Analysis of sports habits and their relations to a healthy lifestyle for young people aged 11-14

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Abstract: The aim of the study is to present the health behavior of Hungarian youth aged 11-14. During the research, we analyzed primary school students' relation to regular physical activity and their knowledge about healthy lifestyle. The aim of our research was to explore the health influencing habits of 11 and 14 year olds; we focused on learning about young people's relation to regular exercise, and attitude toward a healthy lifestyle, the emergence of regular physical activity in everyday life, the impact of parents' sports habits on children, and discovering the connection between young people's health-conscious attitudes and sports habits. To explore the research questions and verify the hypotheses, we conducted a questionnaire among the surveyed age group. Using and analyzing the responses obtained during the research, we found that there are favorable data showing that a process has started, but we still have a long way to go. The greatest problem with children's current lifestyle is the lack of conscious behavior. In many cases, they have adequate theoretical knowledge, but their conduct does not match their beliefs.

Keywords: healthy lifestyle, regular exercise, healthy eating, adolescence, analysis

Introduction

In Hungary, the development, awareness, and importance of a healthy lifestyle play a key role in people's everyday lives, but the actual health-conscious behavior of the population cannot be considered appropriate in all cases. Obesity is now an epidemic coupled with many adverse consequences. Based on the 2017 survey data of the Hungarian Central Statistical Office on health and children's health, it can be clearly established that more than half of the adult population in Hungary is overweight (Central Statistical Office, 2018). Unfortunately, in addition to adults, this condition also affects young children. Obesity in early childhood or adolescence...
is a process that is difficult to stop and even more difficult to reverse (Erdely et al., 2020). The problem of childhood obesity and its increasing occurrence can be observed all over the world (Janssen and Lebranc, 2010). The number of overweight or obese children in the European Union exceeds 12 million (Anderson and Butcher, 2006). The number of overweight people is growing by 400,000 a year, while the number of obese children is growing by 85,000 a year. In Hungary, every fourth girl and every fifth boy is overweight or obese. An increase in obesity can be observed between the ages of 3 and 7, so obesity that begins in early childhood is a significant risk factor for adult obesity (Martos, 2012).

Developing a healthy lifestyle and exercising regularly play an important role in preventing obesity (Miles, 2007). The first step in the process of developing a healthy lifestyle is the implementation of a healthy diet, which fundamentally determines and influences our lives, but also our long-term health (Falus, 2015).

Another important component is exercise, namely the maintenance of our body (Falus, 2015). Regular exercise has a preventative effect in both childhood and adulthood. Furthermore, vigorous physical activity also has a positive effect on mental health (Charles and Robert, 1996). Last but not least, we simply feel good while engaging in sports. Physically active young people who exercise regularly are healthier and have better psychosocial and mental health than their non-athlete counterparts (Fintor and Szabó, 2014). In addition, sport also contributes to effective intellectual development. The results of follow-up and experimental research by Trudeau and Shephard (2008) have found that increasing physical activity does not reduce the school performance of primary school children.

Unfortunately, poor habits, poor nutrition, sedentary lifestyles, and smoking, as well as other harmful passions, still lead to serious illnesses and premature deaths today. Obesity and all related diseases (hypertension, diabetes, cardiovascular disease) are considered common diseases (Maddock et al., 1999). The topic of a healthy lifestyle is receiving more and more attention in Hungary, but its implementation in practice is still lagging behind. Both the individual and professionals have an important role to play in turning this around (Kinczel et al., 2020).

Education for a healthy lifestyle, healthy eating (Eves at al., 1994), and the exercise and love of sports should start at the earliest age. It is of utmost importance that healthy lifestyle, healthy diet and regular exercise be the principle of the next generation growing up. To achieve this, a supportive environment and a family background cooperating with the educational institutions are needed (Hídvégi et al., 2015).

Materials and Methods

To understand the topic more thoroughly we conducted both primary and secondary research. Our main goal was to conduct quantitative research. To verify the hypotheses, in 2020 we conducted a survey among the 11-14 age group. The questionnaire involved 501 primary school children aged 11-14 from eight primary...
schools in Hajdú-Bihar County. The response rate was 83.5%. 254 boys (51%) and 247 girls (49%) participated in the completion of the questionnaire (Table 1).

Table 1. Number of research participants by age and sex (N = 501)

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Boys (%)</th>
<th>Girls (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>9.59</td>
<td>6.98</td>
<td>16.57</td>
</tr>
<tr>
<td>12</td>
<td>9.38</td>
<td>8.78</td>
<td>18.16</td>
</tr>
<tr>
<td>13</td>
<td>12.18</td>
<td>13.57</td>
<td>25.75</td>
</tr>
<tr>
<td>14</td>
<td>19.56</td>
<td>19.96</td>
<td>39.52</td>
</tr>
</tbody>
</table>

The first set of questions in the compiled questionnaire involved demographic data that provided information about the gender and age of the respondent, helping to accurately evaluate the responses. The second group of questions included inquiries about the sports habits of the respondent, where we asked about, among other things, the frequency of sports, the location of sports, and how long the respondent has been engaged in regular sports activities. We were also curious about where sport, as a leisure activity, is situated in the life of the participant; how he/she relates to regular exercise; does s/he play sports with the parents; whether s/he likes school physical education classes and how important s/he considers physical education in school. The queries of the third group of questions focused on the healthy lifestyle and eating habits. These queries surveyed respondents' health awareness and attitude toward a healthy lifestyle, and there were questions about eating habits as well. During our research, we also wanted to map the habits of the respondent regarding watching TV and using smart devices (Table 2).

Table 2. Focal points of the research

<table>
<thead>
<tr>
<th>Physical activity</th>
<th>Health behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of regular exercise</td>
<td>Eating habits</td>
</tr>
<tr>
<td>Frequency of sports</td>
<td>Healthy, proper nutrition</td>
</tr>
<tr>
<td>Interaction between sports and well-being</td>
<td>Consumption of soft drinks, confectionery, fruit and dairy products</td>
</tr>
<tr>
<td>Vision for sport</td>
<td>Visiting fast food restaurants</td>
</tr>
<tr>
<td>Joint exercise with parents</td>
<td>Composition and appearance of food</td>
</tr>
<tr>
<td>Love of physical education classes</td>
<td>Screen usage</td>
</tr>
<tr>
<td>Workout</td>
<td></td>
</tr>
</tbody>
</table>

Results and discussion
In the first part of the questionnaire, we assessed the means and frequency of physical activity in the daily life of 11–14-year-olds, and the importance of physical activity in maintaining their health.

Based on the answers it can be concluded that almost 90% of the surveyed age group (447 people) consider the role of regular physical activity to be important and even very important to maintain their health. The proportion of students (85.6%, 429 people) who also consider it important to exercise and play sports regularly to maintain their health is slightly lower. It is encouraging that nearly 90% of those surveyed believe that regular exercise is key to maintaining good health. But it is thought-provoking that we are already losing 4% here (18 people), who, although
aware of the importance of daily exercise, consider engaging in sports regularly no longer really important (Figure 1).

![Figure 1. The role of exercise in maintaining health](image)

The responses received reflect that the vision of young people completing the questionnaire is not very positive. Analyzing Figure 2, it can be concluded that almost 4% of the respondents (19 people) already believe that regular exercise will not be a part of their daily life in adulthood, however, 22.5% (113 people) still seem insecure, namely they can move in either direction.

![Figure 2. The role of exercise in adulthood – vision](image)

It can be concluded that our own results are in line with the data obtained from the Hungarian HBSC survey (2018) and the European Commission’s Special Eurobarometer 472 survey (2017), which predict that regular exercise in this age
The Hungarian results of the HBSC survey in 2018 also highlighted the fact that only 18% of adolescents (11-17 years old) exercise daily (Német et al., 2019), as well as according to the results of the European Commission’s Special Eurobarometer 472 survey (2017), 53% of the Hungarian population do not play sports at all. Only 9% of respondents said they participate in sport activities regularly. These results confirm the sad fact that as the Hungarians age they move less and less, the proportion of regular athletes is very low.

Examining the sports habits of upper secondary students further, we found that nearly 68% (340 people) of the respondents attend training regularly, so 32% (161 people) limit their sports activities to school physical education classes only. Children start playing sports at an average age of 7.2 (Figure 3). This age almost coincides with the beginning of primary school education.

The responses to the survey showed that those who like to play sports are happy to try several venues (gym, swimming pool, ice rink, community sports field) as well as several kinds of sports. Based on the results, 53.7% of the respondents (269 people) used to play sports and exercise together with their parents, 64.7% of the respondents (174 people) spend their free time together actively once a week (mostly cycling, running, badminton) and almost 5% (13 people) play sports more than three times a week with their parents (Figure 4). Examining sports habits and good family examples, we found that children who see good parental example and are used to playing sports together are more likely to attend trainings, meaning that good examples have a positive effect on children’s daily exercise habits.
Examining the effect of sport and regular and intense exercise on well-being, a significant majority of the respondents (84%, 420 people) say that active exercise influences well-being, while 8.4% (42 people) stated that the effect of exercise on well-being is not significant. 7.8% (39 people) of the respondents expressed a neutral opinion about this issue.

The answers to the question why exercise and sport are important for young people and what motivates them to be physically active provide interesting feedback. Several of the predefined options could be selected. Analyzing the data in Figure 5, most respondents (66%, 331 people) play sports regularly for their health. Slightly fewer of them (44%, 220 people) want to look better. These data could mean that the influence of the media and compliance with appearances play a key role in the lives of Hungarian youth. 35% of respondents (175 people) said that they considered physical activity to be important for better well-being, and 22% of them (112 people) wanted to lose weight through regular sports. According to them, more than 1/5 of the survey participants feel overweight or obese. This answer is thought-provoking, as these are young people aged 11-14. Only 20% of the respondents (101 people) indicated that they play sports willingly because of their friends, although friendship and a well-functioning, cohesive team spirit and valuable leisure time spent together are also important during both team sports and leisure sports activities. The proportion of respondents (20.5%, 103 people) for whom sport is important because of their athlete role models was similar. Only 1.8% (9 people) answered that regular and intense exercise is not important to them.
In the second part of the questionnaire, we assessed how healthy lifestyles appear in the daily lives of adolescents aged 11-14 and what knowledge they have in the field of proper nutrition.

The results showed that 87.2% of the respondents (437 people) consider health-conscious behavior important (nutrition, exercise, lifestyle), but 6.4% (32 people) do not consider it important. There was also 6.4% (32 people) of those who did not know what the concept of health-conscious behavior meant (Figure 6).

Examining the responses of young people participating in the survey further, we found that a significant proportion of respondents (83%, 416 people) consider both regular exercise and proper nutrition to be important to maintain health. 6.4% (32 people) of the respondents consider sports to be more important, while 9.2% (46 people) consider proper nutrition to be more important, there’s a very low but
remarkable number of respondents (1.4%, 7 people) consider neither of them important for maintaining our health.

When asked about the composition of a healthy diet, 70.8% of respondents (355 people) have adequate knowledge about which foods contain all the nutrients that are essential for the human body. However, there was a high proportion (29.1%, 146 people) who were unaware of what foods were needed to eat a healthy diet and which foods were not part of a proper diet.

More than half of the young people surveyed (64.9%, 325 people) think that they pay attention to proper nutrition, while 35.1% (176 people) do not pay attention to this.

Based on the results, young people seem to be aware of the principles of good nutrition in theory, but do not or only partially incorporate this into their daily habits.

During the research, we addressed the consumption habits of healthy and unhealthy foods separately. It can be established from the answers that the vast majority of the respondents (91%, 457 people) consume chips, sweets and carbonated soft drinks on a weekly basis. 11% (55 people) of these respondents consume only non-essential foods containing excess calories that are not part of health-conscious behavior at all.

Consumption of fast food that does not belong to the healthy category is also present in the diet of the studied age group almost daily / weekly. 17% (87 people) of the respondents said they never go to fast food restaurants, while 37% (186 people) of the survey visit these establishments on a weekly basis, which are very popular among young people.

According to WHO, the recommended daily intake of fruit and vegetables is 400 grams (WHO, 2003), which corresponds to the amount of 2 average-size apples. According to a 2016 survey by the Central Statistical Office, Hungarians consume only 262 grams of vegetables and fruits per person per day (Central Statistical Office, 2018). Based on the research results of Bíró (2018), this unfavorable result can also be observed among adolescents, whose fruit consumption is well below the recommended amount for the given age group.

This was also confirmed by the results of our own research, according to which the participants in the survey consume fruit, but not in sufficient quantities. The proportion of those who said they never eat fruit is very low, only 2% (8 people). The proportion of daily fruit-consumers is 45% (227 people). 53% of respondents (266 people) eat fruit several days a week, but not every day.

Examining the eating habits further, we found that 53% (267 people) of the studied age group consume dairy products daily, however, it appears in the diet of 44% (219 people) only for a maximum of 4 days per week.

The results revealed that both the consumption of fruit and dairy products lags significantly behind the amount of fruit, milk, and dairy products to be consumed on a daily basis recommended by experts.

Based on the answers to the four questions examined above, we found that the eating habits of the studied adolescents were less than desirable. At this age,
special attention should be paid to the development of good eating habits, as poor eating habits (excessive energy intake, snacks, fast food, low consumption of fruit and vegetables, low consumption of milk and dairy products) can easily be embedded and this can form a basis for subsequent improper adult lifestyles, unhealthy diets and consequent obesity and illness.

The answers to the question about the use of smart devices did not surprise us (Figure 7). It is clear that almost all children use smart devices on a daily basis. The weekend use of more than 2 hours is a notable value, 76% of respondents (380 people) gave this answer.

![Figure 7. Screen usage](image)

Conclusions and recommendations

The aim of our study was to get to know the health-conscious behavior of the 11–14-year-olds, with special regard to sports habits, healthy lifestyle and eating habits. With the help of these results, we can get an idea of the attitude of the examined age group. We also focus on examining the connection between young people's health-conscious attitudes and their sports habits, and the impact of parental example on children's sports habits.

The study concludes that adolescents are aware of the importance of health-conscious behaviors, but routine and family patterns guide their actions in their daily lives rather than purposeful health-conscious behaviors. On the positive side, regular exercise plays an important role in the lives of young people, but at the same time young people's health-conscious behavior is very deficient and superficial. In many cases, although they have theoretical information and knowledge, their actual behavior does not always match what they believe. Based on our results, we have found that the biggest problem is the lack of conscious behavior in children’s current lifestyles. Many are unaware of the health effects of their lifestyle. During our research, we also found favorable results, which suggest that a progress has already started, but we are still at the beginning of the road. Professionals and teachers have a great responsibility to create a healthy society in Hungary. Effective and comprehensive programs should raise people’s awareness about the health benefits
of a proper lifestyle. We also consider it important to change the individual approach in the right direction, considering the specifics of the target group. It is prudent to start shaping attitudes in childhood in such a way that the new, positive outlook and attitude on life becomes second nature in adulthood.

Summary

In our study, we sought to answer the question of how the studied age group thinks about healthy lifestyle, regular physical activity and what they do to make it appear in their everyday life. Both positive and negative results were observed in the lifestyle and health of young people.

The favorable data have highlighted that a progress has already begun, but we still have a long way to go and many tasks to solve for a healthy society to develop in Hungary.

The development of health-conscious behavior, education for a healthy lifestyle, healthy eating and exercise, and the love of sport must begin at an early age. It is of utmost importance that a healthy lifestyle and healthy eating be the principle of the next generations. To achieve this, a supportive environment and a family background cooperating with educational institutions are needed.

References


