

## PREFERENCES OF PHYSICAL EDUCATION TEACHERS IN TEACHING WINTER SEASONAL PHYSICAL ACTIVITIES

## PREFERENCIE UČITEĽOV TELESNEJ A ŠPORTOVEJ VÝCHOVY VO VYUČOVANÍ ZIMNÝCH SEZÓNNYCH POHYBOVÝCH ČINNOSTÍ

J. Michal & S. Straňavská

Faculty of Physical Education, Sports and Health, Matej Bel University, Banská Bystrica, Slovak Republic

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### Abstract

The aim of the study was to investigate and highlight the preferences of physical and sport education teachers in teaching winter seasonal physical activities. The survey involved 653 primary school teachers who annually participate in teaching winter seasonal physical activities. To obtain the necessary information, we used a custom-designed questionnaire for primary school teachers, focusing on questions related to favourite winter sports, preferred forms of organizing winter seasonal physical activities, and materials used during these activities. Through statistical analysis (Chi-square), we found a gender difference in the preferred form of participation in winter seasonal physical activities. On the basis of the obtained results, we can state that most of the primary school teachers, 86.68%, who are involved in teaching winter seasonal physical activities prefer downhill skiing in their free time and are of the same opinion, that ski training is popular among pupils and they like to participate in ski training organized by the school. This study was conducted within the KEPA grant task 032UMB-4/2022 Innovative teaching materials for teachers of physical and sport education in primary schools with a focus on winter seasonal physical activities.

**Keywords:** physical education; teacher; primary school; winter seasonal physical activities

### Súhrn

Cieľom štúdie bolo zistiť a poukázať na preferencie učiteľov telesnej a športovej výchovy vo vyučovaní zimných sezónnych pohybových činností. Prieskumu sa zúčastnilo 653 učiteľov základných škôl, ktorí sa každoročne podieľajú na vyučovaní zimných sezónnych pohybových činností. K získaniu potrebných informácií sme použili nami vytvorený dotazník pre učiteľov základných škôl, ktorý bol zameraný na otázky súvisiace s obľúbeným zimným športom, uprednostnenou formou organizovania zimných sezónnych pohybových činností a využívaným materiálom počas zimných sezónnych pohybových činností. Štatistickou analýzou (Chí-kvadrát) sme zistili, že z hľadiska pohlavia sa objavuje rozdiel v preferovanej forme účasti na zimných sezónnych pohybových činnostiach. Na základe získaných výsledkov môžeme konštatovať, že najviac učiteľov základných škôl a to až 86,68 %, ktorí sa podieľajú na vyučovaní zimných sezónnych pohybových činností preferuje vo svojom voľnom čase zjazdové lyžovanie a zároveň sú toho názoru, že lyžiarske výcviky sú u žiakov obľúbené a radi sa zúčastňujú lyžiarskych výcvikov organizovaných školou. Táto štúdia bola riešená v rámci grantovej úlohy KEPA 032UMB-4/2022 Inovatívne učebné materiály pre učiteľov telesnej a športovej výchovy na základných školách so zameraním na zimné sezónne pohybové činnosti.

**Kľúčové slová:** telesná a športová výchova; učiteľ; základná škola; zimné sezónne pohybové činnosti

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### Introduction

Winter seasonal physical activities are within the National Educational Programme included in the thematic unit of Seasonal Physical Activities, which is part of the core curriculum for the subject

of physical education in primary schools. Among other winter sports, alpine skiing is also included. As Michal et al. (2019) point out, alpine skiing is a very popular winter sport due to the variety it offers. It is a sport enjoyed by various age groups as part of active leisure time. We align with Kippu's (2011) view, which suggests that skiing is suitable for all age groups. We also agree with Blahútová (2017), who states that skiing is a sport that can be enjoyed by children from an early age to older individuals, not only at a recreational level but also at a performance level. Although alpine skiing is one of the most beautiful winter sports, it is the responsibility of physical education teachers to teach students how to ski and to help them develop a positive relationship with skiing (Michal & Kunkela, 2014). According to Michal (2001), alpine skiing is the foundation of the physical education curriculum in the second stage of primary schools because, in addition to developing skiing skills, it also shapes an individual's personality. Several authors have dealt with the topic of winter seasonal physical activities, such as Adamčák & Kozančáková (2013), Dobay (2009), Novotná & Vladovičová (2011), and many others. In addition to Slovak authors, various international authors have also explored the issue of winter seasonal activities. Hrušová (2018), whose research was conducted at T. G. Masaryk Primary School in Vimperk (Czech Republic), focused on methodological approaches to teaching alpine skiing and incorporating the skiing alphabet into alpine skiing lessons. Dosek (2016) examined alpine skiing instruction in Hungary, where alpine skiing is not included in the curriculum. Another contributor to the study of skiing is Demeter & Ozsváth (2016), who primarily focus on the development of teaching aids and materials for ski instructors.

## Methodology

The survey aimed at identifying and highlighting the preferences of physical education teachers in teaching winter seasonal physical activities was conducted between March 2023 and March 2024. The primary research method used to collect the necessary information was a custom-designed questionnaire consisting of 37 questions, administered online. The questions focused on assessing the attitudes of physical education teachers toward winter sports, their opinions on the popularity of skiing courses among students, and also their views on state subsidies and the possibility of students attending ski courses multiple times during their schooling. The research sample consisted of 653 primary school teachers who annually participate in organizing winter seasonal physical activities. Descriptive statistics and testing of hypotheses were carried out using IBM® SPSS® Statistics v29 software. To determine the significance of differences between the examined variables, we applied the asymptotic version of the Chi-square test of independence for  $r \times s$  contingency tables in the inferential data analysis. In cases where the conditions for the asymptotic version were not met, we employed the exact Fisher-Freeman-Halton test, calculated using the Monte Carlo method. Cramér's  $V$  coefficient was used as the effect size measure, with the following interpretation based on minimum threshold values:  $V = 0.10$  – small effect,  $V = 0.30$  – medium effect, and  $V = 0.50$  – large effect. The probability of a Type I error was set at  $\alpha = 0.05$  and  $\alpha = 0.01$ .

## Results

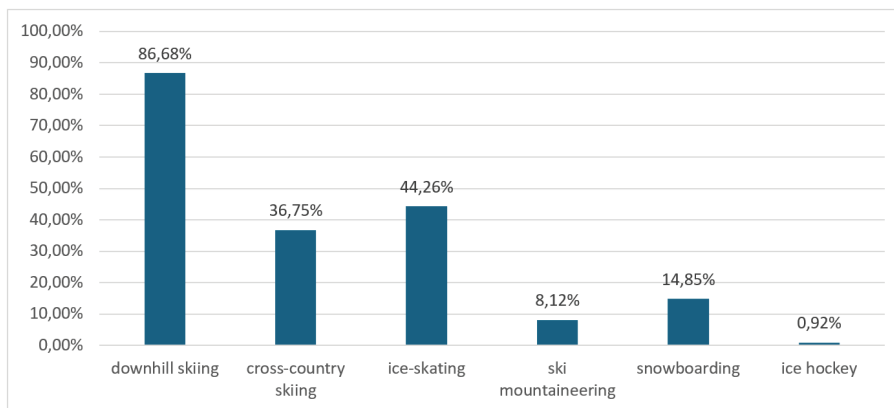
In our survey, we first focused on which winter sports physical education teachers most frequently prefer during their free time. As shown in Figure 1, our respondents predominantly engage in downhill skiing in their free time (86.68%). The second most common response was that they rather practice ice skating in their free time, counting 44.26% of respondents. The third most frequently chosen winter sport was cross-country skiing, favoured by 36.75% of respondents.

In addition to the question which winter sports are preferred by our respondents, i.e. teachers of physical and sports education, or those teachers who have the necessary education to be able to act as ski instructors, we were interested in how the students perceive winter sports from their point of view, that is, whether they are popular or not. We evaluated this question based on the location of the school, that is, whether the school is situated in an urban or rural area. Depending on the school's location, we asked teachers for their opinions on how they believe students perceive or enjoy winter sports. As seen in Figure 2 and Table 1, the majority of respondents (58.81%,  $n=384$ ) believe that students view winter sports very positively or positively (34.76%,  $n=227$ ). It is encouraging to note that only a minimal number of respondents think that students perceive winter sports negatively or very negatively. Some teachers feel that students are indifferent, viewing winter sports as neither positive nor negative (5.91%,  $n=38$ ). In this hypothesis, we assumed that there are statistically

significant differences at the significance level  $p < 0.05$  between the school's location and teachers' views on how students perceive or enjoy winter courses. Based on our calculations, we can conclude that from the perspective of the school's location (urban-rural), there is a statistically significant difference in the popularity of winter skiing courses among students ( $F = 8.903$ ,  $p < 0.05$ ,  $V = 0.123$ ,  $p < 0.05$ ).

Obrázok 1./ Figure 1.

*Preferovaný zimný šport respondentmi./ Winter Sports preferred by respondents.*



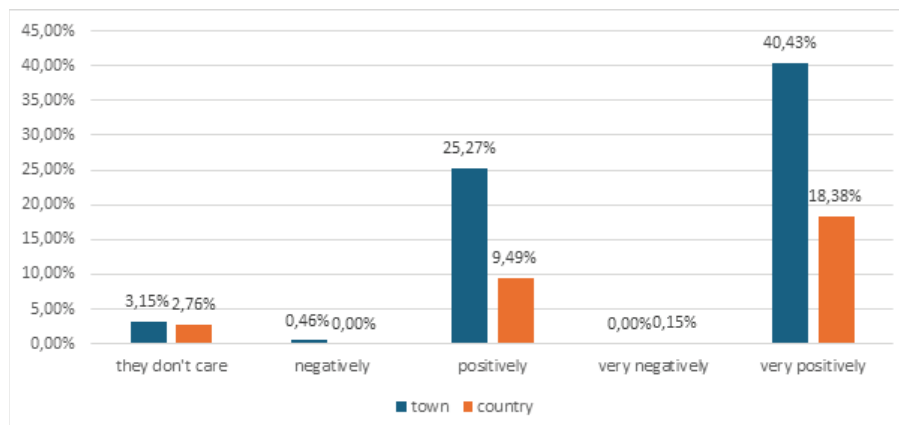
Tabuľka 1./ Table 1.

*Oblúbenosť zimných športov u žiakov z pohľadu učiteľov podľa sídla školy./ Popularity of Winter Sports among Students from the Teachers' Perspective Based on the location of school.*

School location * In your opinion, how do students perceive and like winter courses		In your opinion, how do students perceive - do they like winter courses					Total
		they don't care	negatively	positively	very negatively	very positively	
Location of school	town	20	3	165	0	264	452
	country	18	0	62	1	120	201
Total		38	3	227	1	384	653

Obrázok 2./ Figure 2.

*Oblúbenosť zimných športov u žiakov z pohľadu učiteľov podľa sídla školy./ Popularity of winter sports among pupils from the point of view of teachers according to school location.*



In the context of teachers' preferences for winter sports, we also wanted to determine how teachers evaluate the state funding for winter sports. We analysed this question based on the school's location, specifically the region in which the school is situated, as we conducted the survey across all of Slovakia.

As presented in Figure 3 and Table 2, 56.20% (n=367) of respondents evaluate the state funding very positively. We are also pleased that the second most common response was that they assess the state funding positively, chosen by 34.92% (n=228) of respondents. Among our respondents, 3.52% (n=23) of teachers are indifferent about whether the school receives state funding for ski course, while some expressed that they evaluate this funding negatively (4.59%, n=30), and five respondents rated it very negatively.

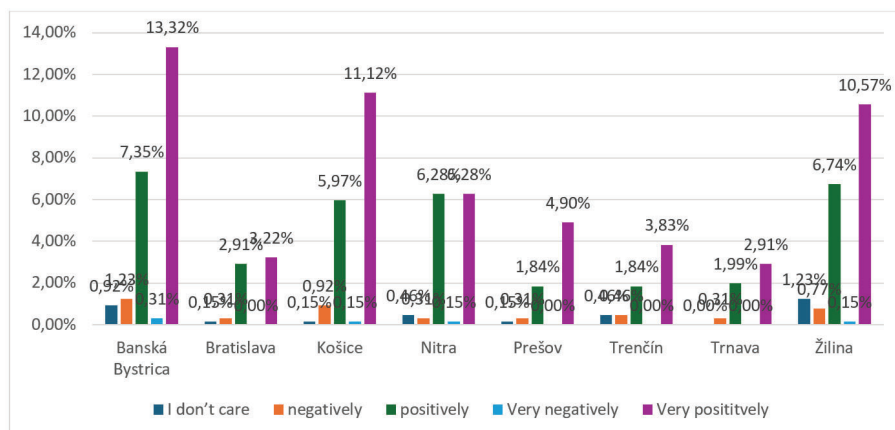
Tabuľka 2./ Table 2.

*Hodnotenie štátneho príspevku učiteľmi na zimné kurzy podľa kraja kde sídli škola./ Evaluation of the state contribution by teachers for winter courses according to the region where the school is located.*

Self-governing region where the school is located ★ How do you rate the state subsidy for winter courses		How do you evaluate the state subsidy for winter courses					Total
		I don't care	Negatively	Positively	Very negatively	Very positively	
Self-governing region where the school is located	Banská Bystrica	6	8	48	2	87	151
	Bratislava	1	2	19	0	21	43
	Košice	1	6	39	1	73	120
	Nitra	3	2	41	1	41	88
	Prešov	1	2	12	0	32	47
	Trenčín	3	3	12	0	25	43
	Trnava	0	2	13	0	19	34
Žilina		8	5	44	1	69	127
Total		23	30	228	5	367	653

Obrázok 3./ Figure 3.

*Hodnotenie štátneho príspevku učiteľmi na zimné kurzy podľa kraja kde sídli škola./ Evaluation of the state contribution by teachers for winter courses according to the region where the school is located.*



When we look more closely at the respondents' answers based on the school's location, specifically the region where the school is situated, we see that the highest number of respondents was from the Banská Bystrica Region, where the largest proportion expressed a very positive evaluation of state funding. Out of the total, 23.12% of respondents were from the Banská Bystrica Region, and more than half of them (57.62%, n=87) evaluated the state funding very positively. The second most represented region was the Žilina Region, with 127 (19.45%) respondents participating in the survey from this area. Respondents from this region also mostly rated the state funding very positively (54.33%, n=69) or positively (34.65%, n=44). The Košice Region had 120 respondents, accounting for 18.38% of the total number, and they also mostly rated the state funding very positively or positively. Respondents from the other regions of Slovakia generally evaluated the state funding for ski course as very positive or positive, with only a few expressing negative opinions, which we consider a reassuring finding. In terms of the region where the school is located and the evaluation of state funding for ski

course, we did not find a statistically significant difference ( $F = 22.610$ ,  $p > 0.05$ ,  $V = 0.094$ ,  $p > 0.05$ ). Therefore, we reject the hypothesis where we presumed that there are statistically significant differences in the evaluation of state funding for winter courses based on the school's location (region).

At the same time, we wanted to find out what the teachers' opinion is about students taking ski course more than once in one year during their studies. We evaluated this question from the perspective of the teachers' gender. Based on the results presented in table 3 and figure 4, we can state that the teachers mostly expressed themselves positively. Almost the same number of male teachers ( $n=171$ , 52.45%) and female teachers ( $n=170$ , 51.99%) are inclined to the possibility that they would definitely like the pupils to have ski course more times during their studies. Also, 29.75% of male teachers and 28.13% of female teachers choose the option of answering "rather yes", that is, a positive statement to a specific question. A total of 45 respondents gave their opinion for the answer option "I don't know", which represents 6.89% of the total number of respondents. Among the respondents there are also those who do not identify with the possibility of students completing ski course more than once during their studies, and the answer "rather not" was chosen by 10.41% of respondents and "definitely not" by 0.15% of respondents. We assess positively that most respondents can imagine and would be in favour of students having ski course more than once during their studies. We assumed that, from the point of view of gender, there is a statistically significant difference in terms of the inclusion of more winter courses at schools. Based on the results  $F = 3.165$ ,  $p > 0.05$ ,  $V = 0.070$ ,  $p > 0.05$ , we reject the hypothesis.

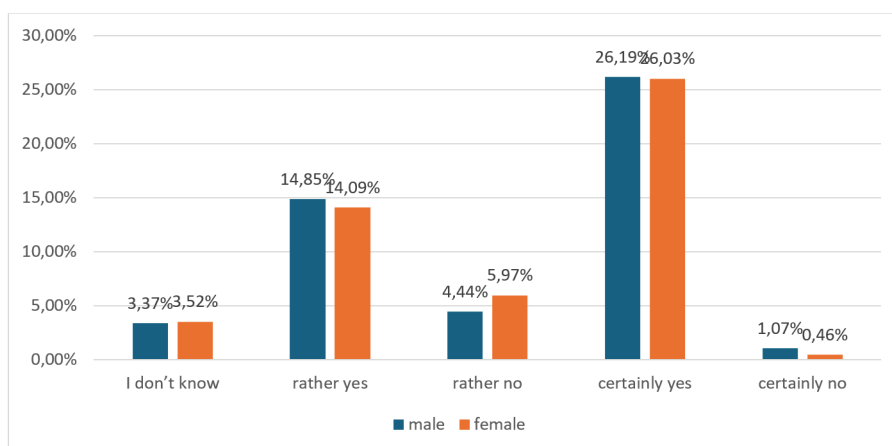
Tabuľka 3./ Table 3.

*Názory učiteľov na absolvovanie lyžiarskeho kurzu viackrát počas štúdia./ Teachers' opinions on taking a skiing course more than once during their studies.*

Gender ★ Would you like the students to have the winter course several times during their studies at school							
You would like the students to have the winter course several times during their studies at school							
		I don't know	rather yes	rather no	certainly yes	certainly no	Total
Gender	male	22	97	29	171	7	326
	female	23	92	39	170	3	327
Total		45	189	68	341	10	653

Obrázok 4./ Figure 4.

*Názory učiteľov na absolvovanie lyžiarskeho kurzu viackrát počas štúdia./ Teachers' opinions on taking a ski course more than once during their studies.*



## Discussion

Just as our respondents prefer downhill skiing in their free time, several authors, such as Reichert & Musil (2008), Michal (2016), and Straňavská & Michal (2022), have also concluded that downhill

skiing is among the most popular winter activities for leisure. Just as the overwhelming majority of our respondents expressed that students enjoy winter sports, similar results have been reported by several authors who also surveyed students about their preferences for winter sports. Straňavská (2019) states in her study that a positive relationship toward winter sports prevails among students in the 7th to 9th grades in the Žilina region. Authors Kresta & Cihlár (2011) and Mlynařík (2012), who conducted research in the Czech Republic, also found that winter sports are popular among students. In contrast, Dosek (2016), who conducted research in Hungary, found that alpine skiing is not among the most popular sports activities. In Germany, alpine skiing is much more widespread and popular compared to Hungary (Enzinger, 2008). Pieberl (2018) examined the aspect of integrating skiing into the school system in Austria and concluded that skiing is very popular among the Austrian population. In relation to the state contribution, Straňavská & Michal (2022) in their study dealt specifically with the question of whether pupils would have received ski training if the state had not contributed. They concluded that while interest among students would decrease, nearly 40% of students would still definitely participate in the ski course. We believe that since several authors, either in Slovakia or abroad, have found pupils' interest in winter sports, that pupils would also show interest in participating in ski course several times during their studies. Among others, Kovács (2020), whose research was carried out in the city of Szombathely, found that the majority of pupils who participated in ski course would like to participate in the training again.

A limitation of our study is that we were not able to reach all teachers involved in the provision of winter seasonal movement activities, or that only primary school teachers were included in our research.

## Conclusion

The aim of this contribution was to find out the preferences of physical and sports education teachers in teaching winter seasonal physical activities. In conclusion, we can state that among the most popular winter sports that teachers prefer in their free time is clearly downhill (alpine) skiing, which almost 87% of respondents do in their free time. In addition to downhill skiing, ice skating and cross-country skiing are among the most popular winter sports. We found out that teachers are of the opinion that ski training is popular with pupils and they like to participate in ski training organized by the school. Considering the state contribution, which is worth €150 per pupil, we came to the conclusion in our survey that teachers evaluate this contribution positively and at the same time they would welcome if pupils at their schools had the opportunity to take ski training more than once during their studies.

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**doc. PaedDr. Jiří Michal, PhD.**  
**Faculty of Sport Science and Health**  
**Matej Bel University**  
**Tajovského 40**  
**974 01 Banská Bystrica**  
**Slovak Republic**  
**jiri.michal@umb.sk**