

THE INCLUSION OF CHILDREN WITH DISABILITIES IN THE SCHOOL ENVIRONMENT: PERSPECTIVES FROM THE SCHOLARLY

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Abstract

Regarding children with intellectual disabilities (ID), physical activity is a fundamental aspect in maintaining their physical and psychosocial health. However, when comparing adolescents with and without ID, the level of physical activity among those with ID is significantly lower, and the specialized literature on this subject is limited. Existing studies highlight that young individuals with ID do not meet the World Health Organization's minimum recommendations for physical activity but spend longer periods engaged in sedentary behaviors. Several factors, such as insufficient support, limited opportunities, and environmental barriers within and outside the school, contribute to the inactivity of these children, even though physical education classes and playtime offer important chances for their physical engagement.

This study aimed to examine the specialized literature concerning children with intellectual disabilities (ID) to assess their participation in school and individual physical activities. One of the challenges encountered that limited the generalization of the results was the lack of large sample sizes and detailed information regarding the severity of the subjects' disabilities.

The conclusion of this study emphasizes the necessity for in-depth research utilizing objective research tools and adapted intervention methods, as well as larger subject samples, to effectively assess and promote physical activity among individuals with intellectual disabilities.

Introduction

Education is one of the fundamental rights of every child, regardless of that child's particular characteristics. Children with disabilities form a heterogeneous and vulnerable population, affected by a wide range of neurodevelopmental and physical conditions that can profoundly influence their daily functioning and quality of life (Khoury et al., 2025).

The Romanian educational system lacks clear legislation in this regard, even though this subject is of great interest to our country, considering the challenges in this field and the increasing number of children with various medical conditions.

It is very important to mention the role that the family plays in the school integration of children with intellectual disabilities. A study conducted by Nga Lai Kwong et al. (2025) concluded that caregiving for individuals with intellectual disabilities involves both positive and negative experiences. Negative experiences refer to the barriers encountered in caregiving, while positive experiences are associated with financial benefits. Family support for individuals with intellectual disabilities is crucial for encouraging their participation in different activities and integrating them into society.

Regarding this category of individuals, their problematic behavior is a factor that deserves full attention. As teachers, it is difficult for us to manage these behaviors and integrate them into mainstream classes without them feeling marginalized. However, we must identify the causes of these challenges and find ways to successfully include them in general education. Experts highlight multiple contributing factors, involving a combination of biological, psychological, and social components (Koritsas & Iacono, 2015).

Internationally, the number of studies on physical activity among children with disabilities is relatively high. However, in our country, their number is quite small. In other countries, studies have been conducted on various team sports—such as football, basketball, volleyball, and handball—which are also compulsory in our country at the gymnasium and high school levels. A recent study conducted in Bulgaria monitored heart rate during basketball training sessions and competitions among children with intellectual disabilities (Borukova et al., 2025). Six athletes from the national basketball team were monitored using Polar Verity Sense devices. Given the very small sample size, the study emphasizes the need for future research to determine athlete fatigue levels during training and competitions, heart rate, and the intensity at which exercises are performed.

Such a study is also necessary within physical education and sports classes, as they differ from training sessions. The intensity at which activities are performed, the lesson structure, and the fact that students with and without medical conditions participate together make this a real challenge for teachers. A study conducted in our country (Roșu et al., 2024) focused on developing a special program designed for children with disabilities to improve psychomotor skills, emphasizing balance and cognitive abilities. The sample comprised 28 children aged 12 to 14, and the program spanned 36 weeks, with 30-minute sessions every two weeks. The study concluded that there were substantial improvements in motor and cognitive-motor skills; however, dynamic balance, both with eyes closed and open, did not show significant changes.

In the case of children with intellectual disabilities, the specialized literature has found that they experience difficulties in dynamic balance (Jouira et al., 2020); specifically, they exhibit impaired postural balance compared to individuals without medical conditions (Dellavia et al., 2009).

Material-method

Research objective

This study aims to conduct an analysis of articles published in the last decade concerning the inclusion of children with disabilities in the school environment. Through a synthesis of existing literature, this paper seeks to identify the proposals, methods, and gaps within the educational system regarding school inclusion in Romania.

The objective is to systematically review the specialized literature on the inclusion of children with Special Educational Needs (SEN) in the school environment to determine the theories, strategies, and approaches that support their effective and equitable integration into mainstream education.

Present the aim of the research, the used methods, the subjects, the technical equipments or the used devices (if it is necessary), the tests or the applied questionnaires.

Search Strategy

To conduct a rigorous search for articles focusing on the inclusion of children with disabilities, I utilized three electronic databases: Google Scholar and MDPI.

For a comprehensive search, I employed specific search terms such as "Special Educational Needs" (SEN), "disability," and "inclusion." This approach facilitated a broad range of relevant articles. The selection of these search terms was based on recommendations from previous systematic reviews in this field.

For Special Educational Needs (SEN), I used:

„Disability”, „intellectual disability”, „cognitive disability”, „learning disability”, „special needs”, „ADHD”, „physical disabilities” „motor disabilities”

For inclusion, I used:

„School inclusion”, „inclusion in the school environment”

For "child," I used:

„Children”, „adolescent”, „age categories”

This combination of terms from the aforementioned databases facilitated the identification of a diverse range of studies, enabling a detailed analysis of school inclusion and the factors associated with this current issue.

Results

Inclusion Criteria

For this paper, the selected studies focused on the inclusion of children with disabilities in the school environment, specifically in physical education and sports. Regarding the time frame, there was a limitation on the publication date of the articles, as only those published in the last 10 years were included. Both quantitative and qualitative studies were considered in this review. Insert text here. Present the most relevant results by using statistical methods. Tables and figures may be used.

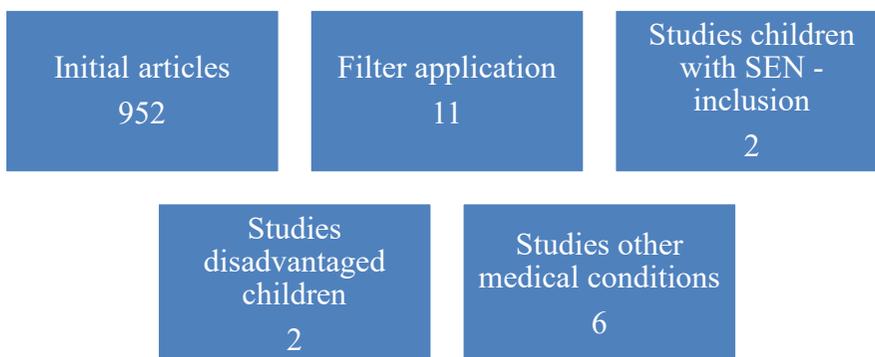
Exclusion Criteria

Studies that did not primarily focus on the inclusion of children with Special Educational Needs (SEN) in physical education and sports classes, regardless of their disability, were not considered. For example, the study by Nistor and Dumitru (2021) was excluded from this paper because, although it addressed school inclusion among children with autism, its intervention methods centered on reducing discrimination and stigmatization via project-based contact initiatives in schools. The study involved 141 high school students using the standardized Haghihat questionnaire.

This article cannot be included in our review because it does not specifically address the inclusion of children with SEN in physical education and sports classes, nor does it provide clear information about their needs or supportive methods to facilitate their integration into the school environment.

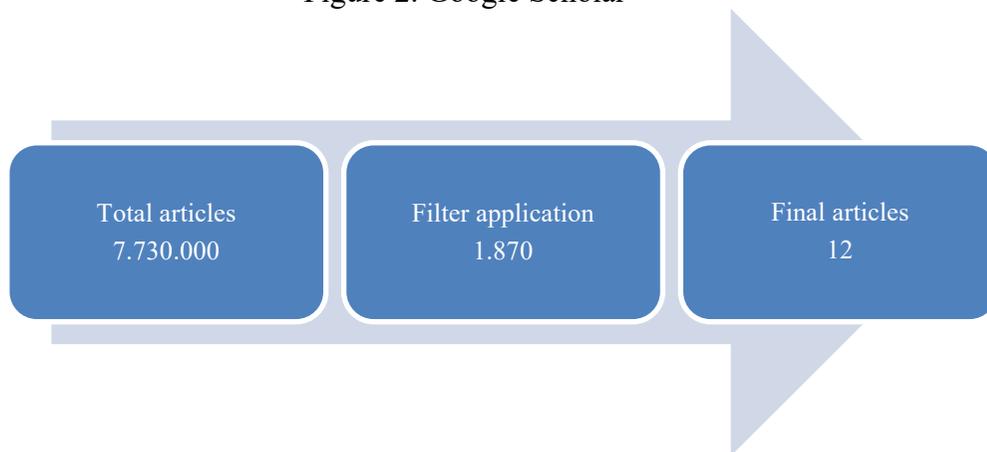
Study Selection

Searching in the MDPI database returned 952 articles when using the item “school inclusion”, which were narrowed down to 11 after applying filters (no older than 10 years, articles published in Romania). Of these 11 studies, one of them focuses on the integration of children with autism in the school environment (Nistor & Dumitru, 2021). Another study that centers on inclusive education was published in 2023, but its main pillar is teachers’ attitudes toward inclusion (Jurca et al., 2023). Two of them emphasized disadvantaged children and minorities (Levi-Sudai & Neagu, 2022) and (Dan et al., 2023). The remaining articles were excluded because their main focus is not on motor disabilities, but represent medical problems (diabetes mellitus, pneumonia, etc.).



A search in the Google Scholar database yielded a total of 7,730,000 articles on "inclusive education." After applying filters (the search term mentioned anywhere in the article, articles published in Romania, and the inclusion of this term in the article), 1,870 articles were identified. However, after applying the additional filter (the search term mentioned in the article's title), only 12 articles from 2017 remained, focusing on the integration of individuals with epilepsy into the school environment through therapeutic means (Papp et al., 2017).

Figure 2. Google Scholar



Discussions

Our society needs accessibility to the education system for all children, regardless of their conditions. It aspires to be a democratic and balanced society,

which not only represents a necessity regarding this subject but also a fundamental right. This concept of inclusive education entails the full integration of these children into mainstream education, providing them with equal development opportunities compared to students without medical conditions. Analyse and compare your results with other similar studies, present the importance of the results, if the hypothesis is confirmed or infirmed, present the limits of the study.

When discussing inclusion in the school environment, we must also recognize the importance of teacher preparation in teaching and learning processes. Managing disruptive behavior can have serious consequences, but the way this behavior is addressed makes a significant difference in the conduct of school activities. These behaviors can range from severe to dangerous, from aggression towards peers or self-harm, to less harmful forms (Smith et. al., 2022) However, some authors emphasize that, regardless of type and severity, disruptive behaviors negatively affect the educational environment (Gulboy et al., 2025).

The strongest argument for integrating children with Special Educational Needs (SEN) into the school environment is human rights, as previously mentioned. According to the Salamanca Statement and the United Nations Convention on the Rights of Persons with Disabilities, individuals with disabilities have equal rights to a quality school environment that promotes acceptance, respect, and diversity. Both public and private educational institutions should become spaces of tolerance, where children with specific characteristics represent diversity rather than obstacles.

Specialized studies provide an optimistic and confident overview of integrating children with Special Educational Needs (SEN) into the school environment, emphasizing the significant contribution of this action to the development of social and emotional skills in all students. In this integration process, children learn to empathize, collaborate, and assist one another—fundamental values in a healthy society. Beyond the positive aspects developed in children, it also presents a challenge for teachers in developing pedagogical competencies, making them more open to differentiated teaching methods centered exclusively on the needs of the children.

A study conducted in mainstream schools in our country investigated whether implementing adapted sports programs, designed for children with disabilities, could positively affect the physical fitness and body composition of children without disabilities, specifically primary school students (Utvic et al., 2025). While the study focuses on aspects relevant to our interests, its applicability is limited, which excludes it from our areas of review.

However, in Romania, the inclusion of children with disabilities in mainstream education, despite supporting this aspect by providing the legal framework for all children to participate in education, is often limited due to a lack of resources, insufficient teacher training, and the absence of support teachers. Most teachers in the field do not have specific training for working with these children, and

the number of support teachers is well below the minimum required, being insufficient in many schools, especially in rural areas. In addition to the lack of specialized staff (school counselors, speech therapists, psychopedagogists, etc.), overcrowded classrooms and a rigid curriculum make it difficult to apply the principles of inclusive education. In our country, investing in continuous teacher training, accessible school infrastructure (access routes, the possibility for students to move independently, etc.), and adapted teaching resources is essential. Another aspect that must be emphasized is the collaboration between school and family, with parents being actively involved in the educational process.

Conclusions

The number of children with Special Educational Needs (SEN) is increasing, which means that educational institutions must be prepared for their integration into the school environment. However, at the national level, the specialized literature does not provide clear methods for integrating children with SEN into physical education and sports classes.

Children with SEN have specific characteristics depending on their condition, which means that the curriculum must be adapted for each category to alleviate the symptoms of the disability. Moreover, in Romania, there is no guide proposing specific exercises or games for physical education classes tailored to the type of disability of children in mainstream education. Present the essential aspects of the research and provide perspectives for future studies.

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This study's findings highlight the necessity for a detailed analysis of the needs of children with SEN and the development of appropriate methods for their inclusion in physical education and sports classes. They have the right to regular education; however, teachers lack a curriculum model to guide them in this process.

Education in our country must be accessible to all children, regardless of their particularities, and the specialized literature must provide solutions for the integration of children with SEN into the school environment. Both in physical education and sports, as well as in other subjects, a thorough study of the needs of these children is

required, along with finding the most effective solutions to include them in mainstream education.

Regarding the objective of this research, we can conclude that the lack of a solid research foundation results in a fragile theoretical underpinning. In our country, there are very few studies that focus exclusively on the inclusion of children with Special Educational Needs (SEN) in physical education and sports classes. Therefore, we cannot know with certainty what inclusion strategies are effective for these children, depending on the type of disability.

It is very clear that the existing works referring to children with Special Educational Needs (SEN) are constructed as a unified whole, are not conducted over an extended period, and do not include larger samples or are even structured by categories based on the type of disability they have. In addition to these, fewer studies focus on motor skills and the methods through which they can be developed within physical education and sports classes conducted in schools, rather than through physiotherapy programs or other methods.

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