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## PERSPECTIVE OF PRESCHOOL EDUCATORS ON PHYSICAL EDUCATION: OVERCOMING CHALLENGES AND OFFERING RECOMMENDATIONS

## POGLEDI VZGOJITELJEV PREDŠOLSKIH OTROK NA ŠPORTNO VZGOJO: PREMAGOVANJE IZZIVOV IN PRIPOROČILA

### ABSTRACT

**Background:** Incorporating habitual physical activity and building fundamental motor skills in preschool age indeed form a foundation for lifelong health and a healthy lifestyle where qualified preschool teachers can play a pivotal role in influencing this process. **Purpose:** The presented study aimed to acquire knowledge about preschool teachers' interest in teaching physical education. **Methods:** The study was conducted in March 2024, involving 112 female preschool teachers from 31 preschools across the Eastern part of Slovakia. An anonymous questionnaire likely encourages open and honest responses, contributing to the reliability of the data. **Findings:** Even though most teachers are aware of the importance of physical education in children's lives, and many of them are physically active themselves, its implementation is limited by the content of the State Education Program (ISCED 0), the lack of methodological materials and often the negative attitude of the children's caregiver. **Conclusion:** The results confirmed the need to re-evaluate the content of ISCED 0, especially in the sphere of required competencies, as well as the adjustment of study programs for early child education, where physical education and motor skills development are marginally significant. Furthermore, integrating non-traditional methods, such as bracing and sauna, can further diversify the physical education curriculum and contribute to a more comprehensive and dynamic approach that supports children's health. These methods add variety and motivation, making the learning experience more engaging for the children and the teachers.

**Keywords:** the role of the preschool teacher, children's motor development, content of education, forms, and methods of physical activity

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### IZVLEČEK

**Ozadje:** Vključevanje redne telesne dejavnosti in razvijanje temeljnih gibalnih sposobnosti v predšolskem obdobju predstavlja temelj za zdravje in zdrav življenjski slog, pri čemer imajo usposobljeni vzgojitelji ključno vlogo pri vplivanju na ta proces. **Namen:** Študija je bila usmerjena v pridobivanje vpogleda v interes vzgojiteljev za poučevanje vrtčevske športne vzgoje. **Metode:** Študija je bila izvedena marca 2024 in je zajela 112 vzgojiteljic iz 31 vrtcev z vzhodnega dela Slovaške. Anonimni vprašalnik je verjetno spodbudil odprte in iskrene odgovore, kar prispeva k večji zanesljivosti podatkov. **Ugotovitve:** Čeprav se večina vzgojiteljic zaveda pomena športne vzgoje v otrokovem življenju in je veliko njih tudi samih telesno aktivnih, je izvajanje gibalnih dejavnosti pogosto omejeno zaradi vsebine državnega izobraževalnega programa (ISCED 0), pomanjkanja metodološkega gradiva in pogosto tudi zaradi negativnega odnosa otrokovih skrbnikov. **Zaključek:** Rezultati potrjujejo potrebo po ponovni presoji vsebine ISCED 0, zlasti na področju zahtevanih kompetenc, ter po prilagoditvi študijskih programov za zgodnje izobraževanje predšolskih otrok, pri katerih sta športna vzgoja in razvoj gibalnih sposobnosti pogosto zapostavljena. Poleg tega lahko vključevanje netradicionalnih metod, kot sta razgibavanje z oporo (bracing) in savnanje, dodatno popestri kurikulum športne vzgoje ter prispeva k celostnemu in dinamičnemu pristopu, ki spodbuja otrokovo zdravje. Te metode prinašajo raznolikost in dodatno motivacijo, zaradi česar je učna izkušnja bolj privlačna tako za otroke kot tudi za vzgojitelje.

**Ključne besede:** vloga vzgojiteljev predšolskih otrok, gibalni razvoj otrok, vsebina izobraževanja, metode in oblike telesne dejavnosti

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<https://doi.org/10.52165/kinsi.31.2.207-218>

## INTRODUCTION

Physical education in preschool plays a significant role in upbringing and education, assisting in physical, motor, psychological, and social development. (Junger and Palanská 2017, Cheung 2020 et al.). Multiple investigators substantiated the relationship between physical activity (PA) and the development of motor skills (Tanaka et al., 2012; Chen 2013; Larsen et al., 2015) and the subsequent interconnection between specific locomotion skills and other manipulative proficiencies (Haibach et al., 2011) that is the foundation for individual participation in diverse forms of PA (Wang et al., 2022).

PA contributes to children's health, building PA habits developed in childhood tend to persist into adulthood (Larsen et al., 2015). In addition to genetics, two determinants in particular, the family and the preschool environment, can play a significant role in achieving the required level of a child's physical, motor, psychological, and social development. However, we are unable to influence education in the family directly. Nevertheless, we can influence the focus and content of the educational system managed by the state, primarily through a well-prepared and planned program. In the conditions of ongoing social changes in the Slovak Republic in the last three decades, there have been several adjustments to the educational program aimed at preschool children. The search for an educational principle that would become a modern fundamental factor in preschool education in the current social climate of the Slovak Republic was inspired by new insights in psychology that brought reform and respect for the child's needs, encouragement for the child's own activity, requirements for individualization and freedom of the child (Dvořáková, 1998). This was also the foundation for creating the new State Education Program (ŠVP) by the International Standard Classification of Education, ISCED 0, valid in the Slovak Republic since 2008, where the entire concept of the educational process moves in this direction, primarily by applying the principle of the child's activity and expanding opportunities for children's activity which is not indicative of teacher inactivity. The teacher's activity in the non-directive management of the educational activity becomes a crucial factor in addition to the program itself. It consists of the premeditated creation of conditions for the effective self-development of the child's personality, which is impossible without the child's activity (Junger, 2009).

However, the most significant change in the educational activity through ISCED 0 is its content, which aims to achieve the set competencies. While the 2008 initiative "Program for the Education and Training of Children in Pre-school," physical education asserted its

independent position. The new ISCED 0 program from 2008 includes physical education exclusively as a component of the seven competencies – (psychomotor competencies). That led the ISCED 0 program to significantly deviate from the PA standards developed by the National Association for Sport and Physical Education in the USA (NASPE 2002), which was generally accepted in most countries in the world (Finn et al., 2002; Burdette et al. al., 2004; Pate et al., 2004; Reilly et al., 2006; Oja et al., 2010; Sigmund & Sigmundová, 2011; Van Cauwenberghe, 2012). Investigation (Junger & Palanská, 2016) compared two guidelines, ISCED 0 and NASPE 2002, rewilded that the PA load implemented in the ISCED 0 framework is insufficient in amount. Additionally, it is conducted subliminally, i.e., in the subthreshold zone of intensity. Due to the criticism within the professional community at that time, ISCED 0 was revised in 2016. To that end, the child's physical and motor skills development was included in the Health and Movement educational section within its third section – Physical Activity and Physical Fitness. As a result of the previous conclusions about the position and importance of the kindergarten teacher in shaping the child, we also formulated our research problem in this direction. The goal of the presented research was to gain knowledge regarding the implementation of individual ISCED 0 educational areas within the daily program of the monitored kindergartens and to become more familiar with the teachers' interest in teaching physical activities within individual forms of daily activities as well as in the educational area of Health and Physical activity.

## METHODS

The investigation was carried out in March 2024. An anonymous questionnaire was distributed online to 112 female teachers from 31 preschools in the Košice district (region of the Slovak Republic), whom we contacted on the social network Facebook and via the email addresses of individual kindergartens. 112 teachers from 31 kindergartens sent in their responses. They were experienced teachers with an average age of 38.5 years. Over one-third of the respondents (37.5%) had a university degree and 62.5% had a secondary education. In terms of length of teaching experience, 36.2% of the teachers had more than 21 years of experience, 13.9% had 11-20 years of experience, 8.4% had 6-10 years, and 41.6% had less than 5 years of experience.

The questionnaire, consisting of 18 questions, three of which concerned personnel (age, education, experience), corresponded in its structure and content to the content of the ISCED

0 SVP. That was done to ensure the clarity of the alternatives offered in response to the program's implementation regarding the proclaimed importance and popularity of teaching individual areas. Special emphasis was placed on teaching PA. At the end of the questionnaire, we asked about their relationship to movement and interest in their PA. The ethics board at UPJŠ authorized the study in Kosice, identified as 3/2023. Descriptive statistics and Spearman's rank correlation test were implemented for data processing.

## RESULTS

At the onset of the research inquiry, we were interested in which of the educational fields of ŠVP ISCED 0, by their perspective, were the most important for the child's development (Fig. 1). More than half of the respondents, regardless of their age, assigning this position to the Language and Communication. The area of Health and Physical Activity was positioned only in third place, as older teachers mainly consider it essential. The answers to the question of which educational areas they prefer to teach were the opposite. There is the utmost interest in

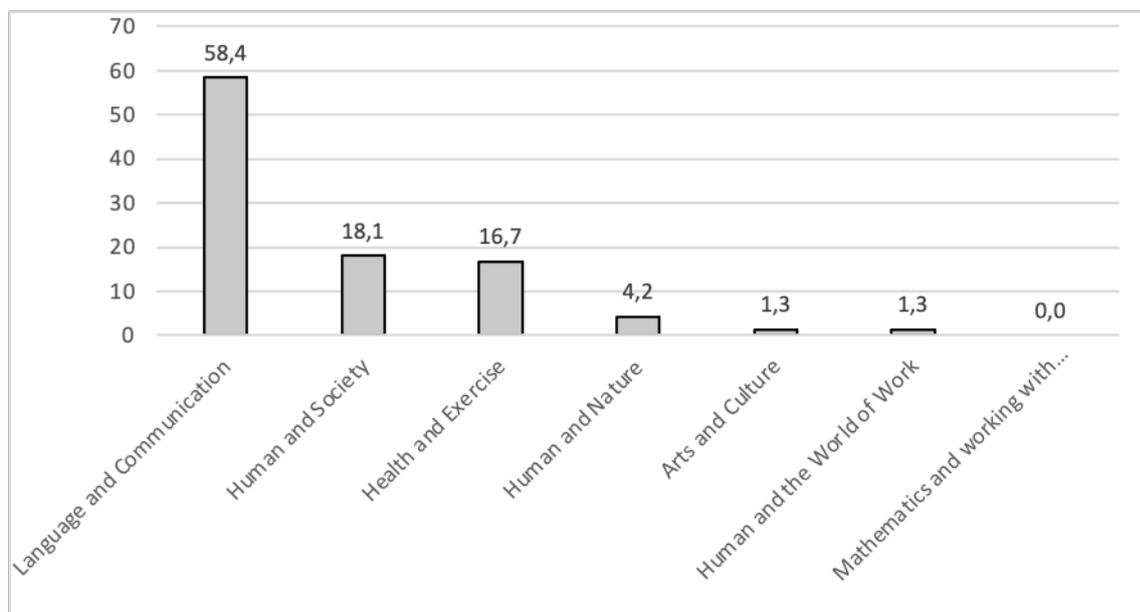


Figure 1. The importance of educational areas on child development in early child education (all values are presented in percentages).

Figure 1 illustrates that Teaching Art and Culture (27.8%) is followed by the area of Health and Physical activity (23.6%). Furthermore, according to the most important, Language and Communication and Human and Society, the first two were placed at the end of interest in their teaching (5.6% and 7.0%, respectively). Neither their age nor the length of their teaching experience significantly impacted the teachers' responses. The difference in responses

regarding significance and popularity was also statistically confirmed by the negative correlation  $r = -0,402$ . Within the framework of questions related to Health and Physical Activity, 72.2% of the teachers ranked first in Physical Activity and Physical Fitness. With a significant distance, with the importance of 13.9%, they stated Hygiene and Self-service Activities and Health and a Healthy Lifestyle. In this context, we were interested in which activities listed in the Physical Activity and Physical Fitness sub-field the teachers prefer to teach (Fig. 2). The most popular physical activities were interactive games that combine physical activity with music enjoyment. Teachers' least favorite is running, including running over obstacles. In a positive sense, most teachers (83.4%) include morning exercises in their daily routine, and 15.3% do so at least sporadically. Only 20,9% of teachers intermittently emphasize bracing and sauna as crucial activities for enhancing children's health.

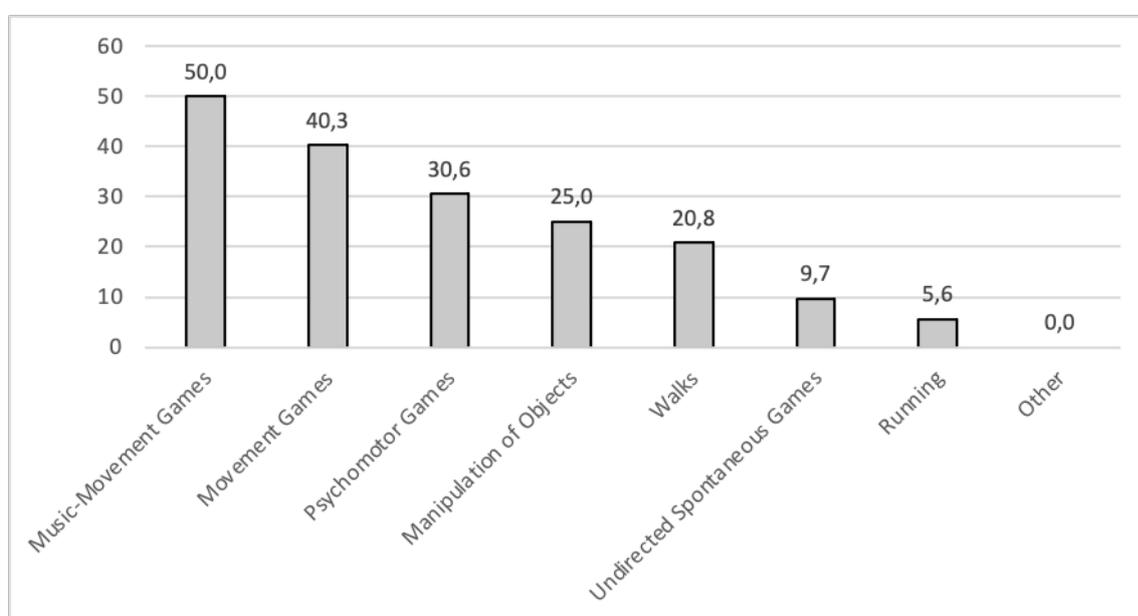


Figure 2. Preschool teachers' preferences for physical activity (all values are presented in percentages).

The use of non-traditional teaching aids for physical activity is directly linked to physical education instruction. Especially when working with children, the tools used play a vital role as a motivator. Only one-third of respondents demonstrate creativity, with half doing so occasionally and others not. When analyzing the shortcomings in teaching physical education in pre-primary education, the respondents had the opportunity to provide additional answers. The most frequently cited response was the lack of favorable conditions or little space for activity (52.8%) and the associated lack of funds to procure the necessary tools and equipment (30.6%); similarly, a limited choice of instructional material for physical activities

for exercise which was stated by (20.4%) of respondents. Surprisingly, 13.9% claim the caretaker's negative attitude towards the PA, along with the child's limited interest.

Where to instigate change in this specified domain, it is essential to equip teachers for its implementation, starting with their education.

Presented investigation discovered that there should not be an issue, as up to 93.1% of teachers express interest in broadening their health and physical education knowledge in a preschool setting. Even those who stated that they were satisfied with the level of methodological support are still interested in enhancing their knowledge in this area. Unfortunately, those who are satisfied with methodological support are less than a third, while the rest evaluated this negatively. As noted before, we have discussed the impact our motivation and participation in PA have on others. Correspondingly, we inquired about teachers' activities during their leisure time. The response aligns with our prior understanding; the primary activity was rest (26.4%). Surprisingly, physical activity and sports were ranked closely behind (20.9%). It was verified by using an ordinal scale from 1-5 that female teachers predominantly exhibit a very positive attitude toward sports activity, with (36.1%) being very positive and (37.5%) positive. As the correlation involves deliberate preparation, we were curious about their engagement in sports activities, referring to sustained sports activities lasting at least 30 minutes (Fig. 3). The most prominent group includes teachers who engage in this activity 1-2 times a week, which might be deemed insufficient for personal development but holds significant importance based on their beliefs. Less than one-fifth of teachers are inactive in this regard.

Comparing physical activity with the acknowledged importance of individual educational areas of ISCED 0 provides an insightful observation. Those teachers who regularly participate in sports or would like to participate in sports activities attribute the most significant importance to *Health and Physical activity*. Furthermore, this was also confirmed in terms of their relationship to sport and their favorite educational area. Half of the teachers with a positive relationship with sports showed *Health and Physical activity* among their favorite educational areas, followed by *Man and society* and *Art and culture*.

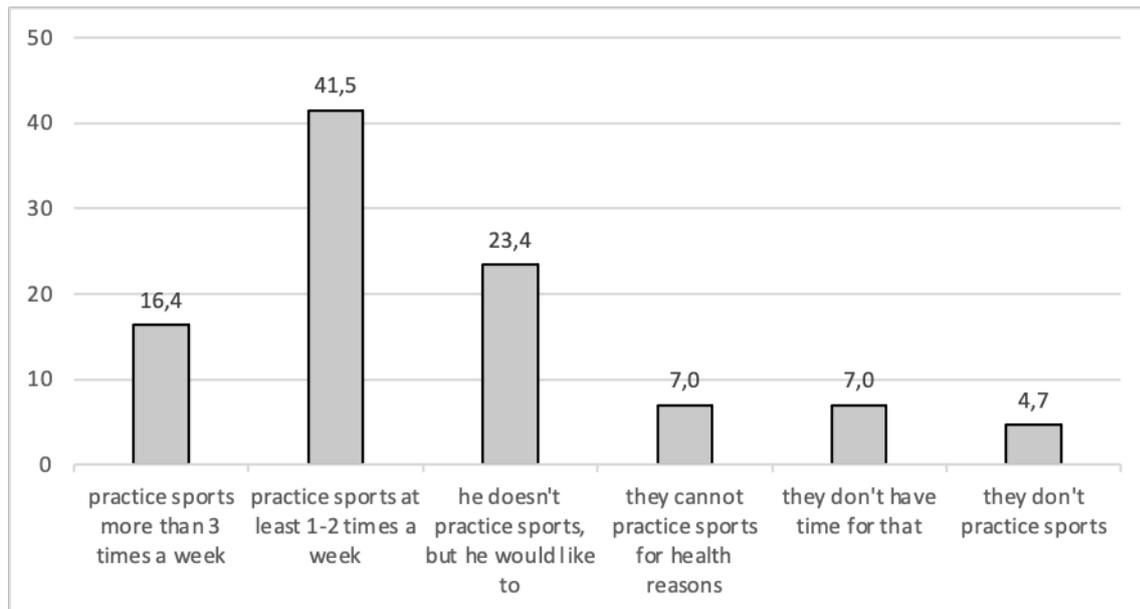


Figure 3. Sport and Recreation activities of the preschool teachers (all values are presented in percentages).

## DISCUSSION

As mentioned above, the critical role in early childhood education is played by the ŠVP ISCED 0, which focuses on fostering a child's holistic development through play-based learning and essential skills acquisition. Such a framework outlines the goals, content, and guidelines for educational programs at the preschool level. It serves as a foundation for creating specific schools' programs and developing teaching materials tailored to the needs of preschoolers, providing a structured approach to early childhood education (ISCED 0, 2016).

The entire content of early childhood education is divided into seven educational areas in ŠPV ISCED 0: 1. *Language and communication*, 2. *Mathematics and working with information*, 3. *Human and nature*, 4. *Human and society*, 5. *Human and the world of work*, 6. *Art and culture*, 7. *Health and physical activity*.

Where organizational upbringing is carried out through the various forms of daily activities, these activities include *games and children's choices activity*, *health exercises*, *educational activities*, *outdoor activities*, and *activities focusing on life management such as (personal hygiene, eating, and resting)*.

Understanding the preschool teacher's perspective on the importance of different areas for a child's development and comparing it with their preferences in teaching can provide valuable

insights. It allows for reflecting on the alignment between their educational priorities and personal preferences, contributing to effective teaching strategies.

It was notable that, from the importance perspective, the child's position in society and ability to communicate takes precedence. However, regarding teaching interest, the focus seems to be on art- combining physical activity with art enjoyment connected with the child's health and physical activity. The paradox is that none listed the area of *Man and Nature* among their favorite educational activities. The observation aligns with personal experiences from seminars with preschool teachers, highlighting a divergence between the professional and social perspectives emphasized in educational programs and the practical interests of teachers and children. This suggests a potential disparity between theoretical priorities and the preferences and inclinations in activities, health promotion, and physical activity that are natural to the child.

Notably, within the health and physical activity area, there is a clear emphasis on physical activity and PA skills development. The art - that combine physical activity and game activities are the most popular despite potential space, material, and methodological equipment challenges. The need for more resources due to insufficient investment in education could pose practical constraints on implementing these engaging and beneficial activities. Addressing such resource limitations could enhance the overall effectiveness of health and physical activity programs in preschool education. It is encouraging that two-thirds of teachers demonstrate creativity and willingness to use non-traditional aids and equipment to overcome resource limitations. The fact that almost all teachers express interest in expanding their knowledge in physical education and health is a positive indicator for future improvement. However, the negative attitudes of parents towards PA, coupled with the limited interest of children, could be improved in promoting a holistic approach to health and physical education. Addressing these parental and child perspectives may be crucial for fostering a more supportive environment for PA in early childhood education.

Despite the well-established scientific evidence emphasizing the importance of daily PA for children's health (Hansen, 2005; WHO, 2011; Oja et al., 2010; Timmons et al., 2012), some families still perceive PA negatively. The influence of parents on children's activity, as confirmed by previous research (Finn et al., 2002; Burdette et al., 2004; Chen & Zhu, 2005; Devjak et al., 2013; Junger, 2014, Junger and Palanská 2017; Huang et al., 2022) underscores the crucial role parental attitudes play in shaping children's behavior. The link between the implementation of PA in preschool and the teachers' level of PA has been scientifically

confirmed (Chen & Zhu, 2005; Cheung, 2020; Huang et al., 2022), and our findings support this connection (Junger & Palanská, 2017). Nevertheless, despite varying levels of personal PA among teachers, their positive attitude toward PA and sports can influence and motivate children, where teachers' convictions and motivations play a crucial role in shaping children's perceptions and engagement in PA (Devjak et al., 2013).

Observing a positive correlation between teachers' importance to health and PA and their engagement in sports and PA is compelling. This connection highlights the potential impact of a teacher's active lifestyle. The alignment between personal practices and professional priorities can contribute to a more effective and authentic approach to promoting a healthy lifestyle among children. As we have already stated in the results section, one's own sports activity also plays a very significant role in recognizing the importance of individual ISCED 0 educational areas and choosing the most favored. Moreover, universities implementing early childhood education and elementary education study programs should respond to this, allowing students to better prepare for future teaching careers within their practical subject skills. In the current absence of such practical subjects, students and future teachers are less likely to understand the importance of PA in their lives as well as in the future development of children.

Our findings indicate that preschool teachers are aware of PA's significance in early childhood development. However, several external and systemic factors limit the practical implementation of PA in preschool settings; these include Restrictions within the State Educational Program (ISCED), which provides limited space for flexible or extended PA integration—a lack of adequate methodological materials to support teachers in delivering high-quality PA classes. Parents often do not prioritize or support active engagement in PA. Finally, the potential for innovative approaches (e.g., integrating PA through play-based learning and integrative thermoregulation strategies), which are not yet widely applied but appear promising, are factors that limit PA. Based on these insights, our conclusion that while awareness is present, implementation is hindered by structural and contextual barriers is advisable and is well justified by the evidence.

### **Strengths and limitations**

The presented research has several strengths. Using a cohort sample (education, experience) ensures a representative cohort group for analysis. Anonymity encourages honest responses, and the freedom to formulate precise questions enhances objectivity. The fact that the

obtained results do not require subjective interpretation adds credibility to the presented findings, contributing to the overall robustness of the presented research. In relation to the weaknesses can be incorporated recognition that answers may reflect teachers' lifestyles and attitudes towards PA. Additionally, if there are indications of low-quality institutional education impacting the responses, it underscores the need to improve teacher training programs. Considering these aspects can help refine the interpretation of our research findings and guide future steps for enhancing teacher preparation and PA promotion in an education setting.

## CONCLUSION

The presented research results highlight a need for re-evaluation of the current ISCED 0 program, particularly in the area of required competencies. The observation that a child's entire physical and motor development is treated merely as a component rather than a distinct objective underscores a potential divergence. Recognizing its importance as an irreplaceable component of development and education suggests a more prominent role in the program, possibly as a standalone objective. It can be stated that structured study programs of early child education play a significant role in sport orientation, where prospective teachers do not have the opportunity to acquire the basic skills necessary for future teaching in kindergarten in practically oriented sport related subjects. That is one of the most important requirements also in connection with the role played by teachers in selecting and implementing individual areas of the ISCED 0 educational program. From a motivational point of view, to increase the effectiveness of education through physical activity, it is advisable to pay more attention to the use of non-traditional forms and aids as well as cold adaptation, or sauna bathing of children within the educational program.

Presumably, the ISCED 0 ISCED ECE set up in this way is also one of the reasons why female teachers attach greater importance to children's education to theoretical areas focused on the child's ability to communicate and child position in society, even though they prefer to teach areas focused on the art- that combine physical activity with art enjoyment. Exploring non-traditional forms and methods can motivate participation and effectiveness in PA. However, we emphasize a holistic approach to enhancing the child's health. Strategies such as bracing, and sauna and diverse and engaging PA contribute to a comprehensive program. This approach addresses physical well-being and promotes a more appealing and holistic health improvement for children.

## Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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