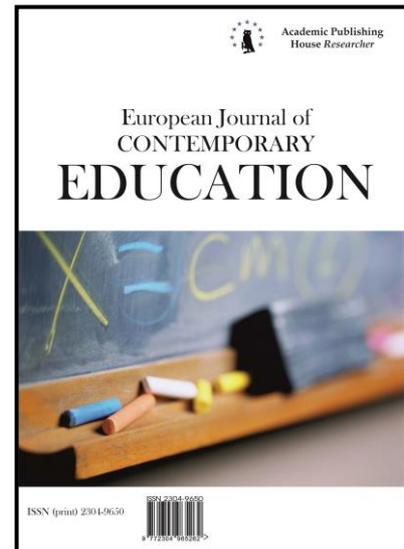




Copyright © 2019 by Academic Publishing
House Researcher s.r.o.
All rights reserved.
Published in the Slovak Republic
European Journal of Contemporary Education
E-ISSN 2305-6746
2019, 8(1): 157-166
DOI: 10.13187/ejced.2019.1.157
www.ejournal1.com

WARNING! Article copyright. Copying, reproduction, distribution, republication (in whole or in part), or otherwise commercial use of the violation of the author(s) rights will be pursued on the basis of international legislation. Using the hyperlinks to the article is not considered a violation of copyright.



Opinions of Teachers from the Central Slovak Region on Teaching Sports Games at Elementary Schools

Miroslav Nemec ^a, Stefan Adamcak ^a, Jiri Michal ^a, Pavol Bartik ^{a,*}

^aMatej Bel University in Banska Bystrica, Banska Bystrica, Slovakia

Abstract

This study analyses the opinions of male and female teachers of Physical and Sport Education in the 264 elementary schools from the Central Slovak Region ($n = 507$, 257 female teachers and 250 male teachers) on the popularity of teaching the sports games thematic unit. These opinions were collected and analysed by questionnaire survey during the school year 2016–2017. Differences of opinions were evaluated from the aspects of gender (male teacher and female teacher) and location (city and countryside). In general, it has been shown that all respondents prefer collective sports, whether in their leisure time or during the class. Artistic gymnastics was ranked as the least popular sport. Several other studies have confirmed that male teachers prefer football while female teachers prefer teaching volleyball. Interestingly, floorball was ranked as the second most popular sport and was ahead of more traditional sports games like basketball. Female teachers firmly refer to football as the least favoured sports game taught in class. The total number of between 11 and 16 hours allocated to the sports games thematic unit is an important finding as well. From the gender aspect, the variance between female and male teachers' answers was statistically significant in terms of popularity and unpopularity of teaching individual types of sports games ($p < 0.01$). From the location aspect, the statistically significant variance at the level of significance was observed only in the female teachers' answers ($p < 0.01$) concerning favouring of a popular thematic unit and unpopularity of teaching specific types of sports games.

Keywords: popularity, physical and sports education, gender, urban and rural schools, sports games thematic unit.

* Corresponding author

E-mail addresses: pavol.bartik@umb.sk (P. Bartik), miroslav.nemec@umb.sk (M. Nemec), stefan.adamcak@umb.sk (S. Adamcak), jiri.michal@umb.sk (J. Micha)

1. Introduction

In our study, we analysed the opinions of Physical and Sport Education female and male teachers on the popularity of teaching the sports games thematic unit via the comparison of this heterogeneous group from gender and location aspects. Why did we focus on female and male teachers from elementary schools? Why did we focus on teaching the sports games unit? The answer is a new approach to education in Slovakia introduced in 2008. This approach consists of a multi-level state education program. The content of the program at the second stage of elementary schools (lower secondary education) is included in ISCED 2 (Bendíková, 2016). The program offers more opportunities for schools to change according to the conditions, possibilities and needs of the region. The program also offers greater opportunities for self-realization and higher autonomy to teachers and a more creative atmosphere among colleagues. This program was started in 2015 and furthermore, the innovation encourages teachers to prepare interesting lessons for pupils to confirm their knowledge, habits, attitudes and skills about sport, health, and healthy lifestyle. The content of lessons must have equal impact on each pupil. Nowadays, teachers have the option to decide upon the content of education. The main issue is whether they will continue to advocate and force gender stereotypes or will question them and thus open the space for girls and boys to form their own femininity and masculinity.

Soares et al. (2013) identified the influence of gender on motivation in physical education at school. The particularity of the sports games unit was the main aspect that led us to discuss this issue. We focused on recommendations stating that sports games should be included in the physical education curriculum in the highest level (up to 25%) and we also looked at the fact that, according to a number of studies, sports games are the most popular activities with pupils attending elementary schools (Nemec, 2002; Kollár, 2007; Argaj, 2010; Dismore, Bailey, 2011 and others). We may consider the following as the basic reasons behind the popularity of sports games: internal and external motivation, collectivity, clear spatial and time allocation, predetermined rules, high level of rivalry due to the unpredictability of the game's outcome until the end (Adamčák, Kollár, 2003).

The main purpose of sports games is that they help pupils to build a positive attitude towards physical activity. The key factor is to establish a positive attitude towards sports at an earlier stage of development, because the older people become the harder it is to establish firm exercise habits (Sekot, 2009).

Another important feature of sports games is their positive impact on health. According to Krafčík and Görner (2013), regular physical activity improves the body's immune system, circulation of blood, helps to strengthen muscles, reduces the amount of fat in the body (losing excess body weight) and lightens one's mood. According to Ružička et al. (2013), sports games also have a beneficial influence on the development of the pupil's personality and qualities such as self-control, purposefulness, initiative, activeness, tenacity, responsibility and cooperation. The socialization process of the pupil is positively affected by the features mentioned above.

The impact the teachers and schools have on pupils is indisputable. Children spend a large part of the day at school. The school has to provide pupils with the necessary information and involve them in activities that will effectively shape their attitudes and develop a healthy lifestyle (Fox, 2004; Sharma, 2006; Marttinen et al., 2018).

Various reports and research show a number of alarming and negative information concerning people's health in general. The Status Report on Enforcing Children's Rights in Slovakia from 2008 reports that youth mostly engage in listening to music, watching television and attending get-togethers in pairs or informal groups (Guráň, 2008).

The results of the international HBSC study (Health Behaviour in School), edited by Currie et al. (2012), point to the fact that a large number of school age children do not engage in sufficient physical activities. Antala et al. (2014) report that physical activity of US citizens is on the decline and has dropped by 32 % over the last 40 years and is expected to drop by as much as 46 % by 2030. Between 1991 and 2009, physical activity in China dropped by 45 % and the drop of physical activity is expected to reach 51 % by 2030. In the United Kingdom, obesity among children aged 2 to 10 increased by 56% between 1994 and 2008. It is shocking that a lack of physical activity accounts for up to 9 % of all deaths in the world. For these reasons, it is important to draw attention to the importance of active lifestyle as a form of disorder prevention. School and teachers are irreplaceable when it comes to dealing with this issue.

In the light of these facts, the main objective of our study was to analyse the differences in the views of Physical and Sport Education teachers teaching at the second stage of elementary schools in the Central Slovakia Region on the popularity of teaching the sports games thematic unit.

2. Materials and Methods

The group of the respondents of the research consisted of 507 physical and sport education teachers of the second stage of 156 urban and 108 rural elementary schools from the Central Slovak Region. To select elementary schools for the research we used a random selection method.

Number of teachers from urban elementary schools was 216 (114 male and 102 female teachers) and from rural elementary schools was 291 (136 male and 155 female teachers). Average age of male teachers from urban elementary schools was 40.32 ± 0.35 years and female teachers was 42.15 ± 0.42 years. Average age of male teachers from rural elementary schools was 44.72 ± 0.38 years and female teachers was 46.25 ± 0.52 years. Figure 1 presents the primary characteristic of the respondents of the research.

The main research method was questionnaire survey. In the questionnaire, we followed the questions used in the research by Nader et al. (2008) and Bendíková (2016). The questionnaire consisted of 8 questions. The respondents wrote their answers on pre-printed forms. The survey was conducted during the school year 2016–2017.

Data analysis – respondents' responses were evaluated from two aspects:

- 1 / – gender differences in opinions (female and male teachers);
- 2 / – location aspect (urban and rural schools).

The results were expressed as a percentage number. The statistical analysis was performed using the TAP 3 software. The differences were evaluated using the Chi-square test. The level of statistical significance was set to $p < 0.01$ and $p < 0.05$.

3. Results

The questions number 1 and number 2 concerned the primary characteristics of the respondents of the research (Figure 1).

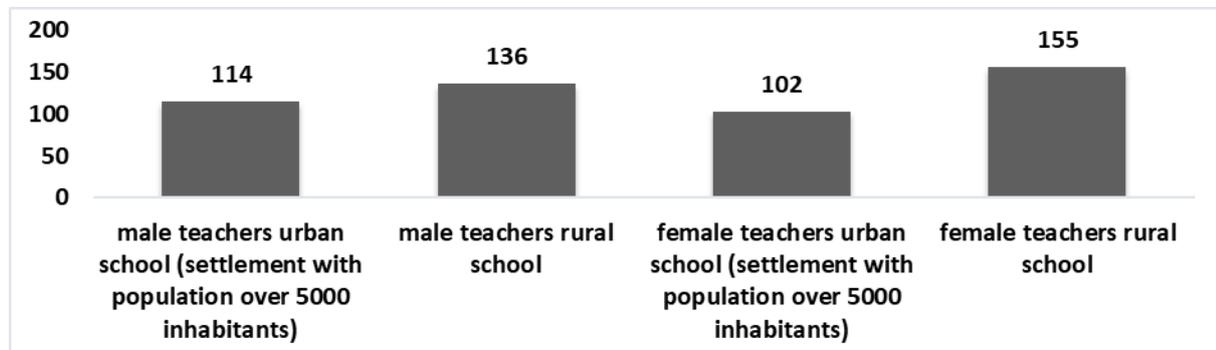


Fig. 1. Primary characteristics of the respondents of the research (n = 507)

Source: own

The third question targeted sports favoured by respondents in their leisure time (Figure 2).

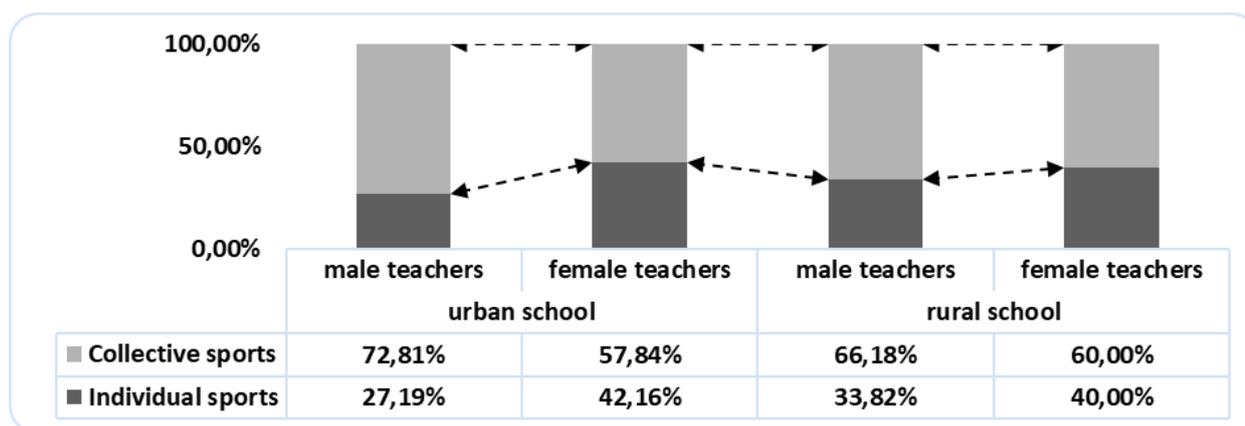


Fig. 2. Sports favoured by respondents in their leisure time

Source: own

We have found that all respondents prefer collective sports. The collective sports are mostly favoured by urban school male teachers (72.81 %), on the other hand, collective sports are the least favoured unit of urban school female teachers (42.16 %). A statistically significant variance was observed in female and male teachers’ answers on third question at the level of significance $p < 0.05$ (Table 1).

Table 1. Statistical evaluation of variance in respondents’ answers (Chi-square test)

	Male/Female teachers	Male teachers urban/rural schools	Female teachers urban/rural schools
QUESTION 3	* p= 0,0182	p= 0,258	p= 0,7307
QUESTION 4	p= 0,2871	p= 0,3116	** p= 0,0005
QUESTION 5	p= 0,4377	p= 0,8985	p= 0,2928
QUESTION 6	** p= 9,667 E-14	p= 0,2348	** p= 0,0015
QUESTION 7	** p= 4,56 E-16	p= 0,7046	p= 0,1085
QUESTION 8	** p= 0,0133	p= 0,1972	p= 0,4079

Explanatory notes: statistical significance – $p < 0.01$ **, $p < 0.05$ *

Subsequently, we analysed whether the respondents agreed to give preference to teaching a specific thematic unit on Physical and Sport Education lessons. It is evident from Figure 3 that all respondents prefer practicing collective sports, i.e. sports games (over 58 %), both in their leisure time and during the class. Male teachers from both urban and rural schools ranked athletics as the second most favoured unit to teach. Female teachers from urban schools prefer teaching artistic gymnastics after sports games (15.69 %), while rural schools female teachers favour athletics. A statistically significant variance was observed only in the answers from urban and rural school female teachers on fourth question at the level of significance $p < 0.01$ (Table 1).

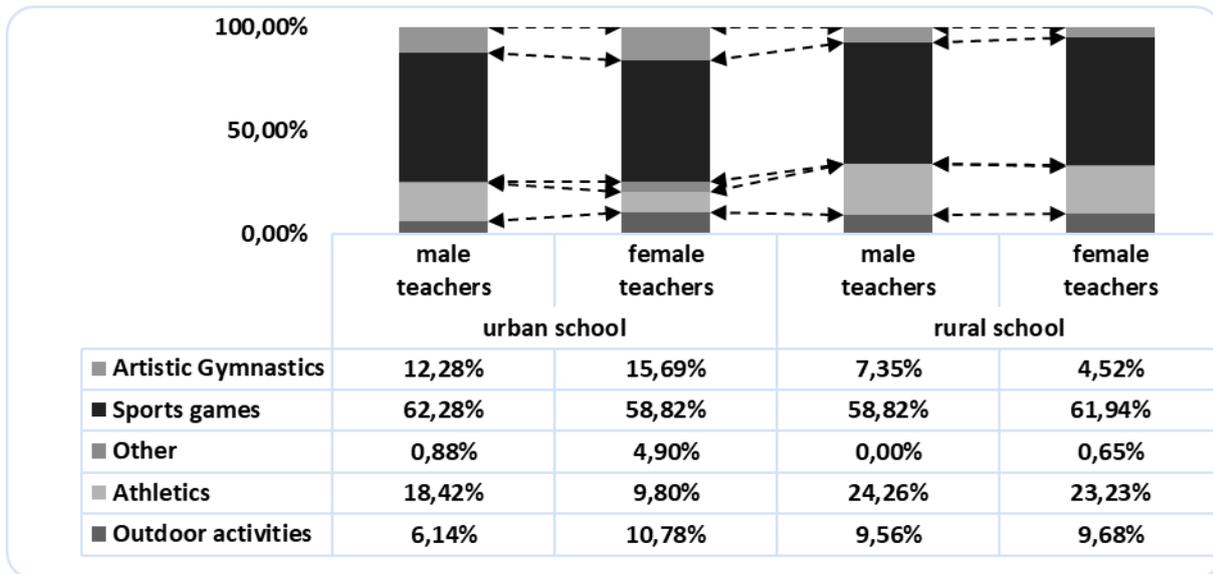


Fig. 3. The most favoured sports taught by respondents
Source: own

The preceding results on favoured sport were mirrored in the question concerning the least favoured sport (Figure 4) as all respondents do not favour teaching artistic gymnastics (more than 50 % of answers). Artistic gymnastics was followed by the option in which teachers had an opportunity to give an example. Male teachers from urban and rural schools mostly mentioned combat sports. Female teachers from urban schools ranked outdoor activities as the second least favoured unit while female teachers from rural schools ranked athletics as the second least favoured unit. We did not observe any statistically significant variance in the answers on fifth question (Table 1).

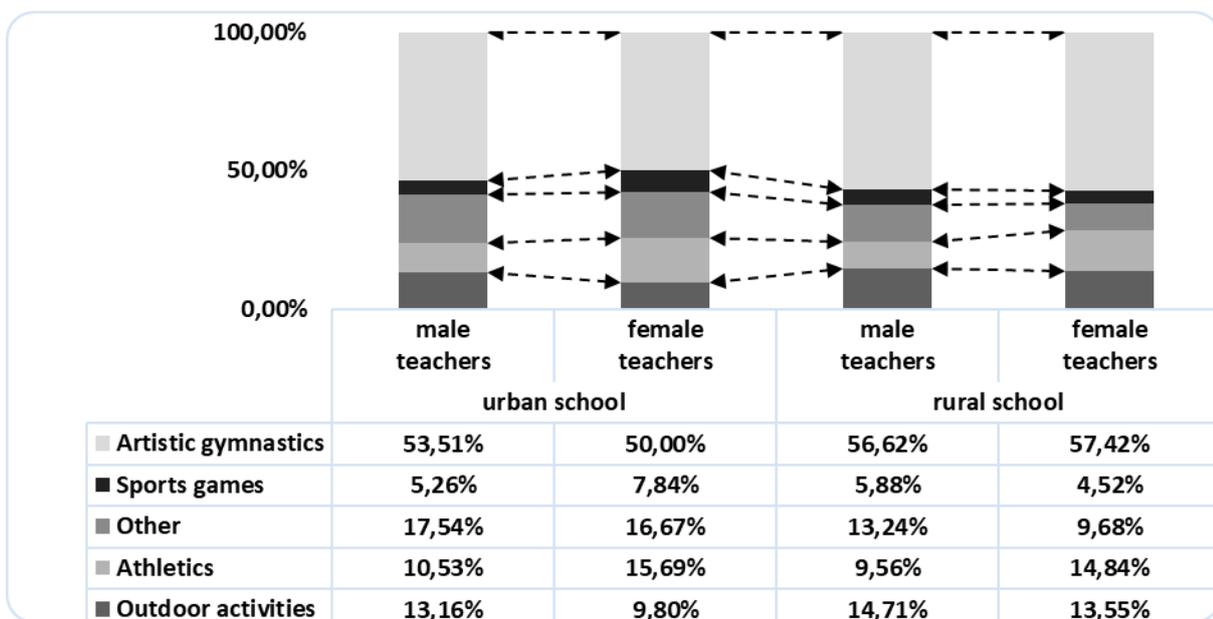


Fig. 4. The least favoured sports taught by respondents
Source: own

The following two questions were focused on a more detailed specification of the respondents' opinion from the perspective of taught sports games. We researched the popularity of sports games (Figure 5).

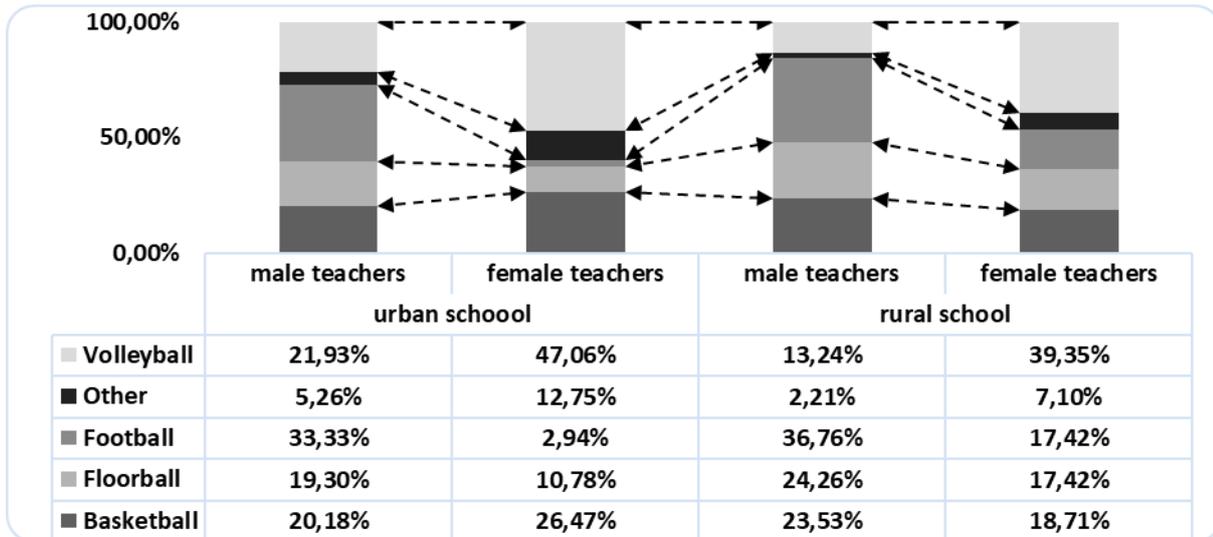


Fig. 5. The most favoured sports game taught by respondents
Source: own

The most popular sports game taught and favoured by male teachers from both urban and rural schools is football, which accounted for more than 33 % of respondents' answers. Female teachers chose volleyball as their favourite taught sports game, accounting for 47.06 % of the respondents' answers in urban schools and 39.35 % in rural schools. Statistical variance was observed in the answers from both male and female teachers. We observed statistical variance in the answers from female teachers teaching at urban and rural schools on sixth question at the level of significance $p < 0.01$ (Table 1).

The least favoured sports game taught by male teachers in urban schools is basketball (34.21 %). Volleyball is the least popular sports game taught by male teachers in rural schools (30.15 %). Female teachers in both observed groups ranked football as their least favourite sports game to teach (Figure 6). We observed statistical variance in the answers from both male and female teachers on seventh question at the level of significance $p < 0.01$ (Table 1).

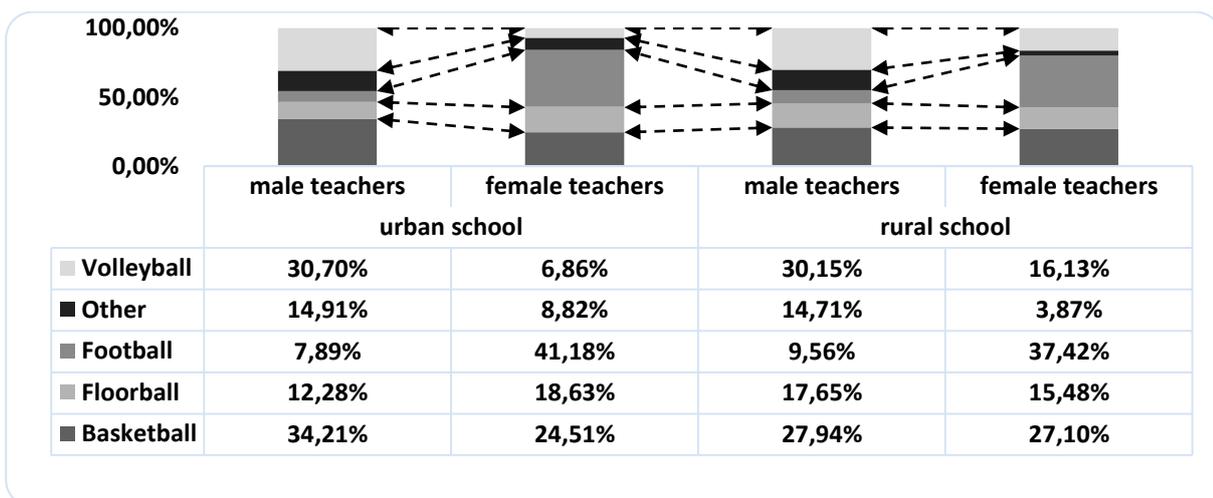


Fig. 6. The least favoured sports game taught by respondents
Source: own

In conclusion, we wanted to learn the preferred total number of hours allocated to teaching the sports games unit by respondents (Figure 7).

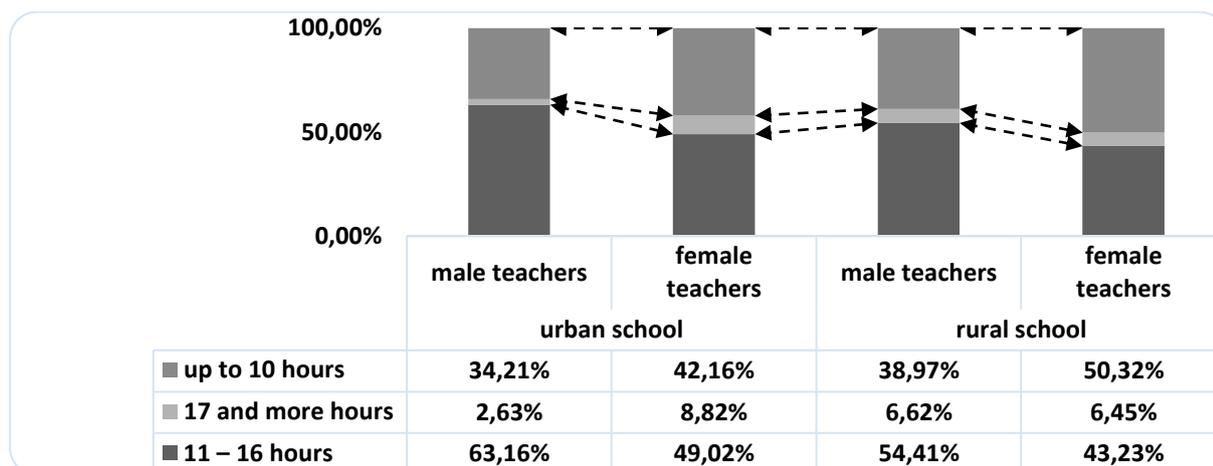


Fig. 7. Total number of hours allocated to teaching sports games unit by respondents
Source: own

Male teachers from rural and urban schools and female teachers from urban schools mostly checked the option eleven to sixteen hours. Female teachers from rural schools commonly allocate up to ten hours to the sports games thematic unit. We observed statistical variance in the answers from male and female teachers on eighth question at the level of significance $p < 0.01$ (Table 1).

4. Discussion

In schools education, Physical and Sport Education is perceived as an essential factor in encouraging and developing effective motor skills in pupils and a major factor in primary health prevention. The partial freedom in choosing the content of the curriculum, various interests, values and practical experience formulated into the answers of the observed group of lower secondary education teachers from the Central Slovak Region revealed several intriguing facts. By comparing the opinions of respondents with regard to teaching their favoured sports games strand we may conclude that there is no gender-specific difference involved in favouring one particular sports game. Both observed groups favour collective sports in their leisure time and while teaching at the school. These findings are in line with the findings of other scholars (Nemec, 2002; Vilímová, Hurychová, 2003; Argaj, 2010; Antala et al., 2014 and others). The least favoured sport in school education that is considered as an unpopular unit of physical education by both the teachers and pupils is artistic gymnastics (Nemec, Adamčák, 2013).

While researching sports games' popularity, we validated findings from numerous preceding studies (e.g. Dismore, Bailey, 2011) reporting that the male teachers prefer teaching football, whereas female teachers are in favour of volleyball. Both sports games are the pillars of Physical and Sport Education classes and significantly mirror the gender-specific perspective on the curriculum contents. Football revolves around direct physical contact and battles between players, features typical for boys. On the other hand, volleyball is perceived as a relatively calm sport in which two teams are separated by a net. These findings also correlate with the interests of the pupils themselves.

The sports games predominate during Physical and Sport Education classes in school but also in their spare time (Frömel et al., 2002; Antala et al., 2014 and others). Fahey et al. (2005) report that the pupils from Ireland favour football, basketball and badminton in the Physical Education classes. It is interesting that floorball was ranked as the second most favoured sports game in the region compared to other traditional sports games like basketball. According to the research of Bendíková (2016), floorball is the most favoured sports game of pupils. As for teachers, we did not observe any difference when comparing the answers on the popularity of sports games teaching. Female teachers clearly present football as the least favoured sports game added to the curriculum.

This difference in opinions on the popularity and unpopularity of teaching sports games is also confirmed by Špaldoň (2017) in research carried out in an elementary school in Western

Slovakia (n=104). He found out that male teachers favour teaching football and floorball, while the female teachers favour volleyball. The least favoured games of male teachers are volleyball and basketball, the least favoured games of female teachers are football and basketball. An interesting finding is the total numbers of hours allocated to teaching the sports games unit.

The total number of 11 to 16 hours corresponds with given recommendations on allocated time to specific units of Physical and Sport Education (Petlák, 2004; Fryková, 2012) and is in line with the findings of Nemeč and Kollár (2012), who analysed opinions of elementary school teachers (n= 202) from the North Regions of Slovakia (the Žilina Region). They discovered that 70.3 % of observed schools allocate 16 hours to the sports games thematic unit (football). In our opinion, the total number of 16 teaching hours ensures physical activity to a large extent and can motivate pupils to exercise.

An important fact is that we are talking about highly popular physical activities from which the pupils can greatly benefit as far as their health and overall development is concerned. Devahl et al. (2006) also report that pupils' interest in physical activity is increased by regularly offering of physical activities at school. Just like Sekot (2003), we assume that the following research carried out worldwide must deal with the issues of physical activity motivation and issues of performing such activities with the accent on the issues of motivation in the school context. The motive behind such research is the fact that the motivation to exercise can reach pupils through a plethora of stimuli. School, family, peers, social circumstances, but also stimuli from Physical and Sport Education teachers.

Taking the statistically significant variance of the specific groups of respondents into account and considering the gender aspect, we noticed differences between the answers of male and female teachers to questions 6 and 7 regarding popularity and unpopularity of teaching sports games at the level of significance $p < 0.01$ ($p = 9.66 \text{ E-}14$ and $p = 4.56 \text{ E-}16$). As we mentioned in the previous text, the gender-specific stereotype is still present even in this region of Slovakia with both male and female teachers having distinct opinions on teaching specific units of Physical and Sports Education (Constantinides et al., 2013). We observed a statistical variance on the level of significance $p < 0.01$ in the opinions of male and female teachers concerning the total number of allocated hours to teaching sports games strand ($p = 0.0133$). Continuing differences in male-female perspective on teaching the Physical and Sport Education classes remain noticeable in the mixed education of Physical and Sports Education (boys – girls). There are several deciding factors and the motivation factor is certainly one of them.

Many kinds of research highlight the differences in the physical activity motivation in different genders, ages, frequency and length of performing physical activity (Moreno et al., 2010; Verloigne et al., 2011). Egli et al. (2011) report that the inner motivation to win and to be recognized is innate to adolescent boys, whereas in case of girls we are talking about external motivation, mainly their physical appearance and weight. We observed a statistically significant variance at the level of significance $p < 0.05$ ($p = 0.0182$) in opinions of male and female teachers in question 3 (favouring of sports in respondents' spare time).

From the location aspect (urban-rural schools), we observed a statistically significant variance at the level of significance $p < 0.01$ ($p = 0.0182$) in two cases. Question 4 ($p = 0.0005$) concerned favouring specific unit during Physical and Sports Education classes by teachers. Female teachers from rural schools and female teachers from urban schools ranked athletics and artistic gymnastics as the second most favoured units respectively. Answers to question 6 ($p = 0.0015$) also show that female teachers from rural schools favoured football more frequently as opposed to female teachers from urban schools. We did not observe any statistically significant variances in the opinions of male teachers when reviewing the location aspect. We can say that the location aspect does not play an important role in education. With respect to these findings, we think that the quality and content of the Physical and Sport Education classes are more likely to be improved by using better training equipment and better space dimensions.

5. Conclusion

The task of all Physical and Sports Education teachers is to thoroughly prepare the kind of teaching programme that will comply with the main aims of education, healthy development of pupils, their interests but also with the requirements set by the school. We found that these factors do not depend only on pedagogical mastery, quality, creativity and activity of teachers, but also on

the gender and surroundings. For all that, we must advocate that Physical and Sports Education teachers are not just teachers. Most importantly, they should be supportive individuals and should motivate the pupils.

During the course of this research, we were able to gather a lot of interesting and helpful facts from our respondents, active teachers, on the topic of Physical and Sports Education. Apart from the gender difference in favouring specific sports games, we were able to validate previous findings stating that sports games are the most popular and the most frequently included unit in the Physical and Sports Education curriculum framework.

It is a positive fact, mainly if you realise that by including and teaching sports games in the educational process we are drawing nearer to living up to Komenský's idea – school by play. Playing is much more popular with pupils compared to other types of physical and cognitive activities that often involve passive processing of the information. Adequately devised play and sports activities have effective educational, ethical, relaxing and mainly health benefits. Physical and Sports Education classes currently constitute 5-8 % of the total number of teaching hours in the elementary education in Slovakia in favour of physical activity against sitting at the school desk. Such situation is still nowhere close to the Kalos khagatos harmony principle, the unity of healthy soul and body or the harmony of one's existence.

We are aware that our findings cover only a specific part of education, but at the same time, they highlight numerous facts that need to be taken into account if we want to improve the quality and quantity of physical activity in youngsters. In conclusion, we would like to highly recommend something – Physical and Sports Education teachers should pay more attention to encouraging and motivating the pupils (and themselves) to engage in preferred, appropriate and healthy physical activities. Sports games are definitely among them.

References

- [Adamčák, Kollár, 2003](#) – Adamčák, Š., Kollár, R. (2003). Pravidlá vybraných športových hier II. Banská Bystrica: UMB.
- [Antala et al., 2014](#) – Antala, B, Labudová, J., Šimonek, J., Strešková, E., Peráčková, J., Kyselovičová, O., Argaj, G., Kršjaková, S, Melek, P. (2014). Telesná a športová výchova a súčasná škola. Bratislava: NŠC, FTVŠ UK.
- [Argaj, 2010](#) – Argaj, G. (2010). Nové prístupy k vyučovaniu pohybových (netradičných) hier v súvislosti so zavádzaním novej koncepcie telesnej a športovej výchovy. *Zborník vedeckých prác Katedry hier FTVŠ UK*, 17: 5–9.
- [Bendíková, 2016](#) – Bendíková. E. (2016). Curricular transformation of education in the field of physical and sport education in Slovakia. *European Journal of Contemporary Education*, 18(4): 410–417.
- [Constantinides et al., 2013](#) – Constantinides, P., Montalvo, R., Silverman, S. (2013). Teaching processes in elementary physical education classes taught by specialists and nonspecialists. *Teaching and Teacher Education*, 36: 68–76.
- [Currie et al., 2012](#) – Currie, C., Zanotti, C., Morgan, A., Currie, D., de Looze, M., Roberts, Ch., Samdal, O., Smith, O.R.F, Barnekow, V. (2012). Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey. Copenhagen, WHO Regional Office for Europe. Health Policy for Children and Adolescents, No. 6.
- [Dewahl et al., 2006](#) – Dewahl, J., King, R., Williamson, J.W. (2006). Academic incentives for students can increase participation and effectiveness of a physical activity program. *Journal of American College Health*, 53(6): 295–298.
- [Dismore, Bailey, 2011](#) – Dismore, H., Bailey, R. (2011). Fun and enjoyment in physical education: Young people's attitudes. *Research Papers in Education*, 26: 499–516.
- [Egli et al., 2011](#) – Egli, T., Bland, H.W., Melton, B.F., Czech, D.R. (2011) Influence of age, sex and race on college students' exercise motivation of physical activity. *Journal of American College Health* 59(5): 399–406.
- [Fahey et al., 2005](#) – Fahey, T, Delaney, L., Gannon, B. (2005). School children and sport in Ireland. Dublin: The economic and social research institute.
- [Fox, 2004](#) – Fox, S.W. (2004). 100 and healthy: Living longer with phytomedicines from the republic of Georgia. Salt Lake City: Woodland Publishing.

Frömel et al., 2002 – Frömel, K., Formánková, S., Sallis, J.F. (2002). Physical activity and sport preference of 10–14 year old children. *Acta Universitatis Palackianae Olomucensis. Gymnica*, 32 (1): 11–16.

Fryková, 2012 – Fryková, E. (2012) Tvorba tematických výchovno–vzdelávacích plánov pre biológiu v rámci školského vzdelávacieho programu. Bratislava: MPC Bratislava.

Guráň, 2008 – Guráň, P. (2008). Správa o súčasnom stave dodržiavania práv dieťaťa v Slovenskej republike za rok. Bratislava: Slovenské národné stredisko pre ľudské práva.

Kollár, 2007 – Kollár, R. (2007). Futbal vo vyučovaní telesnej výchovy na ZŠ. Banská Bystrica: PF UMB.

Krafčík, Görner, 2013 – Krafčík, J., Görner, K. (2013). Vplyv športovo–pohybových aktivít a životného štýlu na kvalitu života vysokoškolskej populácie. Banská Bystrica: UMB.

Marttinen et al., 2018 – Marttinen, R., Fredrick III, R.N., Silverman, S. (2018). Changes in student attitude toward physical education across a unit of instruction. *Journal of Physical Education and Sport*, 18(1): 62–70.

Moreno et al., 2010 – Moreno, J.A., Gonzáles-Cutre, D., Martín-Albo, J., Cervelló, E. (2010). Motivation and performance in physical education: An experimental test. *Journal of Sports Science and Medicine*, 9: 79–85.

Nader et al., 2008 – Nader, P.R., Bradley, R.H., Houts, R.M., McRitchie, S.L., O’Brien, M. (2008). Moderate to vigorous physical Activity from Ages 9 to 15 years, *JAMA* 300: 295–305.

Nemec, 2002 – Nemec, M. (2002). Príprava mladých futbalistoch na školách a v oddieloch. Banská Bystrica: UMB.

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.

Nemec, Kollár, 2012 – Nemec, M., Kollár, R. (2012). Vyučovanie futbalu v názoroch učiteľov telesnej a športovej výchovy na základných školách. *Zborník „Telesná výchova a šport v živote človeka“*: 224–232.

Petlák, 2004 – Petlák, E. (2004). Všeobecná didaktika. Bratislava: Iris.

Ružička et al., 2013 – Ružička, I., Ružičková, K., Šmíd, P. (2013). Netradiční sportovní hry. Praha: Portál.

Sekot, 2003 – Sekot, A. (2003). Sport a spoločnosť. Brno: Paido.

Sekot, 2009 – Sekot, A. (2009). Pohybová aktivita versus obezita. In Mužík, V., Süß, V. (2009). Tělesná výchova a sport mládeže v 21. století Brno: MUNI Press, 58–66.

Sharma, 2006 – Sharma, M. (2006). School–based interventions for childhood and adolescent obesity. *Obesity Reviews*, 7: 261–269.

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.

Špaldoň, 2017 – Špaldoň, F. (2017). Názory učiteľov základných škôl na vyučovanie športových hier. (Záverečná práca). Banská Bystrica: UMB.

Verloigne et al., 2011 – Verloigne, M., De Bourdeaudhuij, I., Tanghe, A., D’Hondt, E., Theuwis, L., Vansteenkiste, M., Deforche, B. (2011) Self–determined motivation towards physical activity in adolescents treated for obesity. *International Journal of Behavioral Nutrition and Physical Activity* 8(97): 2–11.

Vilímová, Hurychová, 2003 – Vilímová, V., Hurychová, A. (2003). Tělesná výchova a sport jako prostředek harmonického rozvoje dětí a mládeže. *Role tělesné výchovy a sportu v transformujících se zemích střeoevropského regionu*. Brno: Masarykova univerzita: 23–25.