Motives of high school students to participate in sports

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ABSTRACT
The aim of study is to expand the knowledge of motives of Slovak high school students to participate in sports (at school but also in extracurricular activities after school) and identify the differences between boys and girls in adolescent age. The research group consisted of 318 high school students (boys: n = 154, 16.77 ± 1.01 years old and girls: n = 164, 16.54 ± 1.14 years old) from various areas of Slovakia. The questionnaire Exercise Motivations Inventory was used as the research tool. The questionnaire contains 54 items to which the respondent answers on the Likert scale. Kolmogor-Smirnov’s test did not confirm the normality of the research group’s data. The nonparametric Mann-Whitney U test was used to evaluate the significance of the differences in motives between girls and boys. For effect size was calculated coefficient r. The most important motive to participate in sport for boys is motive to gain strength and endurance and for girls is motive positive health. We can see significant differences in motives to participate in sports between girls and boys, where boys have higher score in motives affiliation (p = 0.001, r = 0.18), appearance (p = 0.012, r = 0.14), social pressure (p = 0.006, r = 0.15), social recognition (0.001, r = 0.29) and strength and endurance (p = 0.001, r = 0.23). Significantly higher score girls have in motive weight management (p = 0.009, r = 0.15). Our results can help teachers of physical education, trainers, sport educators and parents to plan thematic units, sport activities, which are of interest and attractive in age of adolescence.

KEYWORDS
motivation; adolescence; sport activities

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INTRODUCTION

Whitehead (2004) thinks about question, why only less than a quarter of the population is engaged in regular sporting activity, when there is an evidence of the health benefits of physical activity over the past 20 years. The answer to this question finds in psychology area – specifically in motivation. Nakonečný (1996) talks about motivation as a process of behavior with an individual to achieve specific target states and understands it as a process of increasing or decreasing activity, mobilizing and energizing the organism. According to Švancara (2004) motivation also has a function in which the most important is to satisfy the needs of human, which may be due to lack of being. The role of motivation in this case is to arrive at a certain goal and that is to satisfy the needs. Murphy, Nevill, Neville, Biddle and Hardman (2002), treat the motivation as an inner strength that arises between people and their acts to propel them mutually.

According to Macek (2003) is the period of adolescence a complicated process, especially when it comes to the relationship to sport, sport activities. Most adolescents in this period cease regular sports activities and it is mainly influenced by peers, but nowadays it is mainly modern electronics. There are several studies that show a decline in sports and physical activity during adolescence (Sigmund et al., 2003; Nemček & Rábara, 2017). The growing problem of the alarming state of physical inactivity in children and then in adults causes an increased occurrence of civilization diseases (Bajanová & Lipková, 2009; Šimonek, 2003). Due to the abundant statistics on the health of the population, it is necessary to look for opportunities to motivate the young generation in the field of physical, especially sports and recreational activities (Šimonek, 2006). According to a range of studies (Darayi, 2006; Leondari, Syngollitou, & Kiosseoglou, 1998), various stimulators are available through which it is possible to activate students, for example, by leading them toward specific, partial goals, increasing rewards, encouraging positive emotions and feelings of satisfaction.

METHODS

The research group consisted of 318 high school students (boys: n = 154, 16.77 ± 1.01 years old and girls: n = 164, 16.54 ± 1.14 years old) from various areas of Slovakia. The questionnaire Exercise Motivations Inventory (EMI-2) (Ingledew and Sullivan, 2002) was used as the research tool. The questionnaire contained 54 items to which the respondent answered on the Likert scale. The questionnaire consisted of 14 scales: Affiliation, Appearance, Challenge, Competition, Enjoyment, Ill-Health Avoidance, Nimbleness, Positive Health, Revitalisation, Social Pressure, Social Recognition, Strength & Endurance, Stress Management, Weight Management. The data were processed statistically. Kolmogor-Smirnov’s test did not confirm the normality of the research group’s data. The nonparametric Mann-Whitney U test was used to evaluate the significance of the differences in motives between girls and boys. The significance level was set at $\alpha \leq 0.05$, $\alpha \leq 0.01$. The rate of dependence (effect size) between the two groups of features was conveyed by means of the coefficient $r$ ($r > 0.90$ – very large effect size, $r = 0.70–0.90$ – large effect size, $r = 0.50–0.70$ – medium large effect size, $r = 0.30–0.50$ – small effect size, $r < 0.29$ – very small effect size) (Pett, 1997).
RESULTS

For a better interpretation of the results in Figure 1, you can see distribution of score between girls and boys in the different motives to participate in sports. More detailed numerical forms of results with standard deviations, significance and effect size you can find in Table 1.

In the Figure 1 we can see the most popular motives to participate in sports. In a group of boys dominates on first place motive strength & endurance with score 3.83 ± 1.06 points. On the second place is motive positive health (3.66 ± 1.12 point) and on the third most popular motive for boys is motive appearance (3.40 ± 1.24 point). On the other hand the least popular motive to participate in sports for boys is motive social pressure with score 0.70 ± 0.80 points. In a group of girls we can find in the first three places same motives to participate in sports like in groups of boys, but rank is differently. Motive positive health with score 3.40 ± 1.21 points is the most popular motive to do sport in a group of girls. On the second place is motive strength & endurance (3.29 ± 1.23 point) and on the third place motive appearance (3.12 ± 1.11 point). The least favorite motive to participate in sports for girls is the motive social pressure with score 0.49 ± 0.69 points.

In Table 1 we can see significant differences in motives to participate in sports between girls and boys, where boys have higher score in the motives affiliation (p = 0.001, r = 0.18), appearance (p = 0.012, r = 0.14), social pressure (p = 0.006, r = 0.15), social recognition (0.001, r = 0.29) and strength and endurance (p = 0.001, r = 0.23). Significantly higher score girls have in motive weight management (p = 0.009, r = 0.15).
### Table 1

The mathematical-statistical characteristics of the research sample according gender and differences in particular motives

| Motives                  | Boys     | Girls    | Mann-Whitney U test | Effect size |
|--------------------------|----------|----------|---------------------|-------------|
|                          | x        | SD       | x                   | U           | p          | r          |
| Affiliation              | 2.59     | 1.33     | 2.08                | 1.43        | 9946.5     | 0.001      | 0.18       |
| Appearance               | 3.40     | 1.24     | 3.12                | 1.11        | 10579.0    | 0.012      | 0.14       |
| Challenge                | 3.27     | 1.21     | 3.03                | 1.22        | 11142.5    | 0.069      | 0.10       |
| Competition              | 1.92     | 1.26     | 1.81                | 1.33        | 12024.0    | 0.460      | 0.04       |
| Enjoyment                | 2.25     | 1.25     | 2.08                | 1.31        | 11518.5    | 0.175      | 0.08       |
| Ill-Health Avoidance     | 2.43     | 1.08     | 2.27                | 1.24        | 11462.0    | 0.154      | 0.08       |
| Nimbleness               | 3.02     | 1.38     | 2.94                | 1.35        | 11991.5    | 0.436      | 0.04       |
| Positive Health          | 3.66     | 1.12     | 3.40                | 1.21        | 11065.0    | 0.055      | 0.11       |
| Revitalisation           | 3.38     | 1.00     | 3.09                | 1.26        | 11138.5    | 0.068      | 0.10       |
| Social Pressure          | 0.70     | 0.80     | 0.49                | 0.69        | 10421.5    | 0.006      | 0.15       |
| Social Recognition       | 2.16     | 1.31     | 1.42                | 1.22        | 8458.5     | 0.001      | 0.29       |
| Strength & Endurance     | 3.83     | 1.06     | 3.29                | 1.23        | 9303.5     | 0.001      | 0.23       |
| Stress Management        | 3.04     | 1.16     | 2.78                | 1.40        | 11353.5    | 0.119      | 0.09       |
| Weight Management        | 2.29     | 1.33     | 2.68                | 1.33        | 10506.5    | 0.010      | 0.15       |

### DISCUSSION

Several studies (Bohačíková, 2017; Hroššo, 2016; Kukurová, 2015; Šmela, 2014; Litrová, 2014; Kilpatrick et al., 2005; Ingledew & Sullivan, 2002) point to the importance of the motive positive health leading to participate to sport in adolescence in both genders.

A research Crerand et al. (2020) shows the importance of appearance during adolescence in both sexes. Currently the appearance and its presentation play an important role especially on social networks. A study Chang, Li, Loh, & Chua (2019) of Singapore adolescent girls’ selfie practices, peer appearance comparisons, and body esteem on Instagram points out of the findings that objectifying standards of beauty may permeate adolescent girls’ value systems through frequent appearance comparisons on social media.

The possibility of adolescents to create relationship with physical activities is conditioned how active are people (family, friends ...) around, an offer of physical activities in school and an offer of leisure time activities, that are competitive for physical activities (Rychtecký & Fialová, 2004).

In recent years Blahutková (1995), Došla (2006), Strešková (2007) have dealt with this issue, too. From conclusions of their studies it can be generally said, that within age rising, there is decreasing competition and the desire to identify with sporting idol. Factor of friendship like motive to participate to sport loses its importance. On the other hand there is increasing importance of motives positive health, regeneration, strength and endurance and of course appearance, image and weight reduction.
CONCLUSION

Adolescence is an important milestone in which young people can create and adopt an active lifestyle, but nowadays there is a change in reducing the frequency and quality of physical activity and consequently a greater incidence of sedentary behavior. One of possibilities how to stop this secular trend is to identify the motives for participating in sports activity and offer them attractive thematic units within the school physical education cooperating with these motives. Our results can help teachers of physical education, trainers, sport educators and parents to plan thematic units, sport activities, which are of interest and attractive in age of adolescence. Physical education teachers, trainers, sport educators have the opportunity to open a new thematic unit according to the motivational structure of students or rather according to their motives to participate in sports. In our opinion, the study finds its place in the social field too. Based on the identified motives to participate in sports parents can help plan adolescents’ leisure time and support them to spend it actively with them.

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Conflict of Interest

The authors declare that there are no conflicts of interest.

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