

Teachers' preferences of teaching primary physical education: curriculum preferences

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Abstract

Background and Study Aim Physical education teachers play an important role in helping students to understand the importance of physical activity. By maximizing physical activity time in physical education, physical education teachers can influence physical activity needs of students. The present study was aimed at analysing and comparing teachers' preferences of teaching primary physical education.

Material and Methods Survey instrument (teachers' preferences) was carried out five months (May – September, 2022) through an intentional sampling with survey group size of 1300 physical education teachers of primary education: (i) Preschool and elementary pedagogy (50.76%, n = 660), (ii) Related pedagogy (49.24%, n = 640). Pearson correlation coefficient (r), chi-square test (χ^2) (inferential) and descriptive statistics were used to analyse and compare the data.

Results Physical education is often viewed as a marginal subject within the curriculum, however after analysing the data, on average, 63.54% (n = 826) of survey group believes that physical education is just as important as any other school subject ($p < .01$). According to 52% (n = 676) of survey group, games are popular teaching activity in physical education ($p < .01$). About 40.50% (n = 526) of survey group does not enjoy teaching dance in physical education ($p < .01$). About 37.55% (n = 488) of survey group considers teaching health and fitness as demanding ($p > .05$) and athletics and gymnastics (36.06%, n = 468) as undemanding ($p < .01$).

Conclusions Primary physical education is an important component of curriculum and provides unique challenges for those involved with its teaching.

Keywords: curriculum preference, physical education, primary education, teacher, teaching preference

Introduction

Education is an important part of life, irrespective of one's gender, race or social class. Education determines the future of each human and each country [1]. Investing in education is an important strategy a country can make in its future, however education level varies among countries for many reasons, in particular economic development, poverty, government corruption and level of democracy [2]. Regardless of which attitudes we strive for in teaching, teachers play an important role in providing the power of education to today's children, therefore giving them the possibility for a better future [3]. Teachers play an important role in achieving high-quality education to children and need to develop their competencies [4]. Demands made of teachers are high, despite of maintaining important role in society. Many of them do not understand what quality teaching requires and do not see quality teaching as a demanding mission that requires rigorous training [5].

Classroom teachers play an important role in helping children (1st – 4th year of study) reading and writing and in developing educational path

because of being a foundation of learning and transfer of knowledge [6]. Expected to teach all compulsory subjects, classroom teachers teach all of them with the same criteria, however some of them who specialise in a specific area can influence how a subject is taught and how children gain a view of the subject [7]. Lack of primary physical education knowledge among classroom teachers contribute to uncertainty about what they are doing, however classroom teachers who demonstrate good knowledge can encourage positive attitudes towards physical education in children [8]. Physical education struggles for recognition in relation to other school subjects because of being perceived as a "less important" school subject [6]. Other school subjects higher within the school subject hierarchy receive preferential allocation of resources, in particular equipment funding, staffing allocations and timetabling, however most children express positive attitudes towards physical education, because of subject teacher [9, 10]. Children who have more positive attitudes towards physical education participate more in physical activity [11, 12]. Lack of physical activity among children is of increasing concern, with data showing a decline in participation in physical education [13].

Physical education teachers (classroom teachers) delivering meaningful content and appropriate instruction must become the norm in educational process in order to provide children with positive physical activity attitudes that will lead them to maintain physical activity [14]. Quality teaching, including physical education, is recognised as an important influence in shaping school attainment [15]. Because of importance of physical education in terms of teachers' influence on physical education itself and children' attitudes, the present study was aimed at analysing and comparing teachers' preferences of teaching primary physical education.

Materials and Methods

Participants

In accordance with study aim, the target population consisted of primary physical education teachers (n = 1300) in Slovakia (convenience sample), recruited through an electronic mail [16]. Recruitment process was carried out regularly, in intervals of 2 weeks, aiming for intentional sampling, regarding educational attainment: (i) Preschool and elementary pedagogy (50.76%, n = 660), (ii) Related pedagogy (49.24%, n = 640); average age: (i) ≥ 30 years (13.08%, n = 170), (ii) $< 30 - \geq 40$ years (24.92%, n = 324), (iii) $< 40 - \geq 50$ years (37.54%, n = 488), (iiii) < 50 years (24.46%, n = 318); career level: (i) Beginning teacher (7.84%, n = 102), (ii) Independent teacher (30%, n = 390), (iii) Attestation - 1 (35.22%, n = 458), (iiii) Attestation - 2 (26.92%, n = 350). Data interpretation process (original) consisted of 1500 debriefing forms, however 13.34% (n = 200) of them did not meet inclusion criteria, containing in recruitment process. After meeting the inclusion criteria (data cleaning), the survey group consisted of 1300 primary physical education male (17.24%, n = 224) and female (82.76%, n = 1075) teachers in Slovakia.

Research Design

Single-measure comparative study (descriptive) was carried out five months (May – September, 2022), in order to analyse and compare teachers' preferences of teaching primary physical education. Creating an effective survey instrument made it easier to analyse and compare the data, which consisted of two sections: (i) Demographic information (e.g., age, gender, region (town), career level, educational attainment); (ii) Survey items, which consisted of five closed questions: (ii-i) Teachers' preferences of teaching primary physical education, (ii-ii) Popular teaching activity in primary physical education, (ii-iii) Unpopular teaching activity in primary physical education (ii-iiii) Undemanding teaching activity in primary physical education, (ii-iiiii) Demanding teaching physical activity in primary physical education. Survey instrument was available online (unlimited time) and collecting data (May –

September, 2022). Available feedback (online) did not indicate any issues with comparative design (technical) and survey (e.g., grammar, vocabulary). Financial incentives were not given (voluntary participation), however the survey group (n = 1300) received the final report with their personal results afterwards. Online version of survey was not detecting any data about the identity and chosen due to cost effectiveness, time saving and easy accessibility (Microsoft Forms, Office 365, Microsoft Corp., Redmond, WA, USA) [17].

Statistical Analysis

Available survey data (online) collected through survey (debriefing form) was tabulated and figured in database designed precisely for single-measure comparative study (descriptive). Incidence of responses (each item) of survey group (n = 1300) was analysed and compared by using the Tap3 - Gamo (statistical software) (Banská Bystrica, Slovakia). After cleaning available survey data of survey group (n = 1300), descriptive statistics (e.g., arithmetic mean, percentage frequency) were used to analyse and compare the data (clean). Chi-square test (χ^2), of which the significance level (α) was .01 and .05., evaluated the difference between 1300 physical education teachers of primary education: (i) Preschool and elementary pedagogy (50.76%, n = 660), (ii) Related pedagogy (49.24%, n = 640) [18]. Measuring the strength of linear association between four variables was evaluated by using the Pearson correlation coefficient (r) [19].

Results

According to study aim, Figure 1 illustrates teachers' preferences of teaching primary physical education within the survey group (n = 1300) and confirms that 63.54% (n = 826) of survey group (n = 1300) considers primary physical education as important as other school subject. 23.92% (n = 310) of survey group (n = 1300) believes that primary physical education is popular subject, compared to 8.44% (n = 110) of survey group (n = 1300) who believes that primary physical education is unpopular subject. 53 teachers (4.09%) out of 1300 (100%) are not teaching primary physical education. Difference between 1300 physical education teachers of primary education reveals statistical significance ($p < .01$) ($\chi^2_{(5)} = 13.83$; $p = .003$).

Popular teaching activity in primary physical education within the survey group (n = 1300) illustrates Figure 2 and confirms that games are popular in 52% (n = 676) of survey group (n = 1300). Athletics and gymnastics inscribe 260 teachers (19.99%) out of 1300 (100%). Dancing is popular in 188 teachers (14.43%). 130 teachers (10.04%) out of 1300 (100%) inscribe outdoor and adventure. Health and fitness are popular in 3.54% (n = 46) of teachers. Difference between 1300 physical education

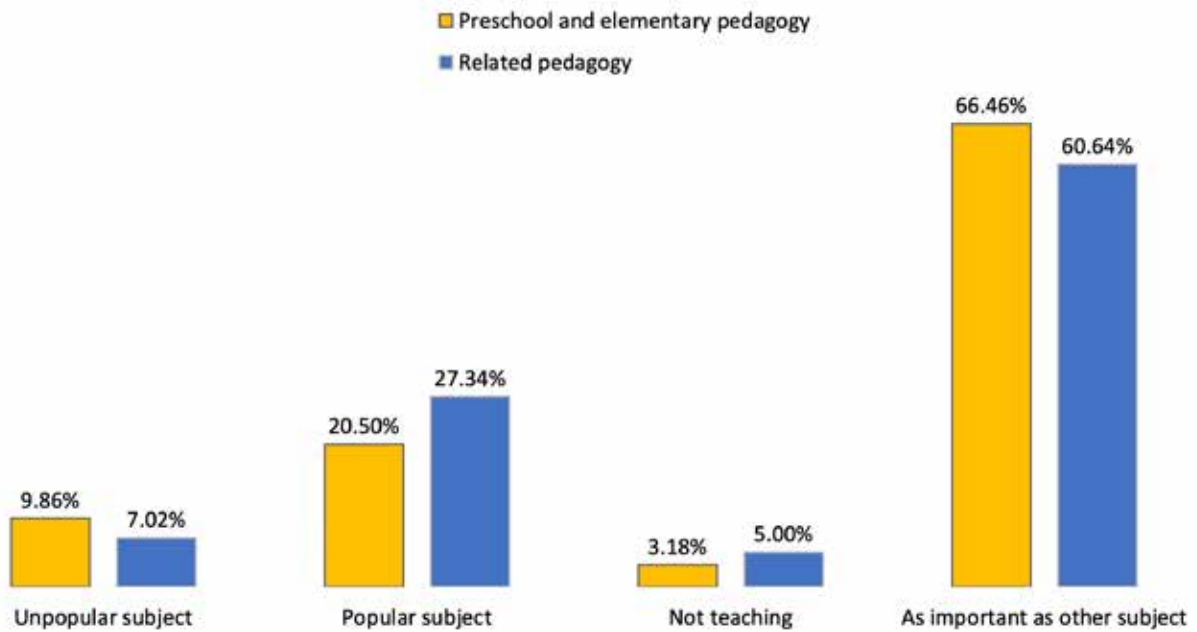


Figure 1. Teachers' preferences of teaching primary physical education

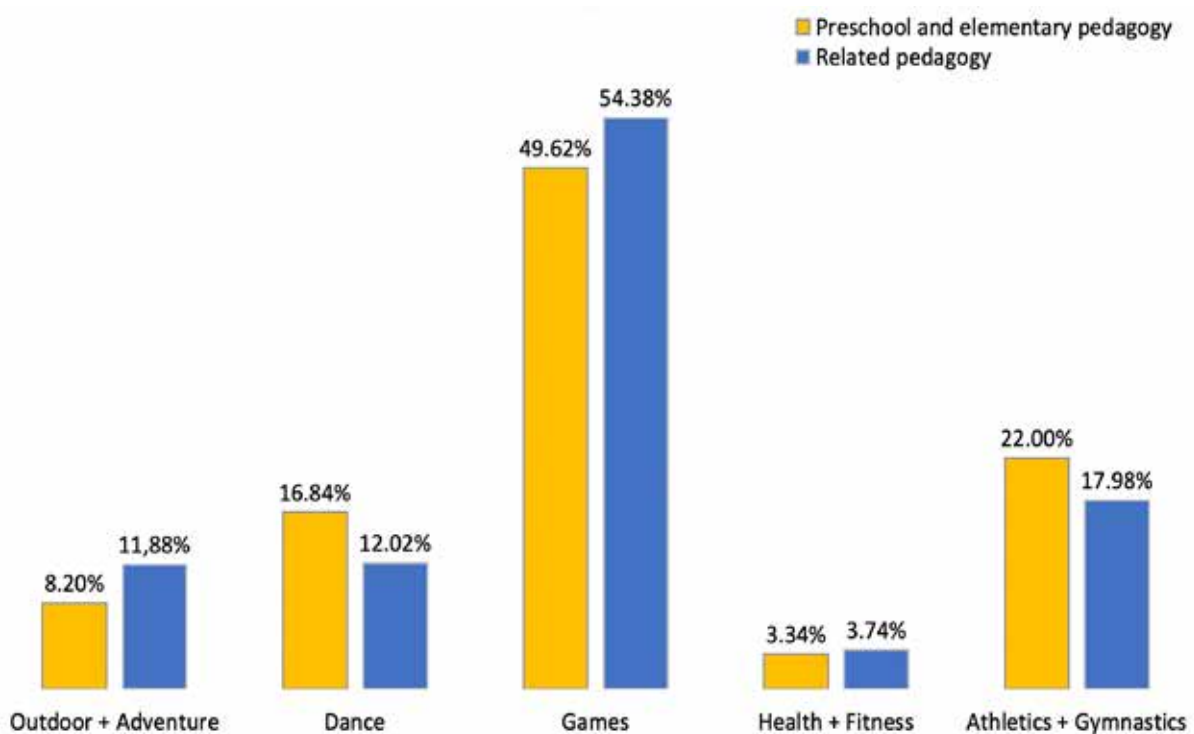


Figure 2. Popular teaching activity in primary physical education

teachers of primary education reveals statistical significance ($p < .01$) ($\chi^2_{(4)} = 13.80$; $p = .007$). Pearson correlation coefficient ($r = .452$) of preschool and elementary pedagogy (50.76%, $n = 660$) indicates moderate positive correlation between popular teaching activity and undemanding teaching activity and moderate negative correlation between popular teaching activity and unpopular teaching activity ($r = -.303$) and demanding teaching activity ($r = -.340$).

Dependence of related pedagogy (49.24%, $n = 640$) between popular teaching activity and undemanding teaching activity is moderate ($r = .390$), as well as popular teaching activity and unpopular teaching activity ($r = -.412$) and demanding teaching activity ($r = -.448$).

Figure 3 illustrates unpopular teaching activity in primary physical education within the survey group ($n = 1300$) and confirms that dancing in

not popular in 526 teachers (40.49%). Health and fitness inscribe 26.05% (n = 338) of teachers. 2.79%-difference is between games (12.86%, n = 167), athletics and gymnastics (10.54%, n = 138) and outdoor and adventure (10.08%, n = 130). Difference between 1300 physical education teachers of primary education reveals statistical significance ($p < .01$) ($\chi^2_{(4)} = 20.05$; $p = .0004$). Pearson correlation coefficient ($r = -.738$) of preschool and elementary pedagogy (50.76%, n = 660) indicates strong negative correlation between unpopular teaching

activity and undemanding teaching activity and strong positive correlation between unpopular teaching activity and demanding teaching activity ($r = .767$). Dependence of related pedagogy (49.24%, n = 640) between unpopular teaching activity and undemanding teaching activity is strong ($r = -.766$), as well as unpopular teaching activity and demanding teaching activity ($r = .896$).

According to 36.05% (n = 468) of teachers, athletics and gymnastics are undemanding teaching activity in primary physical education (Figure 4). 312

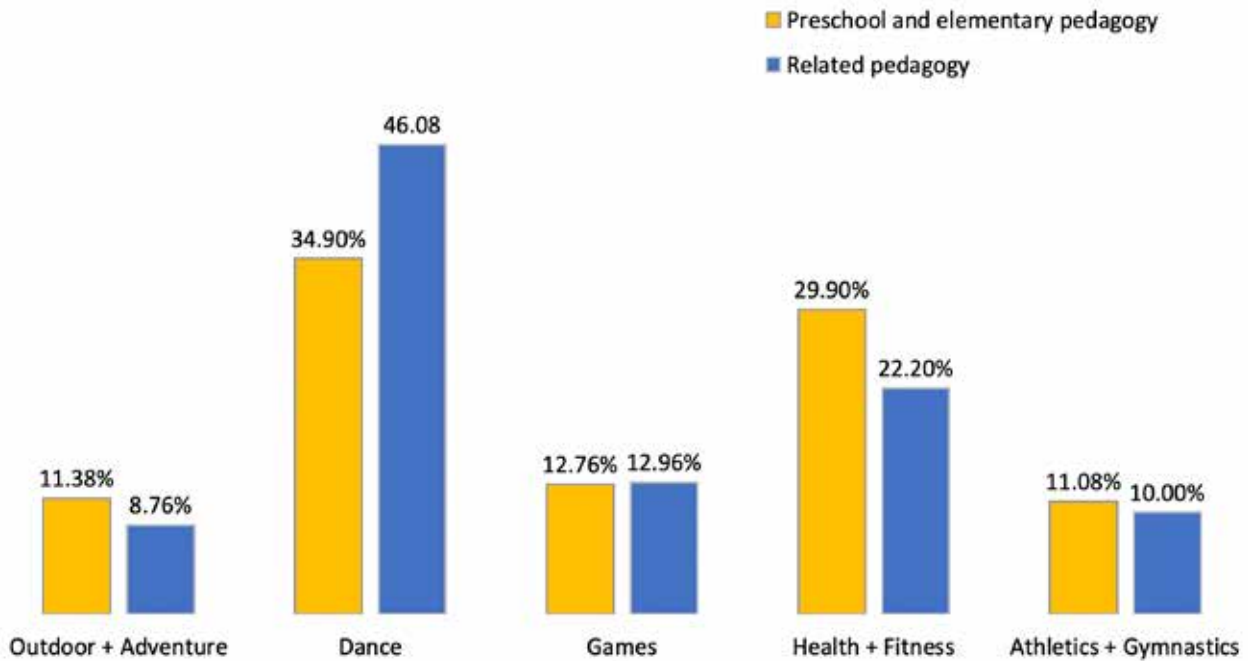


Figure 3. Unpopular teaching activity in primary physical education

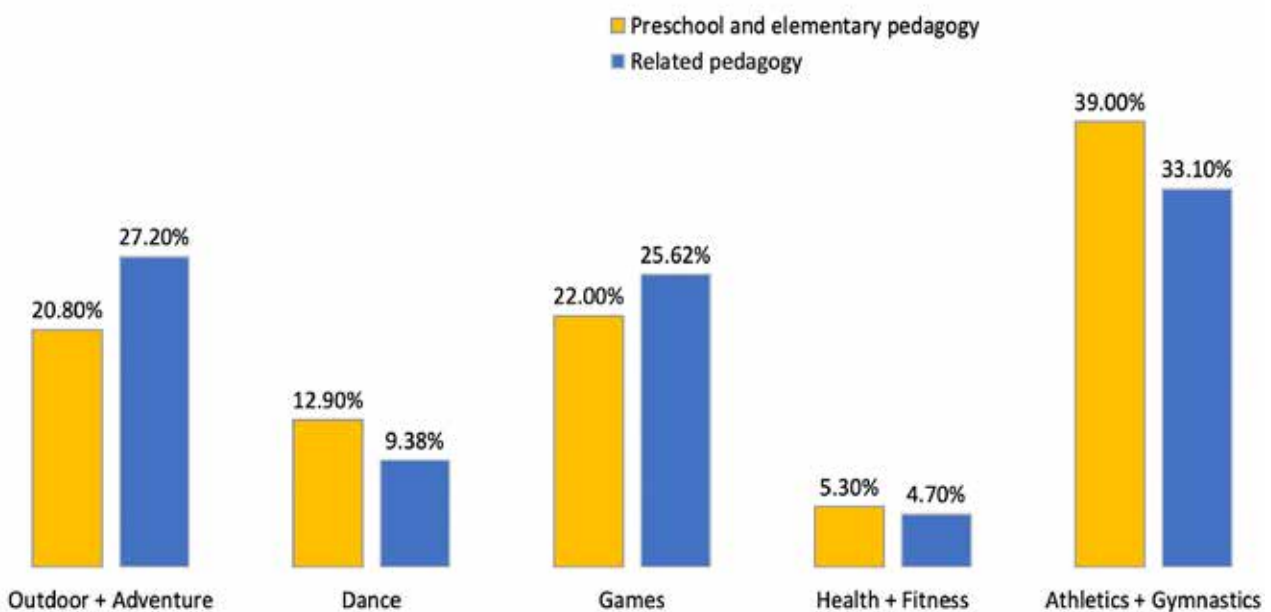


Figure 4. Undemanding teaching activity in primary physical education

teachers (24%) out of 1300 (100%) inscribe outdoor and adventure and 23.82% (n = 310) of teachers consider teaching games as undemanding. Dancing is undemanding in 144 teachers (11.14%), health and fitness in 65 (5%). Difference between 1300 physical education teachers of primary education reveals statistical significance ($p < .01$) ($\chi^2_{(4)} = 14.30$; $p = .006$). Pearson correlation coefficient ($r = -.974$) of preschool and elementary pedagogy (50.76%, n = 660) indicates strong negative correlation between undemanding teaching activity and demanding teaching activity and strong negative correlation between undemanding teaching activity and demanding teaching activity ($r = -.842$) of related pedagogy (49.24%, n = 640).

Demanding teaching activity in primary physical education within the survey group (n = 1300) illustrates Figure 5 and confirms that health and fitness are demanding in 488 teachers (37.55%). 392 teachers (30.20%) out of 1300 (100%) inscribe dance and 14.95% (n = 195) of teachers consider teaching games as demanding. 9.01% (n = 177) of teachers consider athletics and gymnastics as demanding and outdoor and adventure are demanding in 8.29% (n = 107). Difference between 1300 physical education teachers of primary education does not reveal significant difference ($p < .05$) ($\chi^2_{(4)} = 7.14$; $p = .128$).

Discussion

Physical education teachers of primary education (classroom teachers) have an important role in achieving high-quality education. Physical education teachers may occupy a “marginal role” in schools [20], however 63.54% (n = 826) of survey group (n = 1300)

believes that physical education is just as important as any other school subject ($p < .01$). Slovak physical education teachers consider physical education as important as other school subject in schools (80.48%, n = 169) and 17% (n = 36) of them consider physical education more important as other school subjects [21]. Romanian school physical education is perceived as important discipline in curriculum and 75% of teachers consider physical education as important in educational system [22]. Hungarian primary pupils, aged 11 -14 years, consider physical education as important school subject in schools (84.8%, n = 910), however 11.6% (n = 124) of them are of different attitudes [23]. With regards the importance of physical education, 51.6% (n = 148) of students consider physical education “at least” as important as other school subject, however 28.8% (n = 82) of them denote physical education as “not so important” school subject in curriculum. Difference between genders is significant ($p < .01$, $\chi^2 = 20.20$). 60.6% of boys consider physical education “at least” as important as other school subject, compared to 42.6% of girls [24]. Becoming more popular among primary pupils, aged 5 - 11 years [25], devaluation of physical education increases as pupils grow [26]. Existing evidence shows that majority of parents consider physical education as important as other academic subjects. Attitudes range from 54% to 84%, depending on subject being compared [14]. Some believe that physical education is an important (the most) component of curriculum [27].

Games are such a large and integral part of content of physical education curriculum [28]. Incorporating fun and meaningful activity like “traditional” games during physical education can serve as alternative strategy to promote physical activity [29]. According

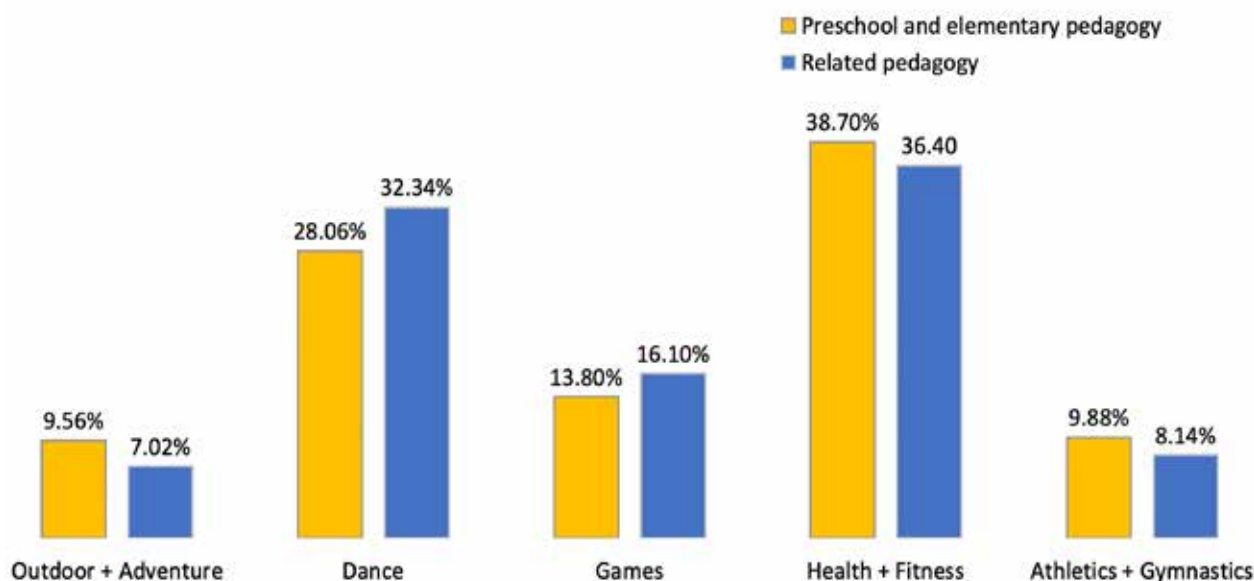


Figure 5. Demanding teaching activity in primary physical education

to 52% (n = 676) of survey group (n = 1300), games are popular teaching activity in physical education. Existing evidence shows that games are popular among male and female physical education teachers in Slovakia (58.02%; n = 653) [30]. Athletics and gymnastics inscribe 260 teachers (19.99%) out of 1300 (100%). Lack of gymnastics instruction is because of physical education teachers' strong focus on other content and their lack of competence and confidence in teaching gymnastics [31]. Many physical education teachers have lack of dance experience and confidence in teaching dancing in school curriculum. 392 teachers (30.20%) out of 1300 (100%) consider teaching dancing as demanding and unpopular (40.49%, n = 526). Almost no attention is given to how physical education teachers approach creative aspects in dance teaching [32]. Teachers of physical education devote almost no time to dancing because they cannot dance themselves and as consequence are limited (pedagogical) in teaching [33]. Outdoor education has positive impacts for children and interest among teachers in this teaching method is growing [34]. 312 teachers (24%) out of 1300 (100%) consider outdoor and adventure as undemanding and popular in 10.08% (n = 130) of teachers. The present study was aimed at analysing and comparing teachers' preferences of teaching primary physical education in Slovakia, therefore it

is problematic to compare our results with available foreign literature, however it is important to realise the interconnectedness of "theory and practice".

Conclusions

Current curriculum allows primary (classroom) teachers partial freedom in choosing the content of education to meet the learning needs of pupils, in consultation with their wider school community. Current physical education curriculum inspires pupils to excel and succeed in primary physical education and enhance their lifelong interest in physical activity. We consider it important to devote extra attention to activity of dance and health in terms of future training of physical education teachers of primary education. Demanding factor with unpopularity of them reflects in practice in the teaching quality of primary physical education.

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Conflict of interest

The authors have no conflicts of interest to declare.

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