Pedagogical Sciences

Педагогические науки

Attitudes of 2nd Stage Primary School Pupils Towards Games and Physical Activities Performed in Sport and Physical Education Classes

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Abstract. This study is concerned with implementing games as one of the methods used in sport and physical education classes at the 2nd-level stage of primary schools (grades 5th–9th). Results of the study pointed to the fact that pupils are still very interested in playful activities. These activities are applied in the main part of the sport and physical education classes. Pupils themselves are of the opinion that playing games provides them with a better opportunity to make contact with their classmates more than any other activity, which creates positive conditions for making interpersonal relationships within a group or a class.

Keywords: attitudes of pupils; motor games; schools physical education and sport.

Introduction.

Holding games is one of the methods that should be applied in sport and physical education classes at both stages of primary education. In fact, it is included in all syllabus topics. John Amos Comenius used games in the upbringing and education process as a means to help one understand and manage everyday tasks and assignments, as well as a way to spend one’s free time. He considered games to be a method of learning not perceived by children as boring. In this sense, games represent one of the most important methods of upbringing and education.

Games play a crucial role in the course of sport and physical education classes because they can be applied in a wide range of activities (Vladovicova, 2001). By playing games, children learn to solve unexpected situations in various conditions. As claimed by Argaj (2011), new and unfamiliar games provide players with excitement, a feeling of change and mostly the opportunity to demonstrate their abilities. Several sources (Vladovicova, 2001; Kozanakova, 2011; Argaj, 2011) indicate that games can be included in any part of sport and physical education classes. Furthermore, teachers themselves may have a negative or positive effect on pupils while demonstrating the game.

The aim of our work was to determine the status and attitudes of 2nd stage primary school pupils towards games and activities performed in sport and physical education classes.

Materials and Methods.

Our study sample consisted of 446 pupils from selected schools in Slovakia (Figure 1).
The questionnaire for 2nd stage primary school pupils was distributed during the 2nd term of the school year 2011/2012. In order to determine the differences among the answers to particular questions, we analysed the results of individual grades. The statistical significance was calculated by performing a chi-square test on the answers given by fifth, sixth and seventh-graders (thereinafter “younger pupils”) which were compared to those provided by eighth and ninth-graders (“older pupils”). We also calculated the statistical significance in relation to the popularity of sport and physical education classes among these pupils.

**Discussion.**

The first issue included in the questionnaire was aimed at the children's evaluation of their physical activities (Figure 2).

The vast majority of pupils believe that they spend a sufficient amount of time doing physical activities (Figure 2) – more than 50%. Considering this question, it was quite surprising that some of the older pupils, i.e. eighth and ninth-graders, could not evaluate their physical activities (“undecided”). Many experts (Verstraete et al., 2006; Babinska – Vitariusova, et al., 2008) point to the fact that adults should be careful when choosing the way they spend their free time because they represent role models for children. Parents influence children’s evaluation of their own physical activities. Statistical evaluation of the first question is presented in Table 1.

**Figure 2. Pupils’ evaluation of their physical activities**

**Table 1: Statistical evaluation of pupils' evaluation of their physical activities**

<table>
<thead>
<tr>
<th>item</th>
<th>boys like PE/do not like PE</th>
<th>boys 5th, 6th, 7th grades/8th, 9th grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>chi</td>
<td>♦ ♦</td>
<td>♦</td>
</tr>
</tbody>
</table>

**Key:** ♦ = statistical significance level p < 0.01 ♦ = statistical significance level p < 0.05 N = statistically non-significant

The next question was related to how much time pupils spend on physical activities during weekdays. As shown in Figure 3, eighth and fifth-graders spend the most amount of time on...
physical activities. The most passive group proved to be the sixth-graders, i.e. as many as 43.75% of them devote less than an hour a week to physical activities. Nadera (2008) claims that children at the age of 9 spend more than 3 hours doing physical activities every day of the week and weekend. As they get older the time spent on activities decreases and at the age of 15 it represents only 49 minutes a day during the week and 35 minutes a day during weekends. When comparing the answers provided by younger and older pupils we did not observe any statistically significant differences, however, taking the popularity of sport and physical education classes into account, a level of statistical significance $p < 0.01$ was recognized.

Our research showed that the time spent daily on physical activities during weekends to a certain extent copied the results of the weekdays. The fifth-graders appeared to be the most active (67.21% of them actively spend more than 2 hours a day doing such activities). On the contrary, the most passive group proved to be the sixth-graders (46.88% of them spend less than an hour a day doing physical activities). Taking this into account, we can ascertain the statistical significance of the differences between younger and older pupils at the level $p < 0.05$. Considering the popularity of sport and physical education classes, a $p < 0.01$ level of statistical significance was recognized.

Yet Smith (2008) recommends at least an hour of physical activities of moderate intensity on a daily basis. By the age of 10 – 11 these activities should be of versatile character (ball games, water sports, playground games, walking and hiking under adult supervision). According to Hajkova (2007), when performing physical activities the child’s safety is of the greatest importance.

The most popular physical activities for all grades are sport games (more than 50%). The fifth and sixth-graders also find swimming very popular. More than 26% of seventh, eighth and ninth-graders chose the option "other (please specify)". These pupils listed cycling and inline skating as their favourite activities.

The statistical evaluation of pupils’ answers is presented in Table 2.

<table>
<thead>
<tr>
<th>item</th>
<th>boys like PE/do not like PE</th>
<th>boys 5th, 6th, 7th grades/8th, 9th grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>chi</td>
<td>♣♣</td>
<td>♣♣</td>
</tr>
</tbody>
</table>

Key: ♣♣ = statistical significance level $p < 0.01$; ♣ = statistical significance level $p < 0.05$; N = statistically non-significant

As shown in Figure 4, the popularity of sport and physical education classes is relatively high. As indicated in previous results, the lowest interest in physical education was observed in the 6th grade in which up to 43.75% of pupils stated that sport and physical education does not belong among their favourite subjects.
Figure 4. Popularity of sport and physical education classes

A study published by the AHA (American Heart Association) Council on Nutrition, Physical Activity and Metabolism in 2003 ascertained that the number of pupils participating in physical education classes had dropped in 11 years of research from 42% to less than 30%. There were no statistically significant differences recorded in the answers of younger and older pupils.

Among all the pupils, the most popular physical activities performed in sport and physical education classes, as well as outside school, include playful sport games. On the other hand, more than 75% of the sixth-graders prefer physical games. Considering the popularity aspect and the answers provided by both younger and older pupils, we observed a statistical significance level $p < 0.01$.

These findings are in accordance with the results of other specialists, for example Palovicova (2010), Adamcak & Nemec (2010), who studied pupils' interests in regard to the popularity of physical activities performed in sport and physical education classes or in their free time. However, the study of Novotna et al. (2009) which was based on the study sample of 354 fourth-graders from the Banska Bystrica region, observed a low interest in sport games. This may be explained by the fact that physical education classes in primary schools mainly include games like basketball, soccer and handball, while pupils are interested in other activities.

Classes that comprise playful activities are once again popular with the vast majority of pupils, i.e. more than 73%. Again, the sixth-graders were the exception since only 50% of them like playful activities. The remaining 50% of the pupils do not like these kind of activities. This is a striking fact, since more than 90% of older pupils (seventh, eighth and ninth-graders) like physical education classes. The statistical evaluation of answers is presented in Table 3.

<table>
<thead>
<tr>
<th>item</th>
<th>boys like PE/do not like PE</th>
<th>boys $5^{th}$, $6^{th}$, $7^{th}$ grades/$8^{th}$, $9^{th}$ grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>chi</td>
<td>♦ ♦</td>
<td>♦ ♦</td>
</tr>
</tbody>
</table>

Key: ♦ = statistical significance level $p < 0.01$ ♦ = statistical significance level $p < 0.05$ N= statistically non-significant

This fact can be explained by poor class organization and inappropriate selection of playful activities for the sixth-graders. Undoubtedly, this fact is also related to the PE teacher's personality. It is important to realize that inappropriate expectations placed on children, as well as underestimating or overestimating their abilities have a negative impact on them. If a game is too difficult, pupils cannot cope with it which leads to violations of the game's rules. At the same time, pupils find low requirements unsatisfying.

The answers to the question “Do you enjoy playful activities in the form of physical activities (tag games, hopscotch, climbing games, hitting goals, etc.) more than those in the form of sport
games (football, volleyball, basketball, etc.)?" can be seen in Figure 5. Older pupils clearly prefer sport games. According to Argaj (2011), pupils gradually start to enjoy games which are more demanding and difficult since they also play these sport games in their free time. Considering the popularity of sport and physical education classes, we did not detect any statistically significant differences in the pupils’ answers. Significance of differences between answers provided by younger and older pupils reached a level of statistical significance $p < 0.05$.

Subsequently, we were interested in the reason why pupils prefer physical games. As shown in Figure 6, pupils are more attracted to these kind of games mostly because they require a lot of moving. This was the case in 50% of the answers provided by fifth, seventh and eighth-graders.

In 40.63% of the answers provided by sixth-graders, the reason given was that physical games offer new experiences. Regarding the ninth-graders, 40.63% of them like these kind of games because they are played in groups. Most of the fifth and sixth-graders answered that playing games provides them the opportunity to show their abilities (Figure 6). This fact was also reflected in the identification of statistical differences in the pupils’ answers at a level of $p < 0.01$, considering both the popularity of sport and physical education classes and the differences between younger and older pupils.
Physical games are most commonly played in a gym during physical education classes (more than 57% of the answers). The eighth-graders were the exception because they stated they usually play games outside during summer. Evaluation of this question gives a pleasing result, because of the fact that pupils play games outside as well, i.e. in school playgrounds (more than 12%) and outside during summer and winter. Statistical evaluation of the answers is presented in Table 4.

Table 4: Statistical evaluation of pupils' attitudes towards the environment in which the games are played

<table>
<thead>
<tr>
<th>item</th>
<th>boys like PE/do not like PE</th>
<th>boys 5th, 6th, 7th grades/8th, 9th grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>chi</td>
<td>N</td>
<td>✿ ✿</td>
</tr>
</tbody>
</table>

Key: ✿ ✿ = statistical significance level p < 0.01 ✿ = statistical significance level p < 0.05 N = statistically non-significant

Therefore, we would like to emphasize the importance of safe and responsible game organization. Injuries have a negative impact on pupils and unpleasant experiences like these consequently discourage them from playing games during which they can get hurt easily.

The fifth and ninth-graders claimed that they play games as a part of their sport and physical education classes at least once every two weeks. Seventh and eighth-graders stated that in their sport and physical education classes they play games at least once a week. A statistical evaluation is presented in Table 5.

Table 5: Statistical evaluation of frequency of games put into the teaching process

<table>
<thead>
<tr>
<th>item</th>
<th>boys like PE/do not like PE</th>
<th>boys 5th, 6th, 7th grades/8th, 9th grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>chi</td>
<td>✿ ✿</td>
<td>N</td>
</tr>
</tbody>
</table>

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The answers provided by sixth-graders confirmed that their interest in playful activities is partly aroused by the low frequency of games being held in physical education classes - which are played only once a month. This state is unacceptable since, according to Argaj (2011), games are the most appropriate form of physical activity for pupils even at the 2nd stage of primary schools. They can be played, for example, at the beginning of the class as the most convenient form of warm-up exercise.

We were also interested in game timing. We learned that games are usually played during the main part of the class (Figure 7).

Figure 7 Frequency of games played in sport and physical education classes and game timing

<table>
<thead>
<tr>
<th>9th grade</th>
<th>7th grade</th>
<th>5th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.375</td>
<td>0.4375</td>
<td>0.958365</td>
</tr>
<tr>
<td>0.375</td>
<td>0.375</td>
<td>0.375</td>
</tr>
<tr>
<td>0.375</td>
<td>0.375</td>
<td>0.375</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>end of the class</th>
<th>5th grade</th>
<th>6th grade</th>
<th>7th grade</th>
<th>8th grade</th>
<th>9th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.475409836</td>
<td>0.0625</td>
<td>0</td>
<td>0.357142857</td>
<td>0.1875</td>
</tr>
<tr>
<td>main part</td>
<td>0.508196721</td>
<td>0.4375</td>
<td>0.98675</td>
<td>0.357142857</td>
<td>0.59375</td>
</tr>
<tr>
<td>warm-up</td>
<td>0.016393443</td>
<td>0.5</td>
<td>0.03125</td>
<td>0.285714286</td>
<td>0.21875</td>
</tr>
</tbody>
</table>
Game timing probably depends on the topic of the particular sport and physical education class (sports, gymnastics, athletics, etc.). Pupils' answers concerning the popularity of sport and physical education classes were statistically significant at a level of \( p < 0.01 \). The differences between younger and older pupils reached a level of statistical significance \( p < 0.05 \).

All the pupils from all the grades questioned would like to play more games in their physical education classes – more than 81\% of pupils in each grade answered “yes”. Sport and physical education teachers at the 2\textsuperscript{nd} stage of primary schools should definitely take this into consideration because the results of Vladovicova-Novotna (2005) research point to the fact that it is getting increasingly harder to arouse pupils' interest in regular physical activity and in physical education itself. We did not reveal any statistically significant differences when evaluating the answers provided by younger and older pupils, however, their opinions on the popularity of sport and physical education classes were statistically significant at a level of \( p < 0.01 \).

Regarding the quality of the game, most of the pupils think that it depends on who they play with and also that the more players participate in the game, the more fun it is (more than 50\% of pupils chose “yes” as the answer). In regard to this issue, the sixth-graders were an exception because 59.38\% of them chose “no” as the answer. Table 6 presents the statistical significance of the pupils' answers.

Table 6: Statistical evaluation of the importance of selection of players

<table>
<thead>
<tr>
<th>item</th>
<th>boys like PE/do not like PE</th>
<th>boys 5\textsuperscript{th}, 6\textsuperscript{th}, 7\textsuperscript{th} grades/8\textsuperscript{th}, 9\textsuperscript{th} grades</th>
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<tbody>
<tr>
<td>chi</td>
<td>♠ ♠</td>
<td>N</td>
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</tbody>
</table>

**Key:** ♠ ♠ = statistical significance level \( p < 0.01 \) ♠ = statistical significance level \( p < 0.05 \) N = statistically non-significant

The pupils (fifth, seventh, eighth and ninth-graders) who regularly play games in sport and physical education classes also realize that they make friends faster during a game than during any other activity (answer “yes” in more than 42.86\% of cases). It confirmed the statement, according to which playful activities develop pupils' personality in the most acceptable way and at the same time they improve interpersonal relationships within a group. Considering younger and older pupils, we did not observe any statistically significant differences in the answers, however, results regarding the popularity of sport and physical education classes reached a level of \( p < 0.01 \) of statistical significance.

More than 56\% of the pupils consider physical activity to be an important part of everyday life. In this sense, older pupils were the most conscious, since 96\% of them designated physical activity as important. This fact was also reflected in the determination of statistical significance, as shown in Table 7.

Table 7: Statistical evaluation of the importance of physical activities

<table>
<thead>
<tr>
<th>item</th>
<th>boys like PE/do not like PE</th>
<th>boys 5\textsuperscript{th}, 6\textsuperscript{th}, 7\textsuperscript{th} grades/8\textsuperscript{th}, 9\textsuperscript{th} grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>chi</td>
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<td>N</td>
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**Key:** ♠ ♠ = statistical significance level \( p < 0.01 \) ♠ = statistical significance level \( p < 0.05 \) N = statistically non-significant

**Conclusion.** Results of our study pointed to the fact that playful activities performed both in sport and physical education classes and in free time are the most popular activities among primary school pupils. What pupils mostly like about games is the opportunity to move. Games are usually performed during the main part of the class in a gym, in the playground as well as outdoors/in the countryside (during summer and winter). The results also showed that in spite of the children's positive attitudes towards playing games in sport and physical education classes, these kinds of activities are not appreciated enough by some teachers. This can be seen in the answers provided by sixth-graders (only 50\% of pupils enjoy playful activities and games since they are performed only once a month). Moreover, playful activities should be integrated into the educational process while paying attention to the pupils' age and their attitudes towards the
subject. This was proved by the determination of statistic significance when evaluating several questions of our questionnaire.

References:

Мнения учащихся II степени начальной школы о подвижных играх реализованных на уроках физической культуры и спорта

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Аннотация. Статья посвящена проблематике подвижных игр как одному из методов обучения на уроках физической культуры и спорта учащихся 5–9 классов начальной школы. Подчеркивается тот факт, что игровые деятельности с точки зрения школьников по-
прежнему пользуются большим интересом. Они используются в основном в главной части урока физического воспитания и спорта, а учащиеся сами считают, что, при игре они быстрееустановят связь с одноклассниками, в отличие от любой другой деятельности, и это создает благоприятные условия в развитии межличностных отношений внутри группы или класса.

Ключевые слова: мнения учащихся; подвижные игры; школьная физическая культура и спорт.