

CHILDREN'S PHYSICAL EDUCATION IN OUTDOOR SPACES IN PRE-SCHOOL: NEEDS AND EXPECTATIONS

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Annotation. This paper analyses the quality and diversity of outdoor spaces in pre-schools in order to assess how well they meet the needs of the kindergarten community for children's physical activity education. Outdoor spaces in kindergartens are essential for children's physical, emotional and social development, and their quality, safety and adaptability are crucial for children's holistic development. The results of the study reveal the expectations and satisfaction of the kindergarten community with the provision of outdoor spaces and assess the impact of these spaces on children's physical activity.

Keywords: outdoor spaces, pre-school education, physical education

INTRODUCTION

The image of a pre-school and the content of its curriculum are often of key importance to parents when choosing an educational establishment. One of the important factors that can influence the decision is the institution's attitude towards children's physical education and the use of outdoor spaces to promote active participation. Every educational establishment should strive for distinctiveness and find ways to attract children and their parents, which helps to maintain its relevance and sustainability. A kindergarten that actively invests in outdoor spaces for children's physical education creates a more attractive image. As a service provider, it is also important for a pre-school to apply management principles effectively and to respond to the needs of society and parents. In a changing environment, it becomes an innovator, providing opportunities for children to explore, move around and be physically active in a natural environment, with the community as the main driving force behind this process.

The Standards for Educational Provision (2011) state that learning environments should be designed and developed according to the principles of functionality, modernity, aesthetics, human safety and ergonomics. The basic health safety requirements for the design of schools and the organisation of the educational process are laid down in the *Lithuanian Hygienic Standard HN 75:2016 "General health safety requirements for the implementation of pre-school and pre-primary education programmes"* (2024), which recommends that the physical school environment should be designed in accordance with health safety principles. While *the Standards for Educational Equipment* focus on the teaching aids necessary to implement the content defined in the curricula, *the Lithuanian Hygiene Standard HN 75:2016* focuses on the requirements related to child safety and health. However, in order to ensure a quality education process, it is necessary to take both documents into account in an integrated manner and to use them as a basis for designing functional spaces suitable for children's outdoor physical activity education.

The problem of this paper concerns the quality and diversity of outdoor spaces for physical activity in pre-schools to meet the needs of the kindergarten community. Well-designed and varied physical education spaces can provide significant benefits for children's physical and emotional development by promoting healthy lifestyles and skills development. However, there are questions about the extent to which these spaces meet the expectations and requirements of the kindergarten community in terms of functionality, safety and variety. It is therefore necessary to analyse how the kindergarten community perceives the existing physical education spaces, their quality and the possibilities to improve them according to the children's educational needs. **The study focuses** on the opinion of the pre-school community on the suitability of outdoor spaces for children's physical education.

The aim is to determine the opinion of the pre-school community on the suitability of outdoor spaces for children's physical education.

Objectives:

1. To describe the meaning of the environment for children's physical education from a theoretical point of view.
2. To reveal the views of the pre-school community on the need for outdoor spaces and their suitability for children's physical activity education.
3. To identify the benefits of outdoor spaces in the context of promoting children's physical education and well-being.

Methods: analysis of scientific literature, questionnaire survey.

THE IMPORTANCE OF CHILDREN'S PHYSICAL EDUCATION ENVIRONMENT: A THEORETICAL PERSPECTIVE

The Law on Sport of the Republic of Lithuania (2024, p. 3) defines the concept of *physical activity* as “physical activity of a person aimed at strengthening health, improving physical and mental qualities and skills, without the aim of preparing for and/or participating in high-level sports competitions, as well as activities aimed at educating the public about sport, physical activity and the improvement of health that can be achieved by such activities”. According to Adaškevičienė & Strazdienė (2013), *physical education* of preschool and pre-school children is understood as a scientifically based pedagogical process, where the educator purposefully influences the pupil on the basis of the values of physical culture, communicates in order to implement a certain programme of development of the physical and mental state of the personality (Adaškevičienė & Strazdienė, 2013). Physical activity in pre-school education institutions is implemented in accordance with the *Guidelines for the Pre-school Curriculum* (2024) and the *General Framework for Pre-school Education* (2022).

In order to achieve the objectives set out in the curricula for pre-school and pre-primary education, it is necessary to organise educational activities appropriately. In accordance with Article 12(1) of the *Law of the Republic of Lithuania on Sport* (2024), in the implementation of pre-school and pre-primary education programmes, children must be provided with active physical activity for at least two hours a day throughout the entire period of education. Therefore, the provision of sports facilities for physical activity in pre-school education is of great importance for the implementation of the programmes.

D'Elia et al. (2020) stress that movement is a particularly important developmental function in the pre-school and pre-primary years. This age is characterised by a greater receptivity to change and learning compared to the later stages of life (adulthood and older age). The above-mentioned researchers argue that the structuring of functional movements and the development and strengthening of motor skills are of particular importance at this age. Functional movements include the biological structure of the body, balance, posture, coordination, spatial and temporal awareness, muscle tone and relaxation. The effects of physical activity education are not only related to motor skills, but also to children's cognitive, emotional, relational and social development. Through movement and physical and sporting activities, children develop, stimulate and improve the functionality of afferent sensory pathways.

Thus, it can be argued that physical education in pre-school and pre-primary education enhances cognitive processes and promotes the development of basic (attention and memorisation), intermediate (analysis, processing, choice) and higher cognitive functions (intuition, convergent and divergent thinking). Moreover, Beliauskienė & Bagdonas (2016) point out that skills and habits formed in the preschool and pre-primary years are the most durable and long-lasting.

The pre-school setting is the main environment in which pre-school and pre-primary children spend most of the day and have opportunities for physical activity. According to Senol (2021), physical education in pre-school settings is a key health promotion tool, allowing for the simultaneous promotion of physical activity habits and healthy lifestyles in large numbers of children. Although children of this age are often naturally inclined to move, their physical movement skills do not develop automatically. As Cheung (2020) points out, pre-schools play an important role in ensuring and promoting children's physical education as this is where they spend most of their time. Research shows that physical activity is a prerequisite for children's development and that regular and systematic physical education activities are therefore essential in pre-school settings. This not only contributes to promoting physical activity in children, but also lays the foundations for healthy lifestyle habits.

The outdoor educational environment is an important component of education, where the overall educational baggage is directly accumulated. It develops the child's cultural identity, gives meaning to self-directed learning, fosters a love of sport and a desire to be physically active, and creates favourable conditions for the development of a self-conscious personality (Burškaitienė & Vilkonis, 2012). A sports ground can contribute to the quality of physical activity classes and other events, and help to shape pupils' attitudes towards movement, exercise and trying out different sports. It is an excellent place for community gatherings and joint sport and health events. The outdoor educational environment of an educational establishment should be vibrant, humanistic and spiritual, giving meaning to the culture, individual needs (including physical activity) and creativity of children. The insights of Strazdienė and Burkė (2019) have highlighted features of the educational environment that can be used to assess outdoor environments in pre-school education. Such environments should be age-appropriate, flexible, dynamic, open, mobile and functional, sustainable and material. It should also have barriers, but be safe, comfortable and playful, all of which encourage children's natural movement.

RESEARCH METHODS AND ORGANISATION

In order to determine the opinion of the preschool community on the suitability of outdoor spaces for children's physical education, a survey was carried out in Panevėžys Nursery School "Žibutė" on 02-22 January 2024, using a questionnaire survey method. The general population of the study consisted of 31 employees and 79 families (110 respondents in total). The survey used a global sampling approach, combining the nursery staff and family respondents into a common master set (N = 110). The sample size was determined using the Paniotto formula:

$$n = \frac{1}{\Delta^2 + \frac{1}{N}}, \tag{1}$$

where: n – the sample size; Δ – the margin of error; N – the general population.

Based on this, the minimum sample needed to ensure a margin of error of 5% is estimated to be 87 respondents:

$$n = \frac{1}{0,05^2 + \frac{1}{110}} \approx 87, \tag{2}$$

Respondents were randomly selected from a general pool, irrespective of their initial affiliation to preschool staff or family groups. The survey questionnaires were submitted electronically using the online platform www.manoapklausu.lt. The survey was completed by 87 respondents (corresponding to the calculated minimum sample) who answered the survey questionnaire. Quantitative analysis of the collected data was carried out using descriptive statistical methods.

The study adhered to the ethical principles of scientific research: respect for personal privacy, confidentiality, anonymity, non-maleficence, fairness and goodwill.

RESULTS

The study to investigate children's physical education in the outdoor spaces of the kindergarten “Žibutė” was actively participated in by the administrative staff (5), pre-school and pre-primary teachers (14), other staff (9), as well as by the majority of the families of the children attending the kindergarten (68). The survey sample meets the criteria of representativeness and reliability. The representation of all sides of the community in the study suggests that the study has produced objective and reliable results.

Each school and its local community is unique and has its own specific needs for a physical learning environment. In order to determine whether the facility's spaces meet the needs of the nursery community for physical activity education, the participants were asked to rate the quality and variety of the outdoor spaces of the pre-school facility. Just under a quarter of the community members are fully satisfied with the existing variety of outdoor spaces, while almost two thirds are somewhat satisfied (see Figure 1). However, a tenth of the respondents have significantly different opinions. They are critical of the number and variety of outdoor spaces (playgrounds, facilities, etc.) available in the nursery, and note that they are not or only partially satisfied with the current situation.

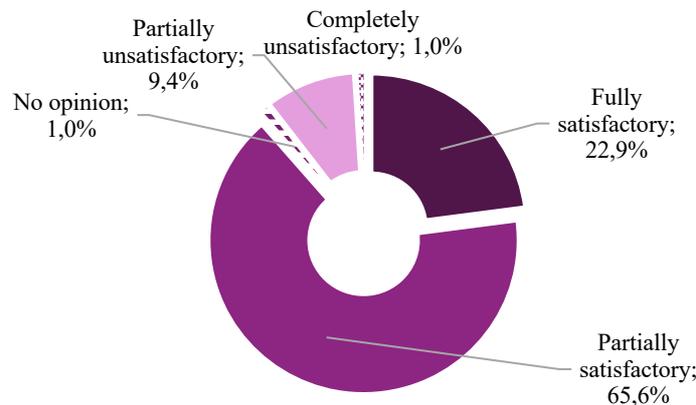


Figure 1: Satisfaction with the variety of outdoor spaces

Adapted spaces for physical education become one of the educational factors that contribute to improving the quality of education and the school's microclimate. High-quality outdoor spaces increase the efficiency of activities, generate positive emotions, develop taste and improve the quality of life. Almost two thirds of the respondents say they are somewhat satisfied with the current quality of the nursery's outdoor spaces, while just under a quarter say they are completely satisfied. However, almost one in nine community members surveyed are either partially dissatisfied or completely dissatisfied with the quality of the current outdoor spaces in the nursery (see Figure 2).

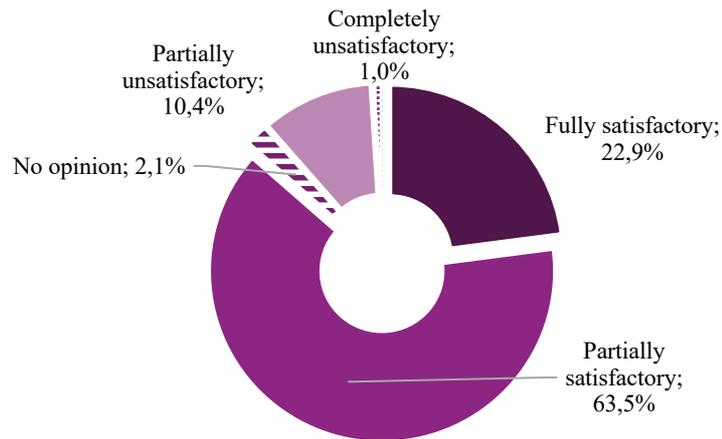


Figure 2: **Satisfaction with the quality of outdoor spaces**

Every pre-school has a duty to ensure the safety of children. Therefore, physical activity activities must be safe and fun for all children at play, whatever their age or ability. The provision of appropriate outdoor spaces would help to achieve this. This is the perception of more than two thirds of respondents (67.7%), who indicate that a sports field would be the most useful in ensuring children's safety (see Figure 3). Slightly more than half (53.1%) of the respondents consider that a sports field would significantly improve the quality of education. This shows that the importance of such a facility is primarily related to the well-being of children and their opportunities for active participation. Exactly half of the respondents indicated that a sports field will allow for a variety of mobile and sporting games, which will give children more choices for active activities. Social aspects such as the organisation of events (15.6%) or a place for community gatherings were considered less important, with the latter aspect being mentioned very rarely (3.1%).

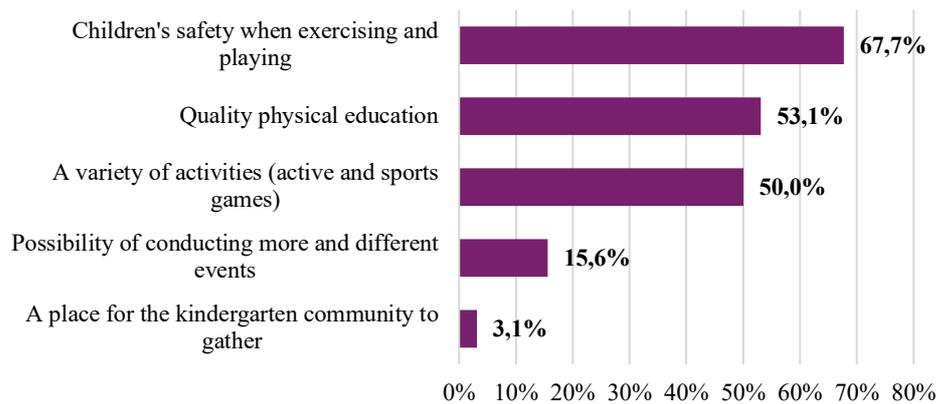


Figure 3. **Potential benefits of improving the sports field**

The updated general education curricula should provide a physical environment for each competence.

A sports field offers many significant advantages for a pre-school institution, meeting the expectations of the community. It is a space that provides opportunities for children to be physically active, promotes healthy lifestyles and creates a safe environment for children's education and recreation, which is agreed by the vast majority of respondents (96.9 % and 95.8 % respectively). As a larger space with a wider range of activities for sporting self-expression, the playground can accommodate a larger number of community members. The majority of community members surveyed agree that the course could be used for a variety of event projects (89.6%), and is a favourable environment for children to experience good adult influence and to learn from appropriate behavioural models (85.4%). The sports field can be used for various meetings, information and educational activities that promote social activity and community spirit, with 83.3% of respondents agreeing with this. Only a slightly lower proportion of respondents (80.2%) agree that a sports ground is an opportunity to foster a culture of cooperation between community members, family and neighbourhood relations and solidarity. More than three quarters of the respondents believe that the strategic location and the larger space of the sports field can be used for national, calendar and traditional celebrations. Knowing the specificities of the work of their kindergarten, more than two thirds of the respondents indicated that they would like to see the playground become a publicly accessible venue for all families to celebrate family festivities.

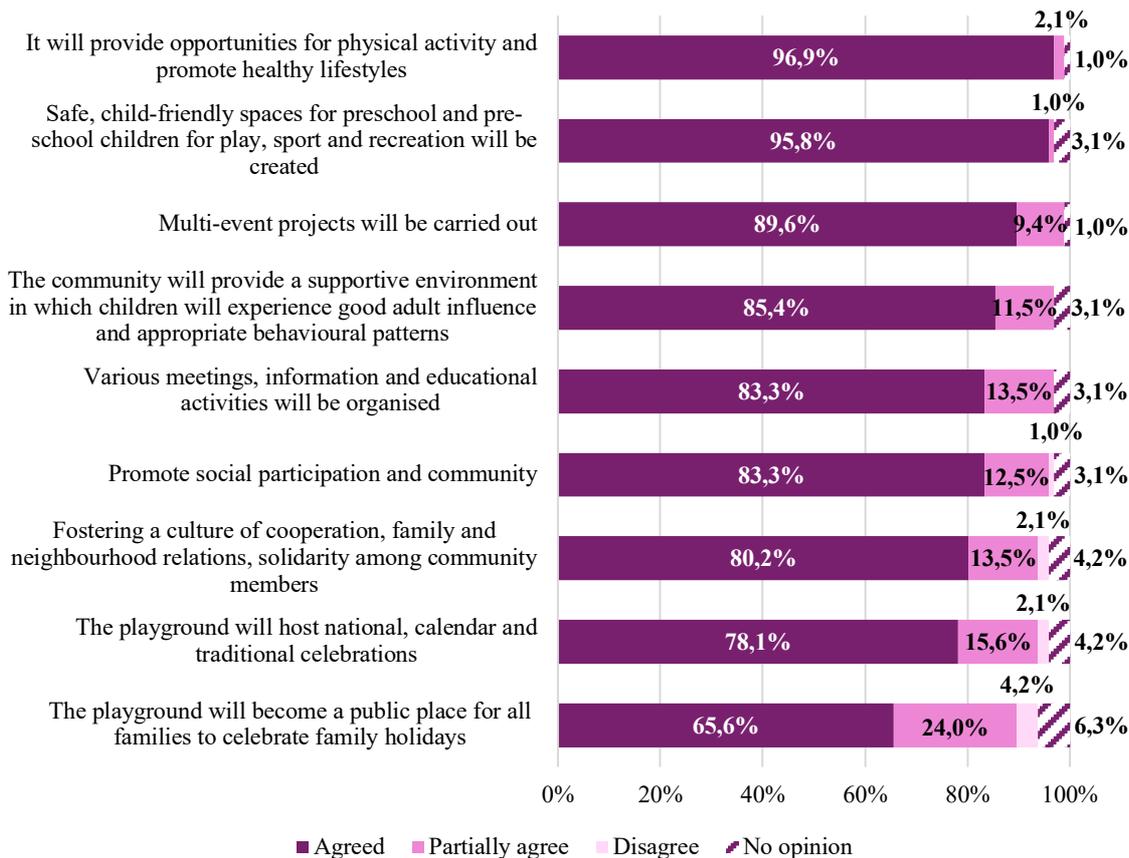


Figure 4: Advantages of an outdoor sports pitch

This paper analyses the importance of outdoor spaces for the physical activity and health of pre-school children. It highlights that well-equipped outdoor spaces not only promote children's physical activity but also contribute to the development of their social, emotional and cognitive skills. However, it is noted that inadequately designed outdoor spaces, such as playgrounds, sports facilities or running tracks, can limit these opportunities and reduce children's motivation to move. Against this background, the paper presents the main conclusions reflecting the results of the study and the problems highlighted.

CONCLUSIONS

In pre-school settings, the physical education environment plays an important role in keeping children physically active. Well-equipped outdoor spaces, such as sports fields, shape children's long-term healthy lifestyle habits and create conditions for a well-rounded personality development.

The community assessment of the pre-school has shown that the existing outdoor spaces do not fully meet children's physical education needs. They are not functional enough, limiting children's opportunities for active and meaningful outdoor time. Insufficient functionality hinders the achievement of physical education objectives and poses safety challenges. This is particularly important in educational settings where children's well-being is a top priority.

Outdoor spaces, such as sports fields, in pre-school settings have many significant benefits that meet community expectations. They provide opportunities for children's physical activity, healthy lifestyles, safety and recreation. A sports field can become an important space for community events, educational activities and social participation. Most community members believe that this space strengthens cooperation, family and neighbourhood relations and solidarity, and is a good place for celebrations and traditions.

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