exam	259	-0,01768	0,80263		
	Diploma	79	0,235672	0,865629		
	Overall	425	-0,00271	0,8108		
Individual activities	Primary school or less	87	0,016569	0,876081	0,267	0,766
	School-leaving exam	259	-0,01741	0,796528		
	Diploma	79	0,055313	0,710882		
	Overall	425	0,003065	0,797186		

We next examined the relationship between the factors and the type of settlement (Table 6). We found significant differences in only one case, namely in individual activities. It is worth noting that the sample includes significantly more people living in cities (302) than those living in the capital (16) or municipality (110), so relevant findings can only be drawn after analysing the sample with a larger number of items. An interesting result is the mean values for light entertainment and self-culture for metropolitan residents, which may imply in the future that those living in urban areas, rather than sporty leisure, prefer these activities. Still, we emphasise that the small number of elements may have a biasing effect.

Table 6. Differences in individual activities by the type of settlement

Factor statistics					Anova probe	
Factors	Type of settlement	N	Mean	Standard deviation	F	Sig.
Sporty activities	Capital city	16	0.02	1.36	0.836	0.434
	City	302	0.03	0.85		
	Municipality, village	110	-0.09	0.85		
	Overall	428	0	0.87		
Light entertainment	Capital city	16	0.33	1.25	1.328	0.266
	City	302	-0.01	0.75		
	Municipality, village	110	-0.004	0.93		
	Overall	428	0	0.82		
High culture consumption	Capital city	16	0.38	0.81	2.523	0.081
	City	302	0.01	0.80		
	Municipality, village	110	-0.08	0.81		
	Overall	428	0	0.81		
Individual activities	Capital city	16	-0.25	1.00	4.266	0.015
	City	302	0.071	0.75		
	Municipality, village	110	-0.16	0.87		
	Overall	428	0	0.79		

Source: own research

The results concerning the type of school and factors are relevant to our subsequent research (Table 7). Significant differences were found for sporting activities, high culture consumption and individual activities. High school students showed outstanding results for sporting activities, which supports our previous research findings (Szabó & Kovács, 2021) that high school students prefer and participate in a higher percentage of sporting activities than vocational high school students or vocational high school students. The same relationship also holds for high culture consumption. The highest percentage of vocational high school students choose lighter forms of entertainment, which otherwise includes passive forms of leisure, and this can be explained by the higher status of high school students (Bocsi & Kovács, 2018).

Table 7. Patterns of leisure activities by the type of school

Factor statistics					Anova probe	
School type		N	Mean	Standard deviation	F	Sig.
Sporty activities	Secondary grammar school	82	0.33	0.96	6.715	0
	Secondary vocational grammar school	201	-0.03	0.84		
	Secondary vocational school	144	-0.15	0.80		
	Overall	428	0	0.87		
Light entertainment	Secondary grammar school	82	-0.05	0.95	1.878	0.133
	Secondary vocational grammar school	201	-0.05	0.71		
	Secondary vocational school	144	0.12	0.88		
	Overall	428	0	0.82		
High culture consumption	Secondary grammar school	82	0.60	0.87	26.278	0
	Secondary vocational grammar school	201	-0.04	0.66		
	Secondary vocational school	144	-0.28	0.77		
	Overall	428	0	0.81		
Individual activities	Secondary grammar school	82	0.07	0.58	2.748	0.043
	Secondary vocational grammar school	201	0.07	0.80		
	Secondary vocational school	144	-0.15	0.87		
	Overall	428	0	0.79		

Source: own research

Significant differences between the groups of students were obtained separated by subjective financial situation in sport and individual outdoor activities (Table 8). The better the financial situation of the individuals, the more likely they are to engage in sport in leisure time, which is in line with previous research findings that emphasise the role of financial capital in (sport) leisure time (Bourdieu, 2011, Nagy, 2009, Herpainé et al. 2017, Herpainé 2018). Our preliminary research has shown (Szabó,2020), for example, that participation in private sports lessons is influenced by subjective financial situations and that only wealthier students can afford to participate in such private activities

Table 8. Comparison of factors with subjective financial situation

Factor statistics					Anova	
	Subjective financial status	N	Mean	Standard deviation	F	Sig.
Sporty activities	It is hard to make a living	23	-0,42526	0,6978	8,515	0
	We live in average conditions	273	-0,08079	0,795369		
	We live better than average	131	0,219596	0,968165		
	Overall	427	-0,00719	0,862459		
Light entertainment	It is hard to make a living	23	-0,09384	0,681691	2,151	0,118
	We live in average conditions	273	-0,04891	0,774408		
	We live better than average	131	0,12607	0,944447		
	Overall	427	0,00235	0,828253		
High culture consumption	It is hard to make a living	23	-0,38405	0,53205	2,854	0,059
	We live in average conditions	273	0,034834	0,825376		
	We live better than average	131	-0,00571	0,810647		
	Overall	427	-0,00017	0,811715		
Individual activities	It is hard to make a living	23	-0,66488	0,826736	9,459	0
	We live in average conditions	273	0,015186	0,79244		
	We live better than average	131	0,099401	0,74562		
	Overall	427	0,004391	0,795575		

Conclusion

In our research, we have explored the patterns of leisure time habits of secondary school students in Debrecen and Nyíregyháza and the differences in these patterns along the lines of sporting habits and social background. After calculating the basic statistics, we could see that passive leisure activities were also dominant in our case (Facebook, Instagram: the value of 6.3 points). It can be seen that sport as a leisure activity takes a back seat compared to the age group we studied but is present in their lives at an above-average level. Other determining factors include variables related to the social background in our analyses. The type of settlement, the type of school, the subjective financial situation, the educational level of the parents, and their sporting habits influence students' leisure activities. Concerning the type of settlement, it can be seen that individual activities are predominant for those living in the city, which is a surprising result given that the questionnaire was largely completed by students in two county seats (Debrecen, Nyíregyháza), where all the possibilities are there for the other three leisure factors to be a dominant factor in their lives. Regarding the type of school, three factors already showed a significant relationship. Outliers were observed for high school students, who scored higher than their peers learning in vocational schools in sporting activities, light entertainment and consumption

of high culture. The subjective financial situation remained a determining factor in sporting habits and leisure time. Those who considered themselves poor financial circumstances scored well below the average for those in better circumstances. As mentioned in the literature review, the family as the primary socialisation arena also plays a very important role in children's leisure time. The parents' education and sporting habits and their higher socioeconomic status also determine the quality and quantity of leisure time.

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