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The Problems of Contemporary Education

Opinions of Pupils and Teachers of Primary Schools in Slovakia on Thematic Unit – Sports Games in Physical and Sport Education

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Abstract

The study aimed to analyse and compare the opinions of selected groups of pupils (boys and girls) and teachers (men and women) of the second primary education stage around Slovakia, which was based on the thematic unit - Sports games, realized within the teaching of physical and sport education. The listed study analyses and compares the opinions of 3606 pupils (boys and girls) and 1219 teachers (men and women) of the second primary education stage around Slovakia, based on the thematic unit – sports games, realized within the teaching of physical and sport education. The survey was realized from 2016 to 2018 while using the questionnaire method. What is more, the survey results were evaluated in terms of the intersexual differences (chi-square test) and correlation relationships of selected questions. We found out that the most popular thematic unit – sports games, is higher from the point of view of pupils and teachers, with the frequency of more than 57 %. The least popular thematic unit in both groups was the gymnastic exercises (44.01 %). Within the teaching of the thematic unit – Sports games, the pupils and teachers preferred team sports rather than individual sports, while the most popular sports game was football in boys and volleyball in girls. The survey groups identified the rules of basketball (44.19 %) as the most difficult within the teaching of sports games. In terms of the statistical significance of intersexual differences of survey groups of pupils (boys and girls), we noticed the significant differences in pupils (boys and girls) within the seven questions (p < 0.01, p < 0.05). In two cases, we did not notice the significant differences in groups of teachers (the most popular thematic unit and preferences of popular team sports and individual sports). We saw a

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very high correlation between the most popular sports games and the difficulty of rules within the survey groups within the survey.

Keywords: favourite preferences, intersexual differences, the second primary education stage.

1. Introduction

The issue of school physical and sport education is constantly monitored from several points of view. Nowadays, physical and sport education has an irreplaceable place and is basically favourite school subject, within the education system of school children. Physical and sport education is realized, within the specific environment (gym, nature and playground), which often requires expressing specific actions and behaviours. Very common are the emotional and spontaneous manifestations, while pupils' positive and negative character traits come to the surface (Semiginovský, 2009). Physical and sport education is mainly the only school subject focused on the realization of physical activity, healthy physical development, and development of mind. The physical and sport education represents the kalokagathia, which is the harmony of body and spirit (Bartík, 2009). Bailey (2006) states that the listed school subject positively increases selfesteem and self-confidence, improves social and cognitive development, and may contribute to better learning outcomes. Within the several scientific studies (Vilímová, Hurychová, 2001, Bartík, 2009, Adamčák, Nemec, 2011, Biddle et al., 2015, Basar, Coskun, 2017) we learn that the school subject of physical and sport education, resp. physical education has sustained in the forefront of pupils' interests, mainly in primary schools. Within Slovakia, the pupils' interest has been documented by the complex research by Antala (2009), which confirmed that the school subject of physical and sport education is more favourite (statistics) among the pupils of primary schools than the students of secondary schools. The listed interests of pupils about the physical and sport education need to be deepened. Therefore it is very important to search for the current forms of its realization, which will be attractive to the pupils/students and will meet his/her ideas and requirements. The ideas and interests should be transformed into the adequate and motivating content of physical and health education. Another reason is that the listed school subject, as stated by Šimonek (2006), Sigmund and Sigmundová (2011), is the only way for many pupils/students to realize the physical activity. In terms of school education and relations of pupils/students towards the school subject of physical and sport education, it is needed to perceive the statement by Antala (2009) that the listed school subject has decreasing status and seriousness, in terms of age and is declining in the hierarchy of school children. Another point of view is presented by Prachař (2016) who states that from the economic point of view, the physical and sport education belongs to the "last place", within the school institutions. Uher and Brtková (2004) perceive the listed problem and point out that physical and sport education teachers often degrade the importance of physical and sport education. The listed facts are also reflected in the increasing number of absences of pupils/students in the lessons of physical and sport education. The results of Balga and Antala (2015) show that the most common reasons of non-practicing, within physical and sport education are the health problems, forgotten clothing and preparation for the following lessons. Within the listed study, the authors also express the concern that the number of female pupils/ students stated as the main reason for non-practicing, within the physical and sport education, the unattractive content of physical and sport education. What is more, the popularity of school physical and sport education depends on the content of teaching units, teaching style, teacher's approach/activity and organizational format (Sigmundová et al., 2005). The listed attributes need to be used as much as possible by the teachers of physical and sport education, applied to the level and preferred interests of the pupils/students. We agree with the opinion of Cothran, Kulinna and Ward (2000) that the content of same lesson of physical and sport education, which is led by the different teachers (different didactic styles), may lead to the different quality of evaluation of lessons from the pupils'/students' point of view. According to the pupils/students, the content of physical and sport education is perceived, as the annual repetition of same activities in the unchanged form. Thus, it is necessary that within the education, there is the maximum degree of harmonization of the content of teaching from the point of view of efforts to fulfil the set content and goal of school subject by the teachers with the interests of pupils/students.

The thematic unit, which is highly popular within the pupils/students, is the – sports games. The listed unit has an important place in physical and sports education content and may be said to

have a decisive place. ISCED 3 (the second primary education stage) recommends up to 30 % of total annual hourly allowance be devoted to the thematic unit – sports games. Adamčák and Nemec (2010) state that out of ten sports activities realized in the lessons of physical and sport education, 1095 primary school pupils had the highest frequency of answers – sports games (24.16 %). The sports games, which are realized within the teaching of physical and sport education, motivate the pupils/ students with their varied content, rich range of activities and mainly by social concept (Hátlová et al., 2009). According to researchers like Singleton (2010) and Perkins and Noam (2007), if the sports games are taught correctly by the teachers, the absence of pupils/students within the lessons of physical and sport education would be lower. The reason is that such lessons not only allow them to improve the fitness, learn new skills, but in various exercises and games, the pupils/students have the opportunity to cooperate with their classmates and solve the issue of strategy and tactics. The pupils/students appreciate success most, which brings recognition and higher social status. Other reasons are that the several sports games, such as football, volleyball and floorball, are defined by simple rules and easy to realize, resp. the fact that the final result of match is unknown until the end for the pupils/students.

The aim of study was to analyse and compare the opinions of selected group of pupils (boys and girls) and teachers (men and women) of the second primary education stage around Slovakia, which was based on the thematic unit – sports games, realized within the teaching of physical and sport education.

2. Materials and methods

Participants: pupils (boys and girls) and teachers (men and women) from 8 self-governing regions of Slovakia were included in the study. A total of 4825 respondents participated in the survey, of which 3606 were the pupils of the eighth and ninth grades of primary schools (1886 boys and 1720 girls) and 1219 were teachers of physical and sport education (651 men and 568 women), within the primary schools in Slovakia. The average age of men was 40, 18 years and women was 45, 24 years. The eighth and ninth grades pupils of primary schools were purposely addressed (689 girls – 13,85 years old and 744 boys – 13,77 years old – of the eighth grades; 1031 girls – 14, 62 years old and 1142 boys – 14,88 years old – of the ninth grades).

Procedure: during the creation of the survey, we used some questions, which were used by Slezák and Melicher (2008), Singleton (2010), Soares, Antunnes and Van Den Tillaar (2013), Nemec and Adamčák (2013). The survey consisted of 7 closed questions. The pupils and teachers inscribed the answers in the pre-printed forms.

Statistical analysis: the data collection was realized from 2016 to 2018. We compared the answers of pupils (boys and girls) and teachers (men and women) and evaluated the answers by statistics, in terms of intersexual differences. The results were quantified by using the percentage and statistical analysis, which was realized by using the program TAP 3 – Gamo Banská Bystrica, while the differences of answers, within the selected groups were evaluated by using the chi-square test. The statistical significance (level) was set at p<0.01 and p<0.05, and correlation was used, within questions 1, 2, 6 and 7.

3. Results

Within the inventory of basic thematic units, which were realized in the lessons of physical and sport education at primary schools, the thematic unit - Sports games achieved the highest average percentage, in terms of popularity (as shown in Figure 1). Within the selected groups (pupils and teachers), the frequency of answers was 57%. The same answers of teachers were also in the second most popular activity, within the thematic unit, which were the athletic exercises (men 19.35% and women 18.66%). Within the group of pupils, we noticed the difference in the second place. The second most popular thematic unit was the gymnastic exercises in girls with the answers rate of 14.13%, and in boys, there were the athletic exercises (11.29%). The thematic unit activities, which were realized in the natural environment, were preferred by less than 10% of teachers, 12.38% of girls and only 8.70% of boys. In terms of statistical evaluation of answers, we may state that in terms of intersexual differences, we found the significant differences of responses at the level of p < 0.01, only in the group of pupils, while in the group of teachers, we did not record the significant differences (as described in Table 1).

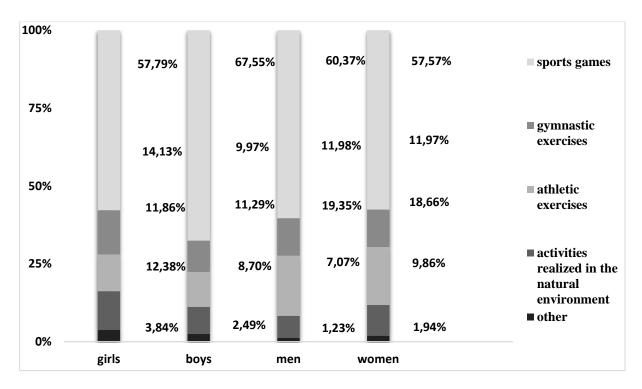


Fig. 1. The most popular thematic unit, realized within the physical and sport education

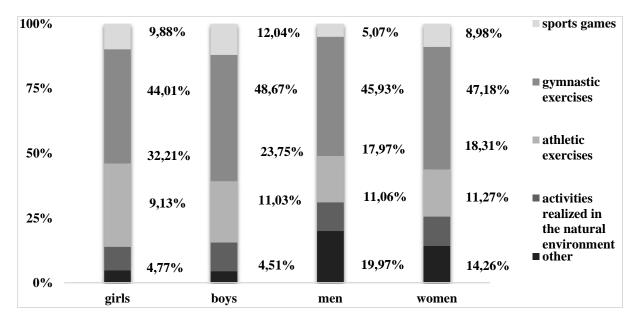


Fig. 2. The least popular thematic unit, realized within the physical and sport education

Due to the fact that the respondents of selected groups always had only one option, while choosing the answer, we included the so-called opposite question, therefore the least popular thematic unit, realized within the physical and sport education, were the gymnastic exercises, which achieved the highest average percentage (as shown in Figure 2). The frequency of answers of selected groups exceeded the value of 44 %, while the highest average percentage of unpopularity was recorded in the group of boys (48.67 %). The second most unpopular thematic unit was the athletic exercises, recorded in 32.21 % of girls, 18.31 % of boys, and 23.75 % of women. The answer "other" was placed second within the men, while the answer rate was 19.97 %. In terms of statistical evaluation of answers, we may state that in terms of intersexual differences, we found the significant differences of answers at the level of p < 0.01, in the group of pupils, while in the group

of teachers, we noticed the significant differences of answers at the level of p < 0.05 (as described in Table 1).

The next question was based on searching for which sports games (team and individual), realized within the thematic unit - Sports games, were preferred by the respondents (as shown in Figure 3). We recorded that the team sports games dominated the answers of selected groups, while the highest frequency of answers was found, within the group of men (68.31 %), the lowest frequency of answers was recorded in the group of girls (50.64 %). The girls (14.42 %) preferred individual sports games rather than the boys (9.38 %). The results were almost identical in terms of teachers (men and women). The team and individual sports games were equally popular for almost 1/3 of pupils (boys and girls). Within the teachers (men and women), the frequency of answers was less than 19 % of selected group. In terms of statistical evaluation of answers, we can state that in terms of intersexual differences, we found the significant differences of answers at the level of p < 0.01, only in the group of pupils, while in the group of teachers, we did not record the significant differences (as described in Table 1).

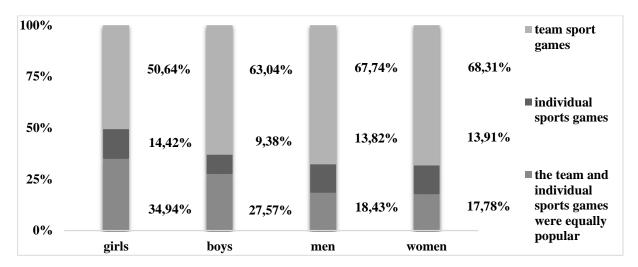


Fig. 3. Favourite preferences of team and individual sports games, realized within the thematic unit – sports games

Within the opposing questions, we were searching for sympathy/antipathy of survey groups (pupils and teachers) in relation to ISCED 3, designated for four basic team sports games (football, basketball, volleyball and handball) and selective team sports game – floorball, realized within the thematic unit – sports games. In terms of popularity (as shown in Figure 4), the ranking was as follows: volleyball (28.59 %), football (27.30 %), floorball (21.29 %), basketball (15.59 %) and handball (7.24 %). The answer for volleyball dominated in the group of girls (33.08 %) and women (45.95 %). Football dominated within the group of boys (41.30 %) and men (38.10 %). Very interesting was the third place of selective team sports game – floorball, which only had the lower frequency of answers (13.03 %) in the group of women, while the frequency of popularity of selected groups was higher than 20 %. In terms of statistical evaluation of answers, we may state that in terms of intersexual differences, we found the significant differences of answers at the level of p < 0.01 in the groups of pupils and teachers (as described in Table 1).

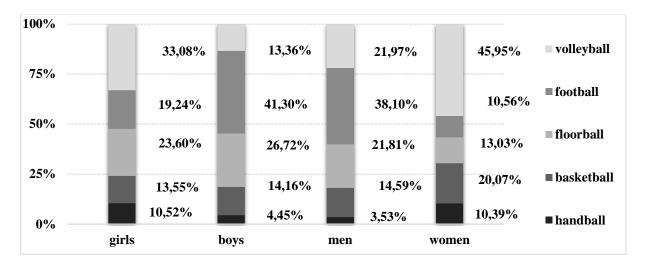


Fig. 4. The most popular team sports game, realized within the thematic unit – sports games

Following the previous question, we searched for which of listed team sports games, realized within the thematic unit – sports games, the selected groups considered as the least popular (as shown in Figure 5). Within the selected groups (pupils and teachers), the most unpopular sports game was the handball (27.37%), which was followed by volleyball (24.60%). The highest frequency of answers – handball, was recorded in the group of girls (30.76%) and men (30.41%), while the football was recorded, within the group of women (37.85%), it was the football and volleyball, within the group of boys (35.52%). The selected groups (pupils and teachers) marked the selective sports game (floorball) as the least unpopular sports game (10.29%), realized within the thematic unit – sports games. In terms of statistical evaluation of answers, we may state that in terms of intersexual differences, we found the significant differences of answers at the level of p < 0.01 in the groups of pupils and teachers (as described in Table 1).

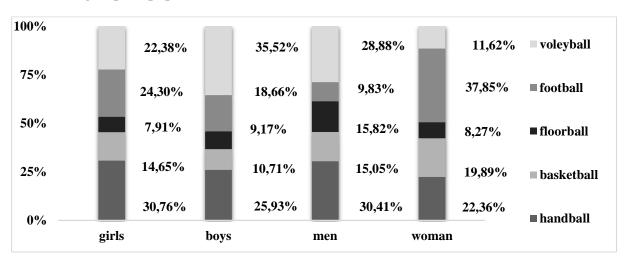


Fig. 5. The least popular team sports game, realized within the thematic unit – sports games

At the end of survey, we included the opposing questions, in which we searched for the opinions of selected groups on the complexity of rules of team sports games (football, basketball, volleyball and handball), resp. selective sports game – floorball, realized within the thematic unit – sports games. The sports game with the most complex rules, within the selected groups (pupils and teachers), was marked the basketball (49.35 %) (as shown in Figure 6). The volleyball, as the sports game, was marked as the second sports game with the complex rules (24.99 %). The rules of football were marked as the least complex (9.30 %). The highest average percentage was achieved by the sports game – basketball, within the group of men (57.60 %). We found the lowest average percentage of sports game – football, within the group of girls (5.70 %), while in terms of statistical

evaluation of answers, we may state that in terms of intersexual differences, we found the significant differences of answers at the level of p<0.05 in the groups of pupils and teachers (as described in Table 1).

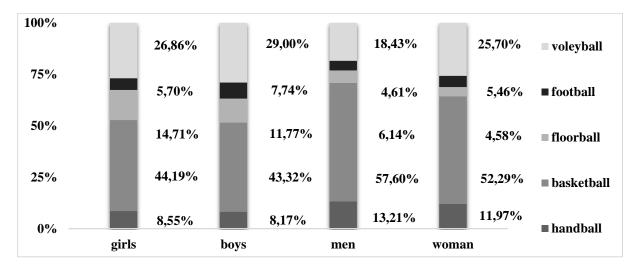


Fig. 6. The most complex rules of team sports games, realized within the thematic unit – sports games

The simplicity of rules of football was also confirmed by the opposite question (as shown in Figure 7), where 52.67 % of respondents indicated the rules of football within the selected groups (pupils and teachers). The basketball reached the average percentage of 2.77 %. The girls marked the volleyball, as the least complex rules (33.26 %). Only 1.23 % of men marked the basketball. In terms of statistical evaluation of answers, we may state that in terms of intersexual differences, we found the significant differences of answers at the level of p < 0.01 in the groups of pupils and teachers (as described in Table 1).

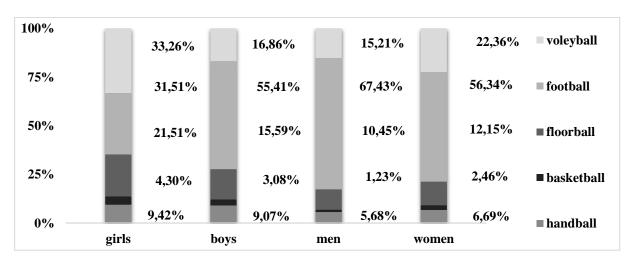


Fig. 7. The least complex rules of team sports games, realized within the thematic unit – sports games

While determining the correlation relationships (as described in Tables 2, 3, 4 and 5), we focused on examining the dependence of popularity, resp. unpopularity of sports games, in relation to the complexity of rules of selected sports games, realized within the thematic unit – sports games. We found that for each selected group there was always very high, direct dependence in only one relationship. Within the group of pupils (boys and girls) and men, we found that the more popular the sports game is, the less complex the rules are, while in the group of women,

we found the very high, direct dependence of relationship between the unpopular sports game and the least complex rules.

Table 1. Statistical evaluation of answers, within the pupils (boys and girls) and teachers (men and women)

Figure	girls/boys		women/men		
	χ2 test /df	(value p)	χ2 test /df	(value p)	
1	43.7(4) **	p=0,007	4.2(4)	p=0.369	
2	34.4(4) **	p=0,005	12.5(4)*	p=0.013	
3	59.2(2) **	p=0,001	0.086(2)	p=0.957	
4	344.6(4) **	p=0,002	183.3(4) **	p=0.001	
5	86.6 ₍₄₎ **	p=0,006	172.9(4) **	p=0.002	
6	13.2(4) *	p=0,010	11.0(4) *	p=0.025	
7	235.6(4) **	p=0,008	18.2(4) **	p=0.001	

Legend: ** = p < 0.01; * = p < 0.05; df = degree of freedom

Table 2. Correlation analysis of answers, within the girls in terms of popularity and complexity of sports games rules

Girls	the most popular sports game	the least popular sports game	the most complex rules	the least complex rules
the most popular sports game	1			
the least popular sports game	-0,263355*	1		
the most complex rules	+0,060492*	-0,417560**	1	
the least complex rules	+0,808368***	+0,071916*	-0,41680**	1

Legend: +direct correlation; -indirect correlation; ***very high correlation r = 0.8 to 1 (-0.8 to -1); **moderate correlation r = 0.4 to 0.8 (-0.4 to -0.8); *very low correlation r = 0 to 0.4 (-0.4 to 0)

Table 3. Correlation analysis of answers, within the boys in terms of popularity and complexity of sports games rules

Boys	the most popular sports game	the least popular sports game	the most complex rules	the least complex rules
the most popular sports game	1	Y		
the least popular sports game	-0,385699*	1		
the most complex rules	-0,366175*	-0,060366*	1	
the least complex rules	+0,862483***	+0,048938*	- 0,536520**	1

Legend: +direct correlation; -indirect correlation; ***very high correlation r = 0.8 to 1 (-0.8 to -1); **moderate correlation r = 0.4 to 0.8 (-0.4 to -0.8); *very low correlation r = 0 to 0.4 (-0.4 to 0)

Table 4. Correlation analysis of answers, within the women in terms of popularity and complexity of sports games rules

Women	the most popular sports game	the least popular sports game	the most complex rules	the least complex rules
the most popular sports game	1			
the least popular sports game	-0,580125**	1		
the most complex rules	+0,397028*	-0,655219**	1	
the least complex rules	-0,077066*	+0,819049***	- 0,304387**	1

Legend: +direct correlation; -indirect correlation; ***very high correlation r = 0.8 to 1 (-0.8 to -1); **moderate correlation r = 0.4 to 0.8 (-0.4 to -0.8); *very low correlation r = 0 to 0.4 (-0.4 to 0)

Table 5. Correlation analysis of answers, within the men in terms of popularity and complexity of sports games rules

Men	the most popular sports game	the least popular sports game	the most complex rules	the least complex rules
the most popular sports game	1			
the least popular sports game	-0,693851**	1		
the most complex rules	-0,363375*	-0,070865*	1	
the least complex rules	+0,858148***	-0,549042**	-0,50998**	1

Legend: +direct correlation; -indirect correlation; ***very high correlation r = 0.8 to 1 (-0.8 to -1); **moderate correlation r = 0.4 to 0.8 (-0.4 to -0.8); *very low correlation r = 0 to 0.4 (-0.4 to 0)

4. Discussion

Searching the content of education has important function, which is in accordance with the intention of State Education Program. The listed program states that the creation of School Education Program should take into account the needs of pupils/students. Thus, the emphasis is placed on the motivation towards the physical and sports activity. It is obvious that if we want to be successful in the listed issue, it is necessary to focus not only on fulfilling the visions and goals of school institutions, but also to respect the interests of teachers and pupils/students. Thus, the issue of interests is needed to analyse through the research method of survey, which is used to find out the information from a wide range of respondents. Within the survey, we tried to analyse the opinions of selected groups, which interact with each other - pupils and teachers. We focused on the school subject of physical and sport education and thematic unit – sports games, in which we examined the popularity and complexity, for example, the attributes, which we considered as crucial in creating the positive relationship between pupils and teachers. In terms of popularity of its content, we found out that within the selected groups (students and teachers), the highest average percentage was achieved by the basic thematic unit - Sports games with an answer rate beyond 57 %. The athletic exercises were marked, as the second thematic unit (15.29 %). The listed findings correlate with the study of Tillinger (1994), which was realized, within the group of 378 primary school pupils in Czechia. The author states that the content of lessons had the significant influence on the pupils' relationship towards the physical and sport education. In terms of popularity of thematic units, the author found out that the ordinary (non-athlete) pupils preferred the sports games (58 %) and athletics (13 %), while the athlete pupils preferred the athletics (56 %) and sports games (26%). The popularity of thematic unit - Sports games, within the primary school pupils and teachers, has been presented by the surveys of several authors, such as Bebčáková (2000), Adamčák and Nemec, (2011), Kremnický (2019a). The opposite findings were presented by the research of Novotná (2009) – 354 pupils of primary schools. Significantly more positive evaluation of physical and sport education with the content of sports games, dance and aerobics, as the teaching content of athletics and gymnastics, was presented by the study of Sigmund et al. (2009), which was realized, within the group of 2213 primary school female pupils aged from 13 to 17 in Czechia and Poland. Hastie et al. (2011) stressed the positive influence of sports games towards the popularity of physical and sport education, which has had increasingly broader and more important influence. According to the authors, it is mainly the possibility to use the wide range of technical and tactical skills and playful character – competitiveness. It is related with the higher popularity, within all age categories. The results pointed out the interests of pupils/students, within the area of team sports games, such as football (48 %) and floorball (36 %). On average, only 6.5 % of pupils/students showed the interest about the gymnastics. In terms of unpopularity of content of physical and sport education, the gymnastics and activity realized in the natural environment appeared in the first places (Tillinger, 1994, Adamčák, Nemec, 2011). Kremnický (2019b) states that the listed facts are certainly related to the fact that in terms of teachers of physical and sport education, up to 30 % of women do not like teaching the gymnastics, 35 % do not differentiate between the teaching of individual thematic units. The women justified the unpopularity of teaching the gymnastics due to its complexity, danger, higher rate of possible injury and poor general physical fitness of pupils/students.

Based on the above, we may state that the presented interests and popularity of sports games, within the respondents, indicate that such lessons allow the selected groups, not only to improve the fitness, but also the game itself, while the pupils/ students have the opportunity to cooperate with other classmates. What students appreciate is the success, within the game, which also brings the recognition and higher social status (Singleton, 2010). In our opinion, it is the influence of socialization, which is the reason for the increased interests of pupils/students towards the team sports games. The listed facts are supported by Argaj (2002) who states that the team sports games and playful activities help the school children to satisfy the desire for human society, lead out of loneliness and enable to communicate with others. Another reason is the fact that the State Education Program allows to include the new non-traditional team sports games, where mainly the floorball significantly attracts the interests of pupils/ students, but also the teachers to its realization. According to Dvořáková (2002), the fact that in the games and playful activities are strengthened the interpersonal relationships, within the pupils/ students, the teachers are aware of them and prefer to teach them. The study by Basar and Coskun (2017), which was based on the analysis of drawing and slogan, within the secondary school students, stressed that the most popular activities of physical and sport education were the sports games (75.1 %).

While analysing the content of thematic unit – sports games, we found out that out of four basic sports games (football, volleyball, basketball and handball) and one selection (floorball), while the overall first place of popularity was between the volleyball and football. However, there was the significant intersexual difference, in which the boys (pupils), men (teachers) preferred the football and girls (pupils), women (teachers) preferred the volleyball. The listed difference was conditioned by the number of variables. The first variable is probably the nature of game, since the football is highly contact and volleyball is the game where the opponents are separated by the net. Kačáni (2005) believes that the reason of popularity of football is the fact that the football belongs to the so-called "Big sports games", played by thousands of players (mainly by men) in each country and watched by thousands of fans (again, mainly by men) around the world. The popularity of football, within the eighth and ninth grades pupils of primary schools (949 boys and girls) was also confirmed by Kozaňáková, Adamčák and Kollár (2015). The formation of new non-traditional games – floorball was also confirmed by the listed authors (the second place) (11.90 % of boys and 18.64 % of girls). The rise of popularity of floorball in Slovakia was also confirmed by research of Krška (2007). According to Vilímová and Hurychová (2003), the most preferred sports games, within the physical and sport education, in terms of boys was floorball and football, while the volleyball was preferred by the girls. Very interesting is the fact that by aging, there are not recorded any significant changes of preferences, which was confirmed by the study of Basar and Coskun (2017) who state that the most popular sports games, in terms of secondary school students, were the football (34.8%), volleyball (21.1%) and basketball (19.2%). The research by Važan, Lovásová and Ludwig (2019) recorded that the university students (boys) preferred the sports games, such as football, floorball and volleyball, while the volleyball was

preferred by the girls (university students). According to Simons-Morton et al. (1994), the sports games, such as basketball and football have the necessary potential to increase the pupils' physical fitness, therefore are popular, within the teachers. In terms of creating the relationships between the students and sports games, even the school subject of physical and sport education, the sports games should be taught correctly (Perkins, Noam, 2007). Bendíková (2001) warns that the pupils/students consider as the most negative being forced to do activities, which they do not enjoy, resp. want to do. What is more, the pupils/ students do not like that they have to do what the teachers wants and have little space (often none) to realize the activities, which interest them.

Howarth and Bailey (2009) consider very important for the success of game when the pupils/students understand the rules, strategy and tactics. Learning new game skills, participating in the game and choosing the tactics of team requires the adequate knowledge of rules of game. It may happen through the theoretical, but also practical dimension of education – memorizing the rules and attempts to master the role of referee in the shorter sections of game and its modifications. According to Gallahue and Donnelly (2003), the knowledge is better to developed through the simple forms of games, for example through the so-called preparatory games. In order to bring the desired educational purpose, the pupil/ student needs the guidance from the teacher. The teacher must be the main coordinator. However, the control must be perfect (must not act as the control of teacher). Due to the fact that the rules of sports games regulate the relationships between the teammates and also define the way of realizing some activities (standard situations), it may appear to be less creative (Zelina, 2011), which is probably the reason of influencing the popularity. The listed statements document the findings, regarding the correlation relationships between the answers of respondents and the fact that the more popular the sports game is, the less complex rules are.

5. Conclusion

The effort to find out, what position has the thematic unit - Sports games in Slovak primary schools, within the school subject of physical and sport education, was realized on the wide range of respondents. We received answers from 3606 pupils of the eighth and ninth grades of primary schools (1886 boys and 1720 girls) and 1219 teachers of physical and sport education (651 men and 568 women). Due to this fact, we consider their informative value for Slovak school environment to be acceptable.

Searching the school subject of physical and sport education, in terms of content (teaching of thematic units), seems to be highly topical issue, not only from the aspect of pupils/students, but also from the point of view of teachers. It is essential to realize that it is increasingly happening that today's school children are reducing the amount of physical activity and losing the natural motivation to realize it, whether at school or in free time. Thus, it is necessary to identify the causes of listed conditions as soon as possible and then correct the teaching process of physical and sport education so that pupils/students do not lose the interest and have positive experiences. One of important variables of the listed process is the need to know and accept the interests and needs. To use one of the most popular thematic unit – sports games, seems to be very good opportunity.

Based on the findings, we would like to make the following conclusions:

- 1. The level of popularity of thematic unit sports games was higher, in terms of pupils and teachers (more than 57%). Within the selected groups (pupils boys and girls, teachers men and women), the listed thematic unit reached first place in the hierarchy of priorities. Within the boys (pupils), it reached the value of 67.55%.
- 2. The least popular thematic unit within the selected groups (pupils and teachers), was the gymnastic exercises (44.01 %). Within the listed question, the men (teachers) were not as distinct in the other possibilities as the other groups.
- 3. Within the teaching of thematic unit sports games, the pupils and teachers preferred the team sports games, while the most popular sports game was the football in boys and men (39.7 %) and volleyball in girls and women (39.5 %). As the least popular sports game, handball recorded 27.37 %).
- 4. As the most complex rules of teaching the thematic unit sports games was recorded the basketball, within the selected groups (44.19 %). Also, the least complex rules were recorded as the rules of football (52.67 %).
- 5. In terms of statistical significance of intersexual differences in the answers of selected groups, we recorded the significant difference, within the pupils (boys and girls) in seven questions

(p < 0.01; p < 0.05). Within the group of teachers, we did not find the significant differences in two cases of answers (the most popular thematic unit and preferences of popular team sports games and individual sports games).

6. By the survey, we found out that there was very high correlation between the most popular sports games and difficulty of rules, within the selected groups. In practice, it means that the more popular the sports game, the less complex the rules are. Within the group of teachers — men, the listed relationship showed very high, direct dependence, while the group of teachers — women showed very high, direct dependence of relationship between the unpopular sports game and the least complex rules.

The above findings entitle us to state that in accordance with the recommendations of ISCED 2 (which states that the thematic unit - Sports games should be realized in each school year to the extent of at least 30 %), it is necessary to include in the content of teaching the school subject of physical and sport education as many lessons as possible to learn and play the sports games. The listed games, as we noticed, had the high percentage incidence (more than 62 %) within the pupils/students (boys and girls). What is more, the sports games are also very popular, within the teachers (men and women). While teaching the sports games, the teachers must carefully choose which sports games are popular and enjoyed by the pupils/ students. The school children prefer to participate in activities, which bring them positive experiences. The great emphasis should be placed on the age and intersexual peculiarities of primary school pupils. We believe that in order to become popular (thematic unit) for the pupil/student, it is necessary to show him/ her it in the widest possible range. The teachers may also take advantage of free choice of only two sports games, within the whole cycle of education at the second primary education stage (ISCED 2). In our opinion, the non-traditional sports games, realized as the compulsory selective subjects, may also play the specific role in consolidating the interests of pupils/ students, where the range of up to 30 % is also set aside for the inclusion in the content of annual education plan of subject. The validity of listed statement was presented by the sports game – floorball, which in the survey reached relatively high popularity, within the selected groups (21.29 %). Due to the fact, we consider the most difficult role of being the teacher and to teach the sports games to be his/her ability to design the content of physical and sports education, where the cognitive and motor tasks will be included and will be not only in accordance with the pupils'/ students' abilities and skills (development), but will provide them the space to fulfil their desires and ambitions, while helping to strengthen the healthy lifestyles.

6. Conflict of Interests

The authors have no conflict of interests to declare.

References

Adamčák, Nemec, 2010 – Adamčák, Š., Nemec, M. (2010). Pohybové hry a školská telesná a športová výchova [Movement games and school physical and sports education]. Banská Bystrica: Univerzita Mateja Bela. [in Slovak]

Adamčák, Nemec, 2011 – Adamčák, Š., Nemec, M. (2011). Vzťah žiakov 2. stupňa základných škôl k športu, telesnej výchove a obľúbenosť vybraných pohybových aktivít na hodinách telesnej a športovej výchovy [The relation of primary school pupils to sports, physical education and the popularity of selected physical activities in physical and sports education classes]. Perspectives of Physical Training Process at Schools, pp. 21-30. [in Slovak]

Antala, 2009 – Antala, B. (2009). Telesná a športová výchova v základných a stredných školách v SR po prvom roku transformácie vzdelávania [Physical and sports education in primary and secondary schools in the Slovak Republic after the first year of education transformation.] Slovenský školský šport – podmienky, prognózy, rozvoj, pp. 54-63. [in Slovak]

Argaj, 2002 – Argaj, G. (2002). Analýza herného zaťaženia pri vybraných pohybových a športových hrách [Analysis of game load in selected movement and sports games]. Efekty pohybového zatížení v edukačním prostředí tělesné výchovy a sportu. Olomouc: Univerzita palackého, Fakulta tělesné kultúry, pp. 7-10. [in Slovak]

Bailey, 2006 – Bailey, R. (2006). Physical Education and Sport in Schools: A Review of Benefits and Outcomes. *The Journal of School Health*. 76(8): 397-401.

Balga, Antala, 2015 - Balga, T., Antala, B. (2015). Postoje žiačok základných škôl k telesnej a športovej výchove [Attitudes of primary school students to physical and sports education]. *Tel. Vých. Šport.* 25(2): 13-16. [in Slovak]

Bartík, 2009 – *Bartík, P.* (2009). Postoje žiakov základných škôl k telesnej výchove a športu a úroveň ich teoretických vedomostí z telesnej výchovy v intenciách vzdelávacieho štandardu [Attitudes of primary school students towards physical education and sport and the level of their theoretical knowledge of physical education in the intentions of the educational standard]. Banská Bystrica: FHV UMB. [in Slovak]

Basar, Coskun, 2017 – Basar, M.A., Coskun, A. (2017). Secondary School Students' Opinions about Physical Education Course. *International Journal of Science Culture and Sport*. 5(4): 263-273.

Bebčáková, 2000 – Bebčáková, V. (2000). Súčasné trendy výučby telesnej výchovy [Current trends in physical education]. *Tel. Vých. Šport.* 10(3): 2-5. [in Slovak]

Bendíková, 2011 - Bendíková, E. (2011). Názory žiakov na komunikáciu učiteľa telesnej a športovej výchovy [Pupils' views on the communication of physical and sports education teachers]. Tel. Vých. Šport. 21(32): 18-23. [in Slovak]

Biddle et al., 2015 – Biddle, S.J.H., Mutrie, N., Gorely, T. (2015). Psychology of physical activity: Determinants, well-being and interventions (3rd Edition). Routledge, London.

Carlson, 1995 – Carlson, T.B. (1995). We hate gym: Student alienation from physical education. *Journal of Teaching in Physical Education*. 14: 467-477.

Cothran et al., 2000 – Cothran, D., Kulinna, P.H., Ward, E. (2000). Students' experiences with and perceptions of teaching styles. Journal of Research and Development in Education. 34(1): 93-103.

Dvořáková, 2002 – *Dvořáková*, *H*. (2002). Pohybem a hrou rozvíjíme osobnost dítěte [Through movement and play, we develop the child's personality]. Praha: Portál. [in Czech]

Gallahue, Donnelly, 2003 – Gallahue, D.L., Donnelly, F.C. (2003). Developmental Physical Education for All Children. Human Kinetics: Creative Printing.

Hastie et al., 2011 - Hastie, P.A., Martínez de Ojeda, D., Calderón, A. (2011). A review of research on Sport Education: 2004 to the present. Physical Education and Sport Pedagogy. 16(2): 103-132.

Hátlová et al., 2009 – Hátlová, B., Slepička, P. Hošek, V. (2009). Psychológie sportu [Psychology of sport]. Praha: Karolínum. [in Czech]

Howarth, Bailey, 2009 – Howarth, K., Bailey, J. (2009). Game Shaping – A Tool for Teachers. Strategies. [cit. 18. 1. 2020]. DOI: http://search.proquest.com/docview/214558934/F4 C019DC969E413CPQ/1?accountid=15618.

Kačáni, 2005 – *Kačáni, L.* (2005). Futbal, teória a prax hernej prípravy [Football, theory and practice of game training]. Bratislava: SPN. [in Slovak]

Kozaňáková et al., 2015 - Kozaňáková, A., Adamčák, Š., Kollár, R. (2015). Miesto a obľúbenosť športovej hry florbal v telesnej a športovej výchove [The place and popularity of the sports game floorball in physical and sports education]. Telesná výchova a šport v živote človeka. Zvolen: TU vo Zvolene, pp. 208-221. [in Slovak]

Kremnický, 2019a – Kremnický, J. (2019). Názory žiakov 6. ročníkov základných škôl k vyučovaniu gymnastiky v Banskej Bystrici [Opinions of 6th grade elementary school students in teaching gymnastics in Banská Bystrica]. Zborník Telesná výchova a šport v živote človeka, Zvolen: TU vo Zvolene, pp. 158-163. [in Slovak]

Kremnický, 2019b – Kremnický, J. (2019b). Názory pedagógov k vyučovaniu gymnastiky v Banskej Bystrici [Opinions of teachers on the teaching of gymnastics in Banská Bystrica]. Zborník Žiak, pohyb, edukácia. Bratislava: Univerzita Komenského v Bratislave, pp. 136-142. [in Slovak]

Krška, 2007 – Krška, P. (2007). Úroveň vybraných florbalových zručností detí mladšieho školského veku [The level of selected floorball skills of children of younger school age]. Telovýchovný proces na školách. B. Bystrica: PF UMB a KTV UMB, pp. 103-109. [in Slovak]

Nemec, Adamčák, 2013 – *Nemec, M., Adamčák, Š.* (2013). Physical games and education process at the 2nd stage of primary schools. Krakov: Spolok Slovákov v Poľsku.

Novotná, 2009 – Novotná, N. (2009). Programy v pohybovom režime žiakov mladšieho školského veku banskobystrického regiónu ako determinant ich zdravia [Programs in the physical regime of pupils of younger school age of the Banská Bystrica region as a determinant of their health]. Banská Bystrica: FHV UMB. [in Slovak]

Perkins, Noam, 2007 – Perkins, D.F., Noam, G.G. (2007). Characteristics of sports-based youth development program. New Directions for Youth Development. 115(10): 75-106.

Prachař, 2016 – *Prachař*, *M*. (2016). Tělocvik zaujímá na školách poslední místo. Děti jsou přitom slabší a línější než dřív [Physical education takes the last place in schools. At the same time, children are weaker and lazier than before]. [cit. 16. 4. 2020]. [Electronic resource]. DOI: https://www.lidovky.cz/domov/telocvik-je-az-na-poslednim-miste-deti-jsou-slabsi-a-linejsi-nez-pred-10-lety. A160209_135452_ln_domov_mpr [in Czech]

Semiginovský, 2009 – *Semiginovský*, *B*. (2009). Školní tělesná výchova - soudobé výzvy a návrh východisek jejich řešení [School physical education – contemporary challenges and design of their solutions]. *Tělesná výchova a sport mládeže*. 75(4): 14-16. [in Czech]

Sigmund, Sigmundová, 2011 – Sigmund, E., Sigmundová, D. (2011). Pohybová aktivita pro podporu zdraví dětí a mládeže [Physical activity to support the health of children and youth]. Olomouc: Univerzita Palackého v Olomouci. [in Czech]

Sigmund et al., 2009 – Sigmund, E., Frömel, K., Chmelík, F., Lokvencová, P., Groffik, D. (2009). Oblíbený obsah vyučovacích jednotek tělesné výchovy – pozitivně hodnocený prostředek vyššího tělesného zatížení děvčat [Popular content of physical education teaching units – a positively evaluated means of higher physical load of girls]. Tělesná kultura. 32(2): 45-63. [in Czech]

Sigmundová et al., 2005 – Sigmundová, D., Frömel, K., Havlíková, D., Janečková, J. (2005). Qualitative analysis of opinions, conditions and educational environment in relation to physical behaviour of adolescents. *Acta Universitatis Palackianae Olomoucensis. Gymnica*. 35(2): 27-33.

Simons-Morton et al., 1994 – Simons-Morton, B.G., Taylor, S., Huang, I.W., Fulton, J.E. (1994). Observed levels of elementary and middle school children's physical activity during physical education classes. *Prev Med.* 23: 437-441.

Singleton, 2010 – Singleton, E. (2010). More than "Just a Game": History, Pedagogy, and Games in Physical Education. *Physical & Health Education Journal*. 76(2): 22-27.

Slezák, Melicher, 2008 – *Slezák, J., Melicher, A.* (2008). Analýza záujmovej telesnej výchovy v súčasných podmienkach [Analysis of hobby physical education in the current conditions]. Telesná výchova a šport, zdravie a pohyb. Prešov: MPC Bratislava, alokované pracovisko Prešov, pp. 46-56. [in Slovak]

Soares et al., 2013 – Soares, J., Antunnes, H., Van Den Tillaar, R. (2013). A comparison between boys and girl about the motives for the participation in school sport. *Journal of Physical Education and Sport*. 13(3): 303-307.

<u>Šimonek</u>, <u>2006</u> – <u>Šimonek</u>, J. (2006). Športové záujmy a pohybová aktivita v dennom režime a ich vplyv na prevenciu drogových závislostí detí a mládeže [Sports interests and physical activity in the daily routine and their impact on the prevention of drug addiction of children and youth]. <u>Štúdie III</u>, pp. 7-102. [in Slovak]

Tillinger, 1994 – Tillinger, P. (1994). Vztah 11-14 letých děti k tělesné výchově a sportu [The relationship of 11-14 year old children to physical education and sports]. Tel. Vých. Šport. 4(1): 6-9. [in Czech]

Uher, Brtková, 2004 – Uher, I., Brtková, M. (2004). Zdravie, pohyb a učenie [Health, exercise and learning]. *Zdravá škola*, pp. 8-11. [in Slovak]

Važan et al., 2019 – Važan, R., Lovásová, V., Ludvig, D. (2019). Vzťah študentov 1. ročníka LF UK k pohybovým aktivitám a športu [The relationship of 1st year LF UK students to physical activities and sports]. Vysokoškolská telesná výchova a šport, pohybová aktivita a zdravý životný štýl. TU Košice, pp. 141-145. [in Slovak]

Vilímová, Hurychová, 2001 – Vilímová, V., Hurychová, A. (2001). Tělesná výchova a sport jako prostředek harmonického rozvoje dětí a mládeže [Physical education and sport as a means of harmonious development of children and youth]. Role tělesné výchovy a sportu v transformujícich se zemích středoevropského regionu. Brno: Masarykova univerzita. [in Czech]

Zelina, 2011 – *Zelina*, *M*. (2011). Stratégie a metódy rozvoja osobnosti dieťaťa [Strategies and methods of child personality development]. Bratislava: IRIS. [in Slovak]