ATTITUDE TOWARDS PHYSICAL EDUCATION AND ENJOYMENT OF PHYSICAL ACTIVITY IN HIGH SCHOOL STUDENTS

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Abstract: Scientific research provides enough evidence that physical activity or exercise is positively related to health and well-being of people. Development of physical activity habits begins at a young age. In our research we explored the relationship between enjoyment of physical activity as one of core elements of intrinsic motivation and attitude to physical activity as one of core elements of school students (M = 16.79, SD = 1.29). Two measurement tools were administered. To assess enjoyment of physical activity we used Physical Activity Enjoyment Scale (PACES) and to assess attitude to physical education (PE) we used Physical Education Attitude Scale (PEAS). Statistically significant relationship between enjoyment of physical activity the used clucation was identified. We also revealed that students who are involved in leisure-time physical activities experience greater enjoyment and their attitude to physical education is more positive. The findings highlight the importance of physical activity linked with positive emotions in school environment and also in adolescents' leisure time.

Keywords: Physical activity, attitude towards physical education, enjoyment of physical activity, high school students.

1 Introduction

The period of adolescence is an important milestone in the process of personality development and thus also in achieving positive attitudes towards sports. Also Dumith et al. (2011) point out that mainly adolescence is an important period in adopting a physically active lifestyle. Vágnerová (2000) defines adolescence as a period between the ages of 14 and 20. Research examining habits related to physical activities of adolescents typically focuses on two main areas, mandatory school physical education and leisure-time sport activities. It has been found that adolescents have different motives for participating in physical activities, including engaging in sport activities with friends, improving motor skills, comparing their own sports specific skills with the skills of others, experiencing enjoyment, making new friends, achieving the desired look and relieving tension (Kružliak, 2013). Overall attitude towards physical education (PE) can also be influenced by several factors and in our research we deal with the dimensions of satisfaction with physical education classes, experiencing comfort in PE classes, attitude to performed activities during PE classes and attitude to PE teachers. According to Orlić and her colleagues (2017), these four dimensions compose the construct of attitude towards physical education. Czarniecka et al. (2012) emphasize that participation in physical education classes, which are well structured, stimulate the child's development, facilitate new skills acquisition and create a habit of regular physical activity that can naturally last into adulthood. Pleasant feelings and enjoyment experienced during physical education classes increase the frequency of physical activities outside the school environment (Younes-Alhourani, 2015). This finding is important mainly because it is generally accepted that involvement in sport and physical activities has a tendency to promote a healthy lifestyle and it creates and reinforces physical and mental well-being and improves the quality of life (Bouchard et al., 2012). The submitted research aims to examine the relationship between the attitudes of high school students towards physical education classes and enjoyment experienced during physical activity. The partial objectives are to explore the differences in these two variables according to two factors: physical activity or physical inactivity of parents; and frequency of adolescents' leisure-time physical activities. Next part provides a brief description of enjoyment of physical activity and attitude towards physical education (PE).

Enjoyment is an important factor when examining participation in physical activities and it is a key component in intrinsic motivation. Theories of motivation explore what leads people to act, think, and develop in a certain way and they analyze factors

that support people's perseverance, performance, and healthy development (Deci, Ryan, 2007). Motivation is also researched in terms of measurement tools focused on specific kinds of motivation such as career motivation or situational motivation (Baňasová, Sollár, 2015, 2016). In summary, motivation is associated with all processes that help energize and maintain behavior oriented to specific goals (Smith, 1998). People who are motivated act in a way that help them attain the set goals (Armstrong, 2009). Nakonečný (1996) defines motivation as a set of steps which enables people eliminate deficiencies in their own lives. Self-determination theory (SDT theory) proposed by Deci and Ryan is considered to be the leading theory in human motivation. The theory assumes that people are most of their time active and curious; they search for success which can bring satisfaction into their lives. According to self-determination theory, intrinsically motivated people are truly interested in what they are actually doing, that is subsequently associated with good and pleasant feelings (Ryan & Deci, 2007). Intrinsic motivation is evoked by the innate need for competence and selfdetermination when interacting with the environment. If an individual perceives himself as not competent for a certain activity or as being under some kind of external control, then his intrinsic motivation is weakened. It typically results to the predominance of external motivation (which depends on external rewards and pressure), or to a specific state labelled as amotivation. Amotivation is defined as a state during which people do not perceive the relationship between their own behavior and subsequent behavioral outcomes (Shen et al., 2010). From the perspective of SDT theory, amotivation means the lowest level of self-determination and a lack of will to act (Ryan & Deci, 2002). Amotivation plays also an important role in physical education classes and it can be manifested in inattention and low effort to be physically active outside the school environment (Ntoumanis et al., 2004). We agree with the opinion that experiencing enjoyment during physical activity or exercise increases physical activity adherence. There is a relationship between the enjoyment of movement and intention to be physically active. Thus, enjoyment can affect intentions and behavior of adolescents towards participation in physical activities they really enjoy (Bungum et al., 2000). According to Subramaniam and Silverman (2002), pleasure or enjoyment is an important component of physical education classes. Physical education is a mandatory subject in Slovak schools (the official name of this subject is Physical and Sports Education). High school students attend physical education classes twice a week, and they also have the opportunity to participate in sports clubs. In document labelled as the State educational program, physical education (PE) belongs to the educational area of Health and Exercise, which provides basic information about the biological, physical, psychological and social foundations of a healthy lifestyle (Kršjaková, 2014b). A specific feature of PE classes (physical education classes) is the focus on motor skills improvement of students and as we know other school subjects do not develop this area to such extent. Education typically takes place in classrooms. Physical education offers more options, except for the gym children and students can go to the nature (outside the school environment) and do some activities there. In addition, students have the opportunity to visit other sports facilities, such as leisure and sports centres, swimming pools and stadiums. Thus, not just place or location of PE classes can vary; PE teachers can modify also the curriculum content of PE classes. A large number of physical education equipment is also available. And we should also consider the primary responsibility of PE teachers for the care and safety of children and students which seems to be more difficult at physical education classes (Kršjaková, 2014a).

Attitude is another factor frequently discussed in scientific literature mainly because of its profound impact on healthy behavior, including participation in physical activities. Attitudes in general can have both, positive and negative meanings and they express the state of mind, feelings and dispositions of an individual (Subramaniam & Silverman, 2002). Attitude is a state of alertness, a tendency to react in a certain way, when confronted with a certain stimulus. The process of attitude functioning is in scientific literature defined in three phases. Oppenheim (1992) proposes the approach labelled as the tricomponential viewpoint. It describes an attitude as a single entity but having three components. The affective component relates to the feelings people have toward an attitude object (e.g., PE classes). The second one, behavioral component relates to people's tendencies to act toward the attitude object. The last component, cognitive relates to the belief that people have about the attitude object. Cheung (2007) adds that not all attitudes have all these three components. Attitude is in psychology defined as relatively permanent system of positive or negative evaluations, emotional feelings and tendencies to act for or against social objects (Mesiarik, 2013). The attitude towards physical education is a complex construct. Describing and explaining its four dimensions, we provide a deeper insight into this topic. The first dimension is defined as satisfaction with physical education classes. We can perceive satisfaction as a process and as a result. It is a state of happiness or fulfillment and can be evoked by psychological, environmental, cultural factors, beliefs and value system. Hudáková and Sollár (2016) in their research found that satisfaction, as a state, can be predicted by various factors, e.g., strategies. The opposite of satisfaction is coping dissatisfaction or discontentment which refers to negative feelings, such as sadness and boredom (Elegba & Adah, 2015). The satisfaction dimension contains items related to the general emotional experience in PE classes (Fazio, 2007). Bebčáková (2012) in her research found that students frequently expressed that they were satisfied with the content of curriculum in physical education classes and girls in general showed less satisfaction than boys. According to another research, the fact that students' attitudes towards PE classes were mainly positive meant overall satisfaction with this school subject and also with the PE teacher (Chatterjee, 2013).

The second dimension is the comfort that students experience in PE classes. Personal comfort is one of the main factors that influence the level of students' interest in physical education classes (Medeková, 2012). This dimension deals with more specific emotions (such as relaxation or anxiety) than the previous dimension (Fazio, 2007). Comfort can be understood as a state of satisfaction, as something that makes our life easier and brings pleasure to our existence. We can also consider its stimulating effect in our lives. By achieving a state of comfort, we can eliminate the causes of discomfort. Absolute relief from discomfort in a certain area does not mean achieving complete and general state of comfort, since people typically face more than just one difficulty or adversity in their lives (Kolcaba & Kolcaba, 1991). The third dimension focuses on attitude to activities performed in PE classes. Dismore and Bailey (2011) point out that the need for a challenge during PE classes is emphasized by many students and new activities should be a part of this challenge. Students' lack of interest is associated with boredom and a lack of choice in repetitive exercises and activities. Hashim et al. (2008) identified several factors that were positively correlated with enjoyment in PE classes. The strongest relationship was identified between the excitement generated by the activity and enjoyment experienced in PE classes. The last dimension examines the personality of PE teachers and approach and methods they use. The importance of personality in teaching profession is emphasized in several studies examining teacher's personality in relation to his authenticity (Hudáková, Kureková, 2020) or to pupil's motivation to learn (Uhláriková, 2018). The important aspect leading to effective PE classes is implementation of innovative teaching methods and professional, creative approach of teachers (Czarniecka et al., 2012). Such approach has a potential to actively engage children and students in PE classes and subsequently create a positive attitude towards sports in general. There is enough scientific evidence that adolescents clearly perceive when PE teachers show enough interest, when their expectations are too high and when they prefer some students to others (Medeková, 2012). The main goal of submitted research

is to examine the relationship between the attitude to physical education in high school students and experiencing enjoyment of physical activity. A similar study was conducted by Younes-Alhourani (2015), who examined the relationship between experiencing pleasure during physical education classes and the intention to perform physical activities in primary school students. The results of her research showed a positive relationship between experiencing pleasant emotions during these classes and being actively involved in physical activities. She found that enjoyment during physical education increases the frequency of participation in leisure sport activities. We assume that a positive attitude towards physical activity.

2 Methods

The research sample consisted of 122 students from two types of high schools: Grammar Schools (n=61) and Secondary Vocational Schools (n=61) in Slovakia. The original number of participants was 124; due to special physical disability two students were excluded from the sample. The age of the participants ranged from 15-19 years (M = 16.79, SD = 1.29). The administration of two questionnaires took approximately 20 minutes. Before conducting the research we have obtained the signed Informed Consent from each student (who were 18 years old and up) and from parents of students, who were under the age of 18. The questionnaires were answered voluntarily and anonymously.

Enjoyment of physical activity was measured by a revised version of the Physical Activity Enjoyment Scale (PACES) questionnaire, which was originally designed to measure positive emotions associated with physical activity participation in college students (Kendzierski & DeCarlo, 1991). The original form of PACES consisted of 18 bipolar statements evaluated on a 7-point continuum. The revised form of the questionnaire consists of 16 statements, starting with: "When I am active...". All items are rated on a 5-point Likert scale that range from 1 (disagree a lot) to 5 (agree a lot) (Carraro et al., 2008). Motl et al. (2001) report the Physical Activity Enjoyment Scale is valid measure of enjoyment due to evidence of factorial validity and convergent evidence for construct validity. To identify attitude to PE classes, the Physical Education Attitude Scale (Orlić et al., 2017) was used. Principal component analysis revealed four key factors, which were labeled as: satisfaction, comfort, activity and teacher. Dimensions satisfaction and comfort both consist of 12 items, dimension activity consists of 11 items and dimension teacher consists of 8 items. Respondents reply on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The Physical Education Attitude Scale is recommended for use since it meets all basic criteria for external and construct validity (Orlić et al., 2017). Descriptive statistics, Pearson correlation coefficient, Independent Sample t-test and One-Way ANOVA were used for data analysis (Sollár, Ritomský, 2002).

3 Results

Descriptive characteristics of two research variables: attitude to physical education and enjoyment of physical activity

Table 1 Descriptive characteristic of attitudes to physical	
education and enjoyment of physical activity	

n M SD Min. Max.						
Attitude to PE	122	149.3	28.64	80	206	
Enjoyment	122	62.01	13.19	25	80	

Note: n- number of participants; M- mean; SD- standard deviation; Min.- minimum; Max.- maximum

As we can see in the Table 1, students scored 149.03 points in the PEAS questionnaire, while the maximum achievable score is 215. The average score in the PACES questionnaire was 62.01; and students could achieve a maximum of 80 points. We can conclude that on average students achieved higher scores in both questionnaires.

a) Relationship between attitude to physical education and enjoyment of physical activity in high school students

Table 2 Relationship between attitude to physical education and	
enjoyment of physical activity (N=122)	

	Enjoyment of PA	l
	r	р
Attitude to PE	.72	<.001
satisfaction	.72	<.001
comfort	.72	<.001
activity	.69	<.001
teacher	.44	<.001

Note: r - *Pearson's correlation coefficient;* p - p *value*

Based on the results we can conclude that there is a statistically significant, positive and strong relationship between the overall attitude to physical education and enjoyment of physical activity (r=.72, p < .001). Similarly, there is a statistically significant, positive and strong relationship between three dimensions of attitude to physical education classes (satisfaction, comfort and activity) and experiencing enjoyment of physical activity. There is a statistically significant, positive and moderate relationship between the attitude to PE teacher and enjoyment of physical activity (r=.44, p < .001).

b) Differences in attitude to physical education classes and enjoyment of physical activity according to parental physical activity (parental physical activity vs. parental physical inactivity)

Table 3 Differences in attitude to PE classes and enjoyment of physical activity according to parental physical activity

		Enjoyment	Attitude
		of PA	to PE
Active parents	M1	61.54	147.78
(n1=65)	SD1	13.96	27.72
Inactive parents	M2	62.54	150.45
(n2=57)	SD2	12.35	29.84
	t	-0.419	-0.512
	df	120	120
	р	.676	.609
	d	0.07	0.09

Note: n – number of participants; M - mean; SD - standard deviation; df – degrees of freedom; t – Student's t test; p – p value; d - Cohen's d – effect size

The results in the Table 3 show that there is no statistically significant difference in attitude to physical education and enjoyment of physical activity between students whose parents are physically active and students whose parents are physically inactive (p > 0.05).

c) Differences in enjoyment of physical activity and attitude to physical education classes according to frequency of leisuretime physical activity (PA) in students

Table 4 Differences in enjoyment of physical activity according to frequency of leisure-time physical activity (PA) in students

Enjoyment of	PA		
Frequency of PA	n	М	SD
several times a week	31	68.97	10.86
once a week	31	62.00	12.92
approx. once in 2 weeks	30	57.47	14.70
rarely	30	59.37	11.59
		F	4.90
		Р	.003
		df	121
		n^2	.333

Note: n - number of participants; M- mean; SD- standard deviation; df – degrees of freedom; F – test statistic; p - p value; η^2 - Eta coefficient

Table 5 Post hoc test - Differences in enjoyment of physical
activity according to frequency of leisure-time physical activity
(PA) in students

Enjoyment of PA				
			95%	Confidence
			interval	
Frequency	MD	р	Lower	Upper
of PA			bound	bound
a - b	6.97*	.031	0.63	13.30
a - c	11.50*	.001	5.11	17.89
a - d	9.60*	.004	3.21	15.99
b – a	-6.97*	.031	-13.30	-0.63
b - c	4.53	.162	-1.85	10.92
b - d	2.63	.416	-3.75	9.02
c – a	-11.50*	.001	-21.98	-8.34
c - b	-4.53	.162	-10.92	1.85
c - d	-1.90	.560	-8.34	4.54
d – a	-9.60*	.004	-15.99	-3.21
d - b	-2.63	.416	-9.02	3.75
d - c	1.90	.560	-4.54	8.34

Note: a - several times a week; b - once a week; c - approx. once in 2 weeks; d- rarely; MD – mean difference; p - p value

Based on Fisher's test, we can point to statistically significant differences in enjoyment of physical activity between the four identified categories (p <.05). The value of Eta (η^2) indicates a moderately significant effect size. Multiple comparisons test identified statistically significant differences in enjoyment of physical activity between students who are physically active several times a week and those who are active once a week; then between those who are active several times a week and those active approximately once in 2 weeks; and finally between students who are physically active several times a week and those who are rarely physically active (p <.05).

Table 6 Differences in attitude to PE according to frequency of leisure-time physical activity (PA) in students

Attitu	ude to PA		
Frequency of PA	n	М	SD
several times a week	31	162.29	25.56
once a week	31	144.65	23.13
approx. once in 2 weeks	30	143.63	32.98
rarely	30	142.27	29.05
		F	3.26
		Р	.024
		df	121
		η^2	.277

Note: n - number of participants; M- mean; SD- standard deviation; df - degrees of freedom; F - test statistic; p - p value; η^2 - Eta coefficient

Table 7 Post hoc test – Differences in attitude to physical education classes according to frequency of leisure-time physical activity (PA) in students

	Attitude to PE						
			95%	Confidence			
			interval				
Frequency	MD	p	Lower	Upper			
of PA			bound	bound			
a - b	17.64*	.014	3.63	31.66			
a - c	15.66*	.030	1.52	29.79			
a - d	20.02*	.006	5.89	34.16			
b – a	-17.64*	.014	-31.66	-3.63			
b - c	-1.99	.781	-16.12	12.15			
b - d	2.38	.740	-11.76	16.51			
c - a	-15.66*	.030	-29.79	-1.52			
c-b	1.99	.781	-12.15	16.12			
c - d	4.37	.545	-9.88	18.62			
d - a	-20.02*	.006	-34.16	-5.89			
d - b	-2.38	.740	-16.51	11.76			
d - c	-4.37	.545	-18.62	9.88			

Note: a - several times a week; b - once a week; c - approx. once in 2 weeks; d - rarely; MD – mean difference; p – p value

Results in the Table 6 indicate that there is a statistically significant difference in the attitude to physical education classes between the four defined categories of leisure-time physical activity in high school students (p < .05). The value of Eta indicates a weak effect size. Based on multiple comparisons test (Table 7), we can conclude that there are statistically significant differences in attitude to physical education classes between students who are physically active several times a week and those who are active once a week; then between students who are physically active several times a week and approximately once in 2 weeks; and finally between students who are physically active several times a week and rarely physically active several times a week and rarely physically active (p < .05).

4 Discussion

The aim of the submitted research was to examine the relationship between enjoyment of physical activity, as a component of intrinsic motivation, and attitude to physical education classes in adolescents - high school students. The studies and theories we used when writing introduction focused on two main areas, the importance of physical activity and exercise in students' lives, and the significance of physical education classes. Based on the theoretical background, two specific measurement tools were used. The first examined enjoyment of physical activity (as a single factor) and the second one examined attitude to physical education and its four factors: satisfaction with physical education (PE) classes, comfort experienced by students in PE classes, PE activities and the PE teacher. As reported by Bungum et al. (2000) enjoyment experienced during physical activity reinforces the intention to engage in activities that are associated with exercise and sport. Physical education has an important function, since it forms the basis of health education (Fairclough & Stratton, 2005) and provides a good foundation for later physical well-being. The main goal of PE classes is to improve physical and mental health and to organize teaching in the way that students develop a positive attitude towards physical activity (Mesiarik, 2013).

a) Relationship between attitude to physical education and enjoyment of physical activity

The results from our research suggest that there is a significant positive relationship between attitude towards physical education and experiencing enjoyment of physical activity. Our findings are in line with the findings of Younes-Alhourani (2015), who reports that being physically active and doing exercises significantly depends also on the perceived enjoyment in PE classes. It seems that high school students who have a positive attitude towards physical education experience greater enjoyment during any physical activity. This relationship can be perceived also in the opposite direction. Experienced enjoyment of exercise or physical activity is associated with a positive attitude towards PE classes. On the other hand, adolescents with a less positive attitude towards physical education feel less happy during physical activities. A possible explanation can be perceived in the similarity between positive attitude and enjoyment, since both are induced by experiencing positive emotions during physical activities. These results are not surprising; as it is known that pupils and students who play sports (or are actively engaged in physical activity) and combine it with positive emotions, have a better attitude to physical education classes. In PE classes, students can experience similar emotions as when they are engaged in leisure-time physical activity. Therefore, they often perceive PE classes as a break from academic learning. On the other hand, students who are not physically active in their leisure time and prefer sedentary behavior will probably consider physical education to be less important than other school subjects. We also identified a strong or a medium-strong positive relationship between the separate dimensions of attitude towards physical education and enjoyment of physical activity. Satisfaction with physical education classes is the first factor and it measures attitude of adolescents to this specific school subject. Fazio (2007) defines this dimension as a group of items exploring a general emotional experience. Based on our results, we can conclude that positive emotional experience and students' satisfaction with PE classes

are related to experiencing greater enjoyment during physical activity (performed in, or outside the school environment). If the students are satisfied with PE classes, they will be probably engaged in leisure-time physical activities and subsequently will have a positive attitude not only to PE classes but to healthy lifestyle (which includes physical activity and exercise) in general. High school students who are not satisfied with PE classes, due to any reasons or factors, do not feel comfortable and thus do not enjoy physical education classes. Kolcaba and Kolcaba (1991) define a state of comfort, as eliminating or removing negative factors such as anxiety and pain from our thinking and acting. They also associate this state with experiencing pleasure in life. This perspective supports our results, that high school students who experience comfort in physical education classes feel more enjoyment while performing any form of exercise or body movement. Students, who feel discomfort in PE classes, might associate this school subject with negative emotions, and are likely to achieve less enjoyment during any type of physical activity than students who experience pleasant and positive emotions, such as comfort. In scientific literature, a positive relationship was found also between the third dimension, which examines the attitude of adolescents to activities performed in PE classes and enjoyment in PE classes (Hashim et al., 2008). According to our results, there is also a positive relationship between the overall enjoyment of physical activity and attitude to PE activities. Furthermore, Dismore and Bailey (2011) emphasize that students' lack of interest during physical education is closely related to activities that are described as not interesting or diverse enough. It turns out that a positive attitude towards the exercises performed in PE classes is related to greater enjoyment during exercise or physical activity. High school students with a negative attitude towards activities in physical education feel less happy when they are engaged in any (light to vigorous) physical activity.

Furthermore, students who can perform the same or similar physical activities in PE classes as they do in their leisure time will probably have a better attitude to all PE activities. When students who prefer individual leisure-time sports and physical activities have to participate at a team activity in PE classes, they will probably experience less enjoyment, thus having a less positive attitude towards PE classes. The last dimension contains items examining the attitude towards PE teacher. Rink, Hall and Wiliams (2010) define a teacher as a person who provides maximum physical activity time during PE classes and also motivates children or students to be physically active also in their free time. Dismore and Bailey (2011), point out that the role of the PE teacher contains also creating a positive learning environment. A teacher who is able to create such atmosphere in PE classes evokes positive feelings in students and helps them develop a positive attitude towards him, and also towards PE classes he is responsible for. Our findings confirmed the relationship between attitude to physical education teachers and experiencing enjoyment when performing physical activity.

High school students with a positive attitude towards their PE teacher are likely to experience greater enjoyment during exercise than students whose attitude towards the PE teacher is rather negative. Students who develop a good relationship with the PE teacher typically perceive the atmosphere in the gym more positively; they enjoy the lessons when comparing them with students whose attitude towards the PE teacher is rather indifferent or negative. Physical education teachers might represent role models for students in many areas e.g., in motor skills development, in maintaining a healthy lifestyle, in improving physical fitness, in development of self-discipline and self-confidence, in learning effective strategies to reduce stress. PE teachers who really enjoy working with children/students and show good relationships with them can significantly reinforce their positive attitude towards physical activities or exercise and help them experience positive emotions while being physically active

b) Differences in attitude to physical education classes and enjoyment of physical activity according to parental physical activity

The findings indicate that there is no significant difference in attitude towards physical education or enjoyment of physical activity between students whose parents are physically active and students whose parents are physically inactive. According to Brzek et al. (2018) positive and healthy physical activity habits depend to a large extent on parental frequency of physical activity. Also Hamar (2005) emphasizes the importance of family background in shaping attitudes toward physical activity. In our research we have obtained a positive result from one item that was added to the administered questionnaires regarding physical activity of students' parents. Based on this result, more than a half of all parents are regularly involved in sport-related activities. Different results obtained Hamar (2005) and he reports that only 19.06% of students' parents in his sample are physically active on a regular basis. To find out a little more about this issue, we asked students who supported and inspired them to be physically active. Only few students identified parents as their perceived support or motivator to sport-related activities. Most of them labelled their friends and peers as people who provide support or motivation for various types of physical activity. Possible explanation is that adolescents try to be independent and might be influenced or inspired more by peers, than by parents. Thus, their attitude to sport-related activities seems to be shaped by their friends and peers and also by famous athletes who might serve as a role model for this age group.

c) Differences in attitude to physical education classes and enjoyment of physical activity according to frequency of leisure-time physical activity (PA) in students

When contemplating about enjoyment of physical activity and attitude to PE classes, we also focused on the frequency of leisure-time physical activity in students. Several significant differences in enjoyment of physical activity and attitude to physical education classes were identified between the defined four groups (students who are physically active several times a week, once a week, approximately once in 2 weeks and those who are physically active just rarely). Romanová and Sollár (2016) found that students who are often engaged in sport related activities experience higher enjoyment of physical activity when comparing them with students who are just rarely engaged in any type of physical activity. Also Broďáni, Kalinková, Paška and Šutka. (2016) report, that female students who are physically active only in PE classes (compulsory school subject) typically have a negative attitude to sport-related activities in general. Our results therefore partially support this study. The highest scores in both variables (enjoyment and attitude to PE classes) were identified in adolescents who are involved in leisure-time physical activity more frequently (in our study physical activity performed several times a week and once a week). Based on our results and with line with several national studies (Brod'áni, Lipárová & Král 2016; Broďáni & Kováčová 2019) we can conclude that the frequency of leisure-time physical activity is closely associated with attitude of students to PE classes but also with enjoyment of physical activity which is perceived by many psychologists as a key regulator of intrinsic motivation.

5 Conclusion

In the presented study we explored the relationships between enjoyment of physical activity and age and perception of success. While no significant relationship was identified between enjoyment of physical activity and perception of success, a weak but significant relationship was revealed between age and enjoyment of physical activity indicating a higher level of enjoyment in younger students. Additionally, individual sports athletes and team sports athletes were compared in enjoyment of physical activity and perception of success. The results of the study indicate that team sports athletes scored higher in perception of success than individual sports athletes. We can assume that team sports athletes are more task-oriented and subsequently they share the common goals. This can possibly enhance the feelings of pride, satisfaction and naturally it increases the perception of success. The findings suggest that it would be useful for the future research to consider at least a larger sample size, including the extended age range for better clarification and more precise generalizability of the results.

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