Published in the Russian Federation
European Researcher
Has been issued since 2010.
ISSN 2219-8229
E-ISSN 2224-0136
Vol. 102, Is. 1, pp. 44-56, 2015

DOI: 10.13187/er.2016.102.44
www.erjournal.ru

Pedagogical sciences

Педагогические науки

UDC 37

Physical Activities of Pupils in Slovak Primary Schools

[1] Štefan Adamčák
[2] Pavol Bartík
[3] Miroslav Nemec

[1] Department of Physical Education and Sports, Faculty of Arts,
Matej Bel University, Slovakia
40 Tajovskeho Str., 974 01 Banska Bystrica
Dr. (Pedagogic Sciences), PhD, Ass. Professor
E-mail: stefan.adamcak@umb.sk
[2] Department of Physical Education and Sports, Faculty of Arts,
Matej Bel University, Slovakia
40 Tajovskeho Str., 974 01 Banska Bystrica
Dr. (Pedagogic Sciences), PhD, Professor
E-mail: pavol.bartik@umb.sk
[3] Department of Physical Education and Sports, Faculty of Arts,
Matej Bel University, Slovakia
40 Tajovskeho Str., 974 01 Banska Bystrica
Dr. (Pedagogic Sciences), PhD, Assosiate Professor
E-mail: miroslav.nemec@umb.sk

Abstract

In this work we studied the physical activities of 1082 pupils in primary schools that were analysed using questionnaires and then evaluated from a perspective of municipal and rural schools as well as from the perspective of the regions the pupils come from. The results were analysed using the TAP programme developed by the GAMO Company in Banská Bystrica. Our survey shows that during the working week almost 20 % of boys perform some physical activities within a time-scale of more than 5 hours a day. In terms of the preference of physical activities, collective sports prevail considerably over individual ones – almost 50 % of all responses. The sports activities offered at schools or in a place of residence are actively performed by less than 14 % of boys.

Keywords: physical activity, pupils, primary school.

Introduction

Physical activity is understood by Brettschneider and Naul (2004) as the group of all exercises produced by the skeletal muscles leading to increased frequency of pulse and breathing. In the past as well as nowadays, there were many studies (HHS, CDC, PCPFS, etc.) focusing on the question of physical activity that tried and are trying to clarify the relation between the amount of physical activities, their intensity and frequency. In 1978 the American College of Sports Medicine (ACSM, 1978) concluded that even the mean intensity of physical exercise can improve working capacity. Over the past years new knowledge and recommendations referring to physical activity have been published but sometimes they are inconsistent or even appear to be contradictory. This is the reason why it is necessary to know the organization publishing the directive or recommendation about what to do and particularly at whom these recommendations are aimed (Hendl, Dobrý, 2011).

In any event, the majority of all studies point out that the amount of physical activities exercised by adolescents is following a downward trend. According to the international HBSC (The Health Behaviour in School) research study, the majority of school children are not active enough concerning physical activities. It is stated in the given study that almost 50% of all girls exercise intensively less than 5 days, getting worse as they age (http://www.hbsc.org/). The results of the study made by Hagströmer et al (2010), who compared the aspect of physical activity from the point of view of its intensity in Sweden (n = 1172) and in the United States (n = 2925), also demonstrated that the population generally preferred a sedentary lifestyle and very little activity. A group of aged Swedish people was more active performing mild or more intensive activities than a group of elder American people. On the other hand, the younger Swedish men's frequency of sedentary lifestyle exceeded the frequency of young men from the United States. We also learn some interesting facts from the study written by Bouchard (2015), stating that people who prefer walking and riding a bicycle as their transport activity to reach work do 30 up to 60 minutes more physical exercise per week than people living in suburban areas who are more reliant on motorised vehicles.

A lack of physical activity has become a characteristic of today's world, which has a negative impact on the health of each individual. The results of the survey carried out by STEM/MARK and VZP 2013 (n = 2058) in the Czech Republic point out that 55% of men and 60% of women have a risky waist measurement and that there was a significant negative increase (women and men) between 2000 and 2005, in terms of men also between 2010 and 2013. According to the WHO (World Health Organization, 2010), an inactive way of life represents the fourth biggest death factor in the world. Moreover, as the WHO states, the increasing rate of lifestyle diseases relates to lifestyle and a lack of exercise in most European countries. Economic consequences are reflected in healthcare, slowing down the economic growth caused by frequent sickness absence (inability to work) and also premature death. The financial cost of 910 million euros per year affects 10 million members of the European population, concerning half of the population that is not physically active enough.

The partial task within the **KEGA 002UMB-4/2014 Project called "Innovation of Physical Activities for Pupils in Primary Schools Carried Out in a Natural Environment Through Play Using the Global Positioning System"** was to find out the extent and content of the physical activities of pupils at primary schools in selected Slovak regions.

Materials and methods

The fundamental method in the research was applied by means of questions –an anonymous, non-standardised survey we performed following research needs. We distributed questionnaires among pupils at the primary schools in selected Slovak towns in the first half of the 2014/2015 school year. The results of the survey were evaluated by the GAMO Company Banská Bystrica through the TAP programme. The survey included 1012 correctly completed questionnaires. The more detailed characteristics of pupils is represented by Figure 1. We analysed the answers provided by pupils from the aspect of municipal and rural schools as well as from the aspect of two Slovak regions – Central and Eastern Slovakia.

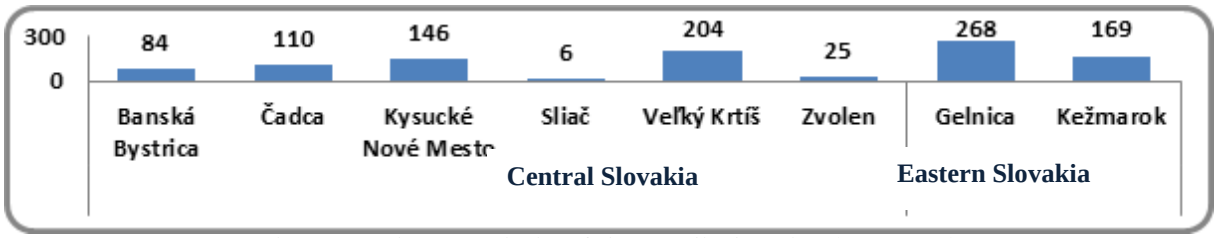

Figure 1. Characteristic of the studied entity (n = 1012)

Results

The results of our survey point out the surprising fact that during the first working week pupils attending rural schools do less physical exercise (less than 1 hour per day 21.85% and more than 2 hours per day 36.69%) in comparison with pupils attending municipal schools (less than 1 hour per day only 14.20% and more than 2 hours per day 46.56%) – Figure 2. The low percentage of physical activity, also shown in the studies of different authors, for example Pratt et al. (1999), Miklánková, Sigmund, et al. (2007), Biddle et al. (2009), etc., should make the national and international institutions intervene in various ways. We agree with Suggs and McIntyre (2011) that the legal, political and economic environment of the nation plays an important role in this regard because it can promote and implement prevention programmes to support a healthy lifestyle throughout various institutions. However, practical experience refers to the opposite trend, for example in checking the activities of the Czech Republic in 2009/2010 it was found out by inspection that the number of schools with extensive physical education is decreasing in comparison to 2009, when there was a decrease of more or less 14 %.

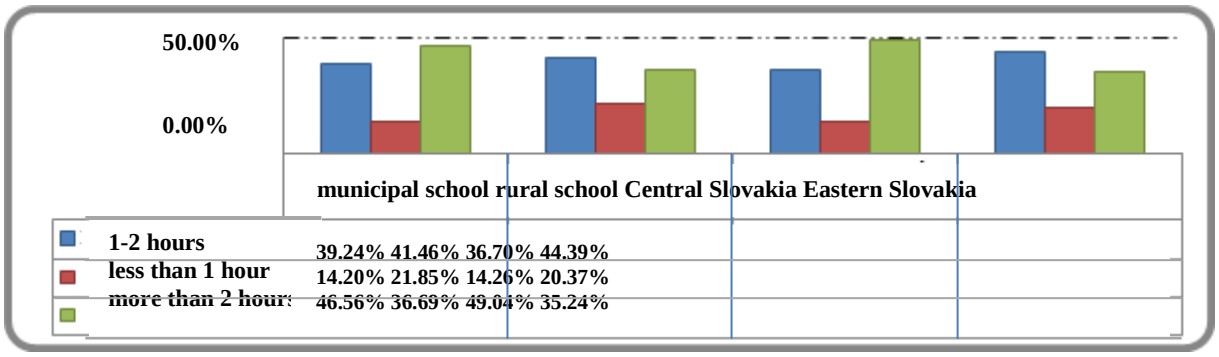

Figure 2. Physical activities pupils perform during the working week stated in hours

Regarding the given Slovak regions, almost 50% of boys from Central Slovakia do some physical activity for more than 2 hours per day, whereby only 35.24% represent boys from Eastern Slovakia. The statistical evaluation is shown in Table 1.

Table 1: Statistical evaluation – Physical exercise of pupils during the working week stated in hours

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	**** p= 1.163 E-03**	**** p= 4.245 E-05**

Legend: statistical significance – $p < 0.01$=******, $p < 0.05$, =*****, n= statistically insignificant

After we obtained these data, we were focused in the survey on how many hours per day pupils perform physical exercise at the weekend. The results of the study written by Nadera et al. (2008) demonstrate that children at the age of 9 spend more than 3 hours doing physical activities not just during the week, but also the weekend, whereby as children get older, they perform fewer activities. At the age of 15 they spend just 49 minutes exercising one day a week and it is even less at the weekend – only 35 minutes per day.

Following the answers of the pupils attending municipal and rural schools, we found out that only 16.03% of the boys in municipal schools and 17.93% of the boys in rural schools dedicate less than 3 hours per day to physical exercise (Figure 3).

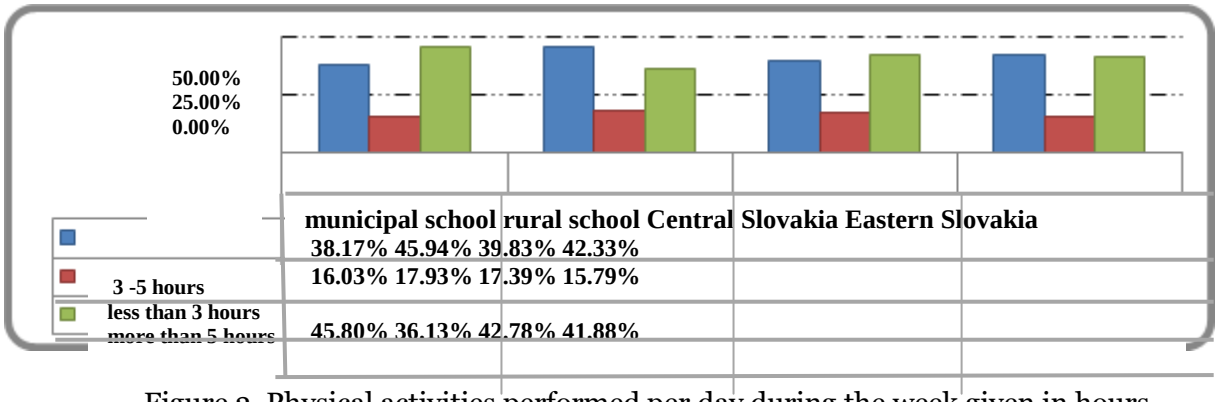

Figure 3. Physical activities performed per day during the week given in hours

In terms of boys attending municipal schools, 48.80% of them dedicate more than 5 hours per day to perform a kind of physical activity, while boys in rural schools represent 36.13 %. The given differences based on the answers were statistically significant at the Chi level – $p < 0.05$. Referring to the selected regions of Slovakia, there were no considerable differences registered in the boys' answers nor were the different answers statistically significant for the reason mentioned above (Figure 2).

Table 2: Statistical evaluation – Physical activities performed per day during the weekend given in hours

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	*** p= 0.01109**	**n p= 0.66651**

Legend: statistical significance - $p < 0.01$= ******, $p < 0.05$ = *****, n= statistically insignificant

During school holidays more than 40% of the boys attending municipal and rural schools as well as boys living in Central and Eastern Slovakia perform physical exercise more than 5 hours, which is considered a positive aspect. On the other hand, in the case of all selected groups, the percentage of those boys doing less than 3 hours of physical activity per day increased too (almost 1/3 of boys from all selected groups). The amount of exercise is inappropriate for these boys during holidays and to a certain extent it can lead to childhood obesity - Cínová et al. (2005) found out that 7-11 years old children in Slovakia are affected by childhood obesity, representing 8%, and 14-17 years old children, representing 11%. From the point of view of statistical evaluation the difference in answers is illustrated by Table 3.

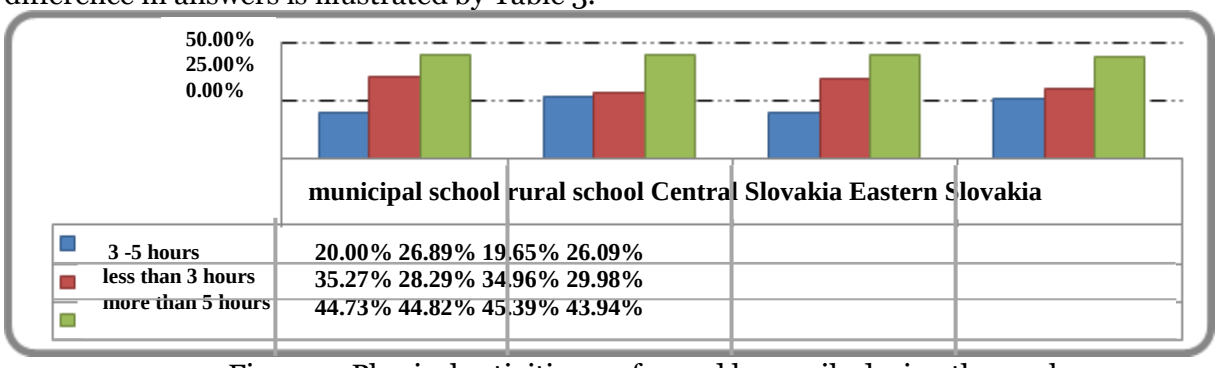

Figure 4. Physical activities performed by pupils during the week in summer holidays stated in hours

Table 3: Statistical evaluation – Physical activities performed by pupils during the week in summer holidays stated in hours

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	* p= 0.01561	* p= 0.03730

Legend: statistical significance – $p < 0.01$= **, $p < 0.05$ = *, n= statistically insignificant
Regarding almost ¾ of all the groups we evaluated, the boys spend their free time both passively and actively.

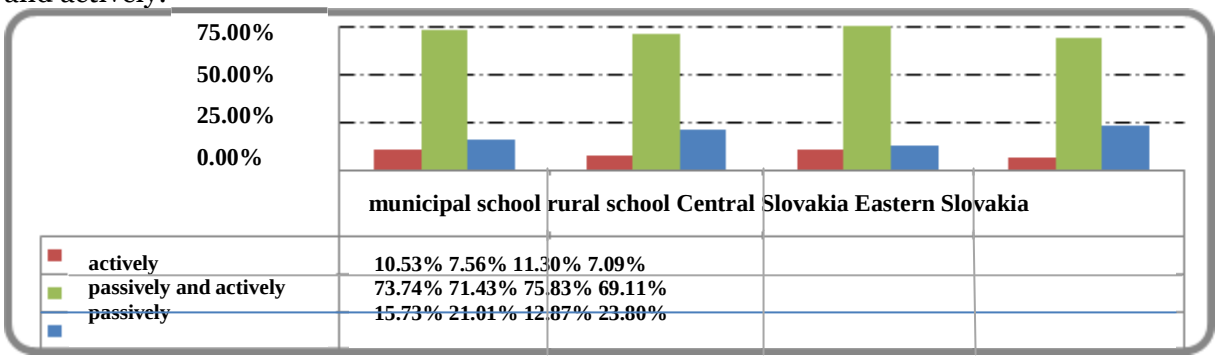

Figure 5. The manner of spending leisure time

Following the answers of the boys attending municipal and rural schools, we did not record statistically considerable differences, but on the contrary, from the point of view of the Slovak regions, the answers were statistically significant at a level of $p < 0.01$. There was a higher level of passivity demonstrated with the boys living in Eastern Slovakia.

Table 4: Statistical evaluation – The manner of spending leisure time

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	n p= 0.05012	** p= 9.935 E-06

Legend: statistical significance - $p < 0.01$= **, $p < 0.05$ = *, n= statistically insignificant

In terms of the character of physical activities – recreational, performance (both of them are equally covered), the boys from all selected groups responded in a very similar way. Approximately 44% of them prefer recreational activities, while roughly 33 % prefer performance activities. The remaining percentage is equally represented by both, recreational and performance activities. The boys' responses were statistically insignificant for the reasons given above. Bendíková (2014) found, in a group of secondary school students, that only 20 % of girls regularly pursue sports and recreational activities either at the recreational or performance level. On these grounds it is clear that the level of physical competence is on a moderate but gradual declining trend for the majority of the population, also proven by the results of the comparative study of the school population's physical competence (Raczek-Mynarski-Ljach, 2002).

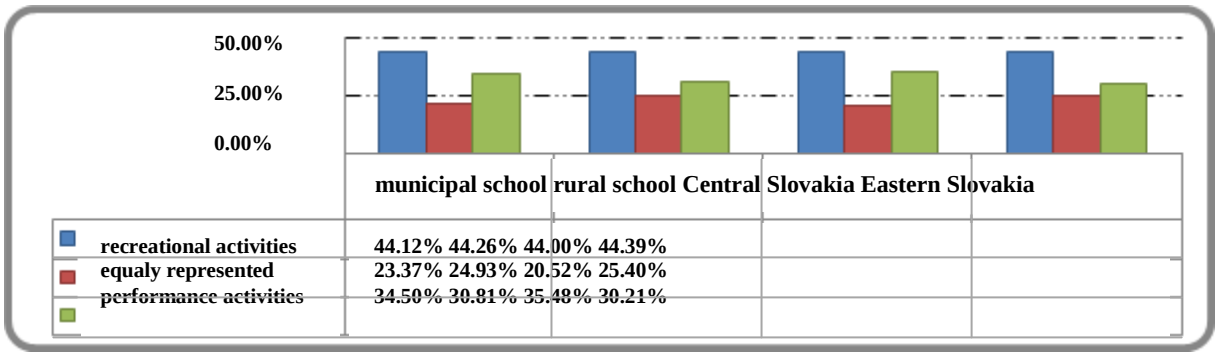

Figure 6. Character of physical activities (Question 5/6)

Table 5: Statistical evaluation – Character of physical activities

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	**n p= 0.32620**	**n p= 0.09540**

Legend: statistical evaluation - $p < 0.01$=**, $p < 0.05$ = *, n= statistically insignificant

The majority of pupils (61.07 %) attending municipal schools prefer doing physical exercise in leisure circles. On the other hand, referring to location, the physical activity shows a balanced distribution among the pupils in rural schools. From the point of view of location, boys from the Central Slovakia are used to attending leisure circles (69.91 %), while in Eastern Slovakia there are physical activities almost equally distributed (leisure circles, sports grounds, outside close to their residence). The responded question concerning municipal and rural schools as well as Slovak regions were statistically significant at the level - $p < 0.01$.

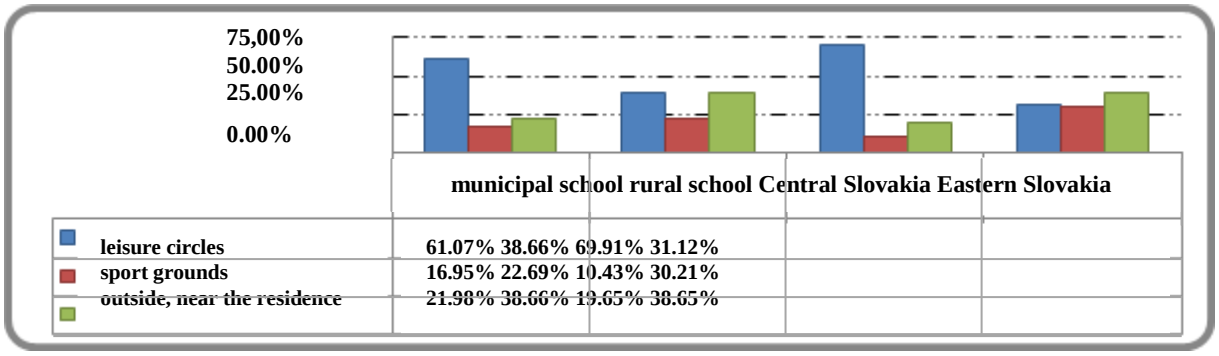

Figure 7. Prevailing location of performing physical activities (question 6/27)

Table 5: Statistical evaluation - Prevailing location of performing physical activities

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	** **p= 2.413 E-11**	** **p= 4.2610 E-34**

Legend: statistical significance – $p < 0.01$= **, $p < 0.05$, = *, n= statistically insignificant

It is obvious that boys prefer collective sports (almost 50 % of responses in all selected groups) to individual ones. Studying the popularity of collective sports games among the pupils we found that the results we obtained are in conformity with the studies of various specialists such as Slezák-Melicher (2008), Lenková, et al. (2010), Nemec-Adamčák (2013), Beťák (2014). They did a research focusing on pupils' interests in their favoured physical activities, performed either at physical education classes or in their free time.

Almost 20 % of the boys in all selected groups prefer individual sports. The responded question concerning municipal and rural schools as well as the Slovak regions were statistically insignificant.

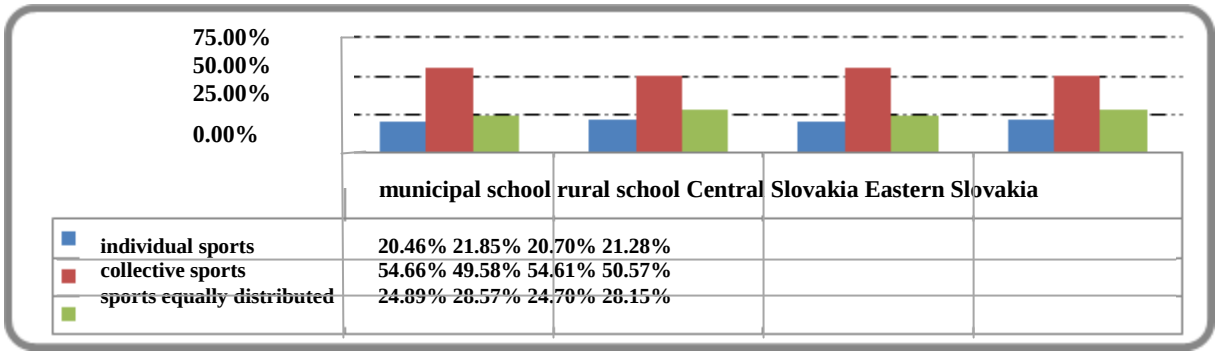

Figure 8. The popularity of sports (Question 7/5)

Table 7: Statistical significance – The popularity of sports

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	**n p= 0.28102**	**n p= 0.38001**

Legend: statistical significance - $p < 0.01$= **, $p < 0.05$= *, n= statistically insignificant

In terms of collective sports, boys prefer traditional sports games (football, basketball, volleyball, etc.). This was proven by the frequency of responses provided by municipal and rural schools that reached over 56% and 65.04% in the case of the boys from Central Slovakia. We were not surprised by the high popularity of traditional collective sports, since mainly football is one of the most favourite sports for boys (Nemec, 2002; Kollár, 2006). Less known collective sports (floorball, ball hockey, field hockey) are mostly favoured by boys living in Eastern Slovakia – 24.49%. The statistical evaluation of this question is shown in Table 8.

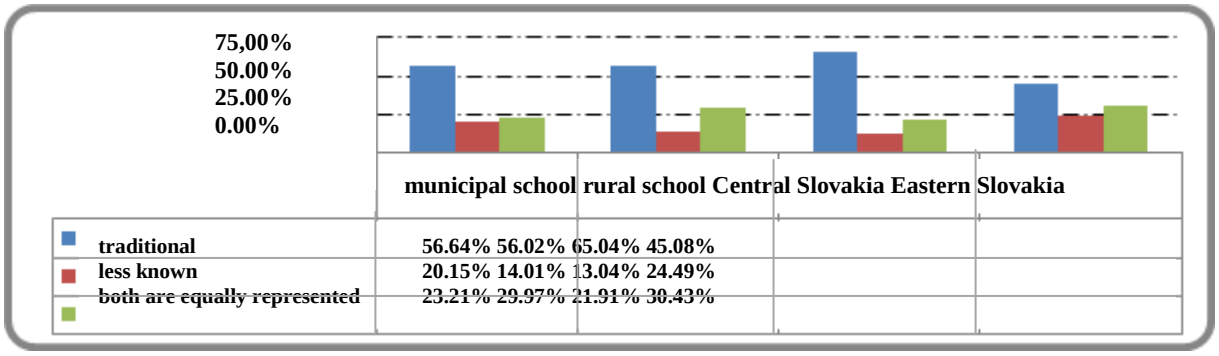

Figure 9. Popularity of collective sports

Table 8: Statistical evaluation – Popularity of collective sports

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	* **p= 0.01108**	** **p= 5.4581 E-10**

Legend: statistical significance - $p < 0.01$= **, $p < 0.05$ = *, n= statistically insignificant

In terms of individual sports, it was proven by the responses of all selected groups that sports activities carried out in natural environments are dominant – hiking, bicycle touring, Nordic walking, etc. The response rate was over 60%. Individual sports carried out in sports facilities are mostly preffered by boys from rural schools – 26.33%, while regarding Slovak regions it was more in the case of boys from Central Slovakia – 20.52%. Evaluating this aspect from the perspective of municipal and rural schools we found considerable differences at the level $p < 0.01$, but from the perspective of the Slovak regions there were no considerable differences.

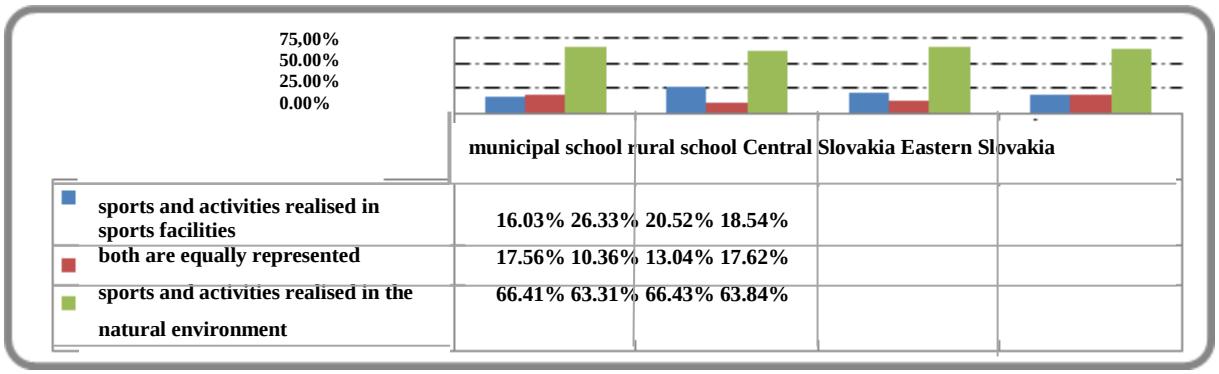

Figure 10. Popularity of individual sports from the point of view of the boys-pupils regarding municipal and rural schools as well as Slovak regions

Table 9: Statistical evaluation – Popularity of individual sports

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	** **p= 3.093 E-05**	**n p= 0.1214**

Legend: statistical significance - $p < 0.01$= **, $p < 0.05$ = *, n= statistically insignificant

Boys usually perform physical activities with their friends, for example with those from leisure circles where the response rate of all selected groups was over 60%. Boys attending municipal schools prefer their family members while performing physical activities – 17.71% and regarding Slovak regions the boys from Eastern Slovakia – 16.93%. There is a statistical evaluation shown in Table 10. We consider the results obtained by Peráčková (2008) and Antala et al. (2012) as alarming because they provide evidence that nowadays physical education at schools is the only way many children perform physical exercise.

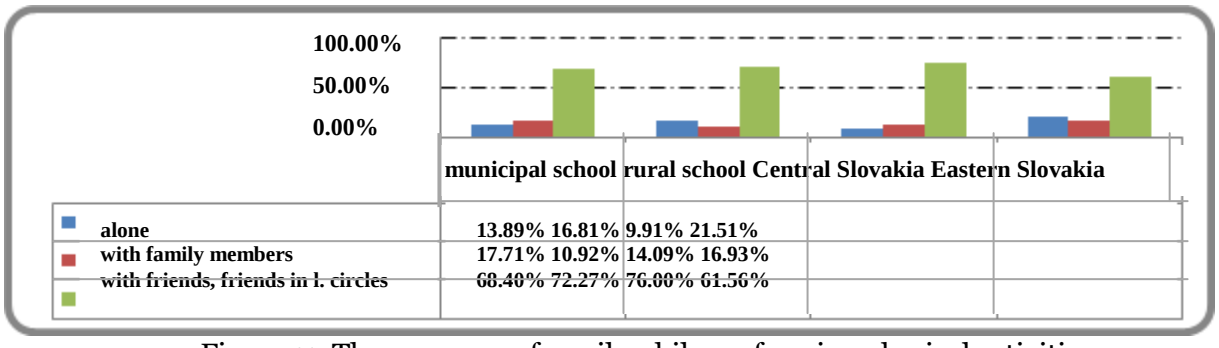

Figure 11. The company of pupils while performing physical activities

Table 10: Statistical evaluation - The company of pupils while performing physical activities

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	* **p= 0.012541**	** **p= 1.747 E-07**

Legend: statistical significance - $p < 0.01$= **, $p < 0.05$ = *, n= statistically insignificant

With regard to the responses the boys provided us (the response rate reached over 50% in all selected groups), parents had the most considerable influence on pupils to make them dedicated to a physical activity. According to Pařízková et al. (2007), if children spend their free time with their parents walking or performing various kinds of sports activities, it becomes natural for them to acquire a positive attitude towards physical activity. Moore et al. (1991) found that parents' influence on the level of activity of their children was more remarkable with active fathers than with active mothers. The most considerable influence was noticed in those families where both parents were physically active, whereby there was a six-fold increase in the difference in comparison with children whose both parents were inactive.

Moreover, the physical activity of the children was also influenced by their friends (the response rate was between 22.09% in the case of the boys from Central Slovakia to 27% concerning the boys from Eastern Slovakia). According to the boys (the response rate did not exceed 16% in any of the studied groups); teachers of physical education and sports have the slightest influence on becoming physically active. It is necessary to remark at this point that the overall stimulation for the pupil's development can be achieved through a wide spectrum of factors such as proven physical activities, influence in the school environment, family, social conditions as well as the influence of a teacher of physical education and sports (Rychtecký-Fialová, 2004). At the same time we have to take into account the fact that after obtaining a university degree with specialization in sports almost 50% of teachers decide to work in different sectors (Jansa et al. 2008; n = 1885) and that there is a shortage of young teachers with practical skills. However, Pacholík (2012; n =55) points out in his study that there is a positive correlation between the duration of acquiring practical skills and the type of temperament of a teacher. It means that teachers with more practical experience showed mostly a phlegmatic behaviour. In the responses the boys provided that considerable differences can be seen just from the aspect of regions at the level $p < 0.01$.

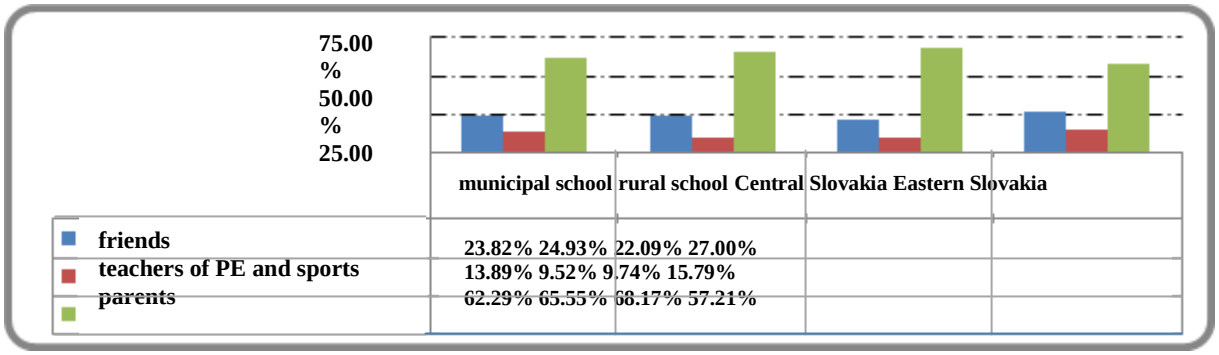

Figure 12. The person who drove you to a physical exercise

Table 11: Statistical evaluation – the person who drove you to a physical exercise

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	**n** **p= 0.13030**	** **p= 6.95083 E-04**

Legend: statistical significance - $p < 0.01$= **, $p < 0.05$ = *, n= statistically insignificant

The main motivation for the pupils at rural schools (80.11%) as well as those from Eastern Slovakia (67.96%) to perform physical activities is improving and strengthening their health and physical competence. The pupils at municipal schools (45.65%) and those from Central Slovakia are motivated by working on their figure and reducing body weight. Focusing on motivation for people attending fitness centres, Stacke (2008) found from the results of her study that the main motive was reducing their body weight.

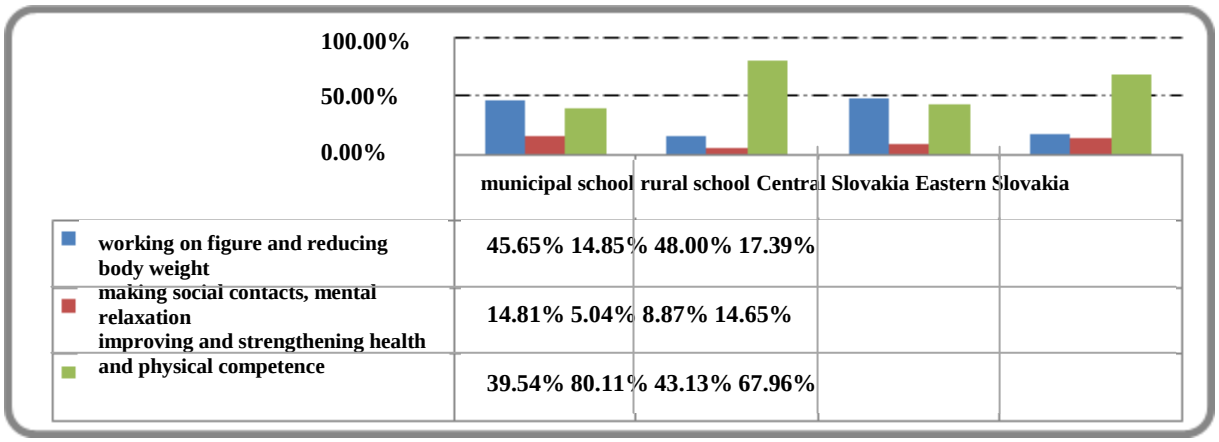

Figure 13. The main motivation for performing physical activities

Less than 15 % of boys responded that socializing with others and mental relaxation belonged to their main motives while doing physical activities. The study by Tagliaferro et al. (2008) arrived at interesting empirical results that showed that there was a direct relationship between physical activity and reducing the risk of experiencing depression, hopelessness or suicidal behaviour.

Evaluating this question from the aspect of the municipal and rural schools as well as from the aspect of regions of Central and Eastern Slovakia, the responses provided by the boys were statistically significant at the level $p < 0.01$.

Table 12: Statistical evaluation – The main motive for performing physical activities

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	** **p= 5.836 E-34**	** **p= 5.253 E-23**

Legend: statistical significance - $p < 0.01$= **, $p < 0.05$ = *, n= statistically insignificant

According to boys in municipal schools (49.62%) and those from Central Slovakia (58.78%), the dominant factor that keeps boys from performing physical activities is a “financial burden”. On the other hand, according to the boys attending rural schools (47.34%) and those from Eastern Slovakia, the dominant factor that keeps them from performing physical activities is the availability of space close to their place of residence. Reed and Philips (2006) point out in their studies that students are physically more active if there are sports facilities close to the school they attend or if there is enough sports equipment in the place of their residence.

Statistical evaluation is shown in Table 13.

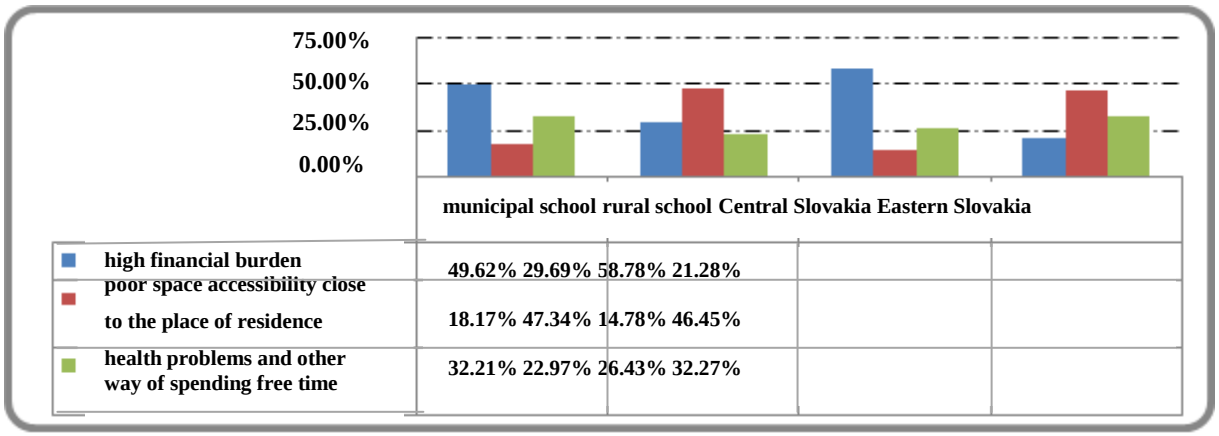

Figure 14. The main factor keeping pupils from performing physical activities

Table 13: Statistical evaluation - the main factor keeping pupils from perfomring physical activities

item	municipal school/ rural school	Central Slovakia/ Eastern Slovakia
statistical significance chi – squared test (p-value)	** **p= 6.890 E-22**	** **p= 3.631 E-38**

Legend: statistical evaluation - $p < 0.01$= **, $p < 0.05$ = *, n= statistically insignificant

Conclusion

Performing physical activities should be an integral part of everybody's lifestyle, bearing in mind age and state of health, of course. Apart from being healthy, physical activity provides many benefits such as higher physical performance, increased self-confidence, awareness of our competences and skills as well as in general giving us a good impression and a feeling of satisfaction. The attitude of adult individuals towards physical activities in the future largely depends on developing opinions and attitudes during adolescence. The survey results on pupils in Slovakia provide the following:

- ✓ pupils in rural schools perform physical activities during the working week to a smaller extent than pupils in municipal schools – the chi is statistically significant at a level of $p < 0.01$
- ✓ during school holidays more than 40% of the boys in municipal and rural schools as well as the boys from Central and the Eastern Slovakia dedicate more than 5 hours to performing physical activities
- ✓ approximately 44% of boys prefer recreational physical activities and roughly 33% prefer performance activities
- ✓ boys definitely prefer collective sports (almost 50% in all selected groups) to individual ones
- ✓ regarding their responses, parents are the ones who have a major influence on performing physical activities (more than 50 % in all selected groups) while the lowest influence is attributed to teachers of physical education and sports – there was no response frequency of more than 16 % in any of the selected groups
- ✓ the main motivation for pupils in rural schools (80.11%) as well as those from Eastern Slovakia (67.96 %) to perform physical activities is improving and strengthening their health and physical competence. Pupils at municipal schools (45.65%) and those from Central Slovakia are motivated by working on their figure and reducing body weight.

The research results show that from the aspect of health promotion and disease prevention it is important to make active movement a part of today's lifestyle for the entire population. In the context of improving the quality of teaching physical education and sports in regards to healthcare and a healthy lifestyle, an initiative should be taken to analyse or adapt university study programmes preparing future teachers of physical education and sports.

References:

1. ANTALA et al.. (2012). Telesná a športová výchova v názoroch žiakov základných a stredných škôl. NŠC, FTVŠ UK Bratislava: END, spol. s r.o. Topolčianky, 2012, 168 s.
2. BENDÍKOVÁ, E. (2014). Životný štýl adolescentiek z pohľadu vybraných determinantov zdravia. In Zborník „Pohyb a zdravie". Trenčín: Fakulta zdravotníctva, Trenčianska univerzita Alexandra Dubčeka v Trenčíne, 2014, s. 27-36.
3. BEŤÁK, B. (2014). Pohybové a športové aktivity vo voľnom čase žiakov stredných škôl v Poprade. In Telesná výchova a šport v živote človeka : recenzovaný zborník vedeckých prác. Zvolen : Technická univerzita, 2014, s. 76-85.
4. BIDDLE, S.J.H. – SOOS, I. – HAMAR, P., et al. (2009). Physical activity and sedentary behaviours in youth: Data from three central-eastern European countries. European Journal of Sport Science 9, 2009, s. 295 – 301.
5. BOUCHARD, C. Physical Aktivity and Obesity. [online] [cit. 2015-04-2]. Dostupné na WWW: http://www.humankinetics.com/excerpts/excerpts/environments-play-role-in-your-physical-activity.
6. CÍNOVÁ, J., CIBRÍKOVÁ, S., & MROSKOVÁ, S. (2005). Detská obezita – epidémia 3. tisícročia. In Sestra , č. 6/7. s. 8-9.
7. DEWAHL, J., KING, R., & WILLIAMSON, J. W. (2006). Academic incentives for students can increase participationen in and effectiveness of a physical activity program. Journal of American College Health,53(6), 295-298.
8. HAGSTRÖMER M, TROIANO RP, SJÖSTRÖM M, BERRIGAN D.(2010) Levels and patterns of objectively assessed physical activity: a comparison between Sweden and the United States. Am J Epidemiol. 2010; 171: 1055–1064.
9. JANSA, P., KOVÁŘ, K., & DŘEVIKOVSKÁ, P. (2012). Pohybové aktivity a životospráva učitelů základ-ních škol v ČR. Česká kinantropologie, 16(2), 90-105.
10. KOLLÁR, R. (2006). Stav vyučovania futbalu na 1. stupni ZŠ. In: Súčasnosť a perspektívy telovýchovného procesu na školách. Banská Bystrica: UMB PF, 2006. s. 106-112 ISBN 80-8083-227-1
11. MOORE, L. LOMBARDI, D. WHITE, M. CAMPBELL, J. OLIVERIA, S. ELLISON, C. (1991). Influence of parents'physical activity levels on activity levels of young children. Journal of Pediatrics, 1991, 118, s. 215-219.
12. NEMEC, M. (2002). Príprava mladých futbalistov na školách a v oddieloch. 1. vyd. Banská Bystrica : FHV UMB, 2002. 104 strán ISBN 80-8055-707-1
13. NEMEC, M.-ADAMČÁK, Š. (2013). Physical games and education process at the 2nd stage of primary schools. Krakov: Spolok Slovákov v Poľsku, 2013, 183 s.
14. PACHOLÍK, V. (2012). Osobnostní dimenze učitele tělesné výchovy na středních školách. In Soudobé podněty v pedagogice tělesné výchovy (pp. 37-55). Brno: MU
15. PARÍZKOVÁ, J. et al. (2007). Obezita v dětství a dospívaní. Praha: Galen.
16. PERÁČKOVÁ, J. (2008). Režim dňa, voľný čas a telovýchovná aktivita žiačok vybraného gymnázia. In Telovýchovné a športové záujmy v rámci voľno-časových aktivít žiakov. Bratislava: Univerzita Komenského, Fakulta telesnej výchovy a športu 2008, 160 s.
17. PRATT, M., CACERA, C. A., BLANTON, C. (1999). Levels of physical activity and inactivity in children and adults in the United States: current evidence and research issues. In Med, science in Sports and Exerc., roč.31, č. 11, Suppl., s. 526-533.
18. RACZEK J.-MYNARSKI W.-LJACH W. (2002). Kształtowanie i diagnozowanie koordynacyjnych zdolności motorycznych. Katowice.
19. REED, J. A., & PHILLIPS, D. A. (2006). Relationship between physical activity and the proximity of exercise facilities and home exercise equipment used by undergraduate university students. Journal of American College Health, 53(6), 285-290,
20. RYCHTECKÝ, A., & FIALOVÁ, L. (2004). Didaktika školní tělesné výchovy. Praha: Karolinum.
21. SIGMUND, E., MIKLÁNKOVÁ, L., MITÁŠ, J., SIGMUNDO-VÁ, D.&FROMEL, K. (2007). Provází nástup dětí do 1. třídy základní školy výrazný pokles jejich pohybové aktivity? Med. Sport. Boh. Slov., 16(2), pp. 78–84.

22. STACKEOVÁ, D. (2008). Motivace k pohybové aktivitě. Rehabilitace a fyzikální lékařství, 15(1), 22-26.
23. STEM/MARK, (2013). Stav obezity v České republice. Retrieved 25. 2. 2014 from the World Wide Web: http://www.slideshare.net/stemmark/obezita-2013-stemmark-vzp.
24. SUGGS, S. & MCINTYRE, C. (2011). Public Opinion Towards Health Communication Measures to Address Childhood Overweight and Obesity in the European Union. Journal of Public Health Policy, 32(1). 91-106. doi: 10.1057/jphp.2010.44.
25. WORLD HEALTH ORGANIZATION, (2010). Global Recommendations on Physical Activity for Health. Geneva: Author.

УДК 37

Физическая активность учащихся в словацких начальных школах

[1] Стефан Адамсак
[2] Павол Бартик
[3] Мирослав Немек

[1-3] Департамент физической культуры и спорта, факультет искусств,
Университет Матея Бела, Словакия
40 Tajovskeho ул., 974 01 Банска Быстрица
[1] Доктор педагогических наук, доктор философии, доцент
E-mail: stefan.adamcak@umb.sk
[2] Доктор педагогических наук, доктор философии, доцент
E-mail: pavol.bartik@umb.sk
[3] Доктор педагогических наук, доктор философии, доцент
E-mail: miroslav.nemec@umb.sk

Аннотация. В этой работе мы изучали физическую деятельность 1082 учащихся в начальных школах, которые были проанализированы с помощью анкет, а затем оцениваются с точки зрения муниципальных и сельских школ, а также с точки зрения учеников из региона. Полученные результаты были проанализированы с помощью программы TAP, разработанной Компанией в GAMO в Банска Быстрица. Наше исследование показывает, что в течение рабочей недели почти 20 % мальчиков выполняют некоторые физические действия в масштабе времени более 5 часов в день. С точки зрения предпочтений физической деятельности, коллективные виды спорта преобладают над значительно индивидуальными – почти 50 % всех ответов. Спортивные мероприятия, предлагаемые в школах или в месте жительства активно осуществляется у менее чем 14 % мальчиков.

Ключевые слова: физическая активность, ученики, начальная школа.