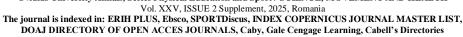


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# THE THERAPEUTIC AND EDUCATIONAL DIMENSION OF PHYSICAL THERAPY IN SPECIAL SCHOOLS: PARENTS' PERSPECTIVES

## BUGHIRICĂ-GEORGESCU MAGDALENA<sup>1</sup>, DRĂGAN ANCA MARIA<sup>2</sup>

#### **Abstract**

Physical therapy is an essential discipline in special schools, contributing to the recovery, development and integration of children with disabilities. Through its complex role – medical, educational and social – it goes beyond the strictly therapeutic sphere and becomes an integrated component of special education. Through movement and adapted exercise, the child not only improves his physical condition, but also gains self-confidence, autonomy and real chances of participation in the community. In this sense, physical therapy proves to be an indispensable tool in achieving the objectives of contemporary special education

*Aim.* In the context of the lack of complex studies that would report the opinions and attitudes of parents regarding the importance of kinetic therapy in special schools. We set out to analyze parents' opinions and attitudes regarding the importance of physical therapy in special schools, with an emphasis on its role in the recovery of spinal static disorders, the development of children's autonomy, and their educational and social integration.

*Methods*. The sociological survey method was used and as a research technique - the questionnaire that allowed obtaining answers to the research questions. The research was conducted in 15 special education units. The questionnaire addressed to parents was completed by 283 people (parents/legal representatives) of students with spinal static disorders.

*Results*. The results show a majority preference of parents for allocating at least four hours of physiotherapy per week in special schools. The majority of parents (89%) consider it necessary to introduce physiotherapy in mainstream education. Two-thirds of parents (66%) consider it useful to develop a specialist guide to support the recovery of children with spinal static disorders.

Conclusions. Parents consider physiotherapy essential in special schools, requesting an increase in the number of hours and its extension to mainstream education. High confidence in the effectiveness of physiotherapy and positive collaboration with specialized teachers are key factors in the success of the recovery process.

Keywords: physiotherapy, spinal static disorders, special education, parents, physiotherapy hours.

## Introduction

According to Mârză-Dănilă (2012), "in the context of medical recovery, physical therapy plays an essential role in restoring the functional potential of people in various situations of incapacity or handicap". Special education aims to support children with special educational needs (SEN) in the learning and social integration process. Among the fundamental disciplines involved in the recovery and development of students is physical therapy, defined as "movement therapy", which uses adapted physical exercise for prophylactic, recuperative and compensatory purposes. Physical therapy, as a discipline in special schools, aims to recover students with locomotor deficiencies and neuromotor disorders, based on mild, moderate, severe and/or associated sensory and mental deficiencies.

In special schools, physiotherapy is not limited to the medical dimension, but becomes a complex tool of educational and recuperative intervention, integrated into the instructional-educational process. It aims to correct motor deficiencies and prevent complications secondary to disability (contractures, skeletal deformities), but also to develop psychomotor abilities, self-confidence and personal autonomy. The integration of the physiotherapy discipline into the curricular area "Specific and compensatory therapies" has an essential contribution to the educational-therapeutic process in special schools. Through therapeutic motor activities, it joins the other recuperative disciplines in order to increase the adaptation capacity of students, by correcting, improving and/or compensating deficiencies of the locomotor system. In this sense, physiotherapy constitutes a fundamental tool in the recovery and adaptation process of students with mild, serious, severe or associated disabilities, supporting them in the face of the demands they face daily. Moreover, through its formative and recuperative functions, physiotherapy directly contributes to achieving the goals of special education, embodied in the maintenance and improvement of students' health, by capitalizing on physical exercises adapted for therapeutic purposes.

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 $<sup>^{1}\,</sup>Special\,Secondary\,School\,no.\,\,3,\,Bucharest,\,Romania.\,Corresponding\,author:\,magdabughirica@yahoo.com;$ 

<sup>&</sup>lt;sup>2</sup> University of Oradea, 1 University Street, Oradea, Romania.





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Physical therapy has a significant influence on the harmonious physical development of students, contributing to the correction of motor deficits, the formation of fundamental movement skills, the development of effort capacity and the facilitation of integration into the social and professional environment. The process aims at the gradual acquisition of motor and functional skills, by capitalizing on experiences specific to school age and permanent reporting on the type and degree of disability manifested. In the development and implementation of physical therapy programs, it is essential to apply the principle of individualization, as a particular form of the principle of accessibility.

Individualization of the intervention is achieved by designing and applying Personalized Intervention Plans (PIP), which allow the continuous adaptation of the therapy to the particularities of each student: the type and degree of disability, the medical diagnosis, the associated conditions, the level of biomotor development and the individual resources available.

Physical therapy is a component of medical physiotherapy, with the objective of restoring diminished functions or optimizing the functional level of the individual with various conditions (Ciolcă, 2012). The main method specific to this discipline is physical exercise, used for the purpose of somato-functional, motor and mental recovery, but also for the reeducation of secondary, compensatory functions, in the case of partially reversible or irreversible conditions (Cordun, 1999).

The contents of physiotherapy training are organized into fundamental areas, designed to cover both the physical and psychomotor dimensions of the student's development. These include:

- 1. Correction of postural and other physical deficits, through exercises adapted to maintain correct posture and prevent skeletal deformities;
  - 2. Neuromotor re-education, with the aim of restoring motor control and segmental and global coordination;
  - 3. Development of psychomotor skills;
- 4. Increasing and optimizing motor capacity, by strengthening the resistance, strength and mobility necessary for participation in school and social activities.

Thus, physical therapy goes beyond the strictly medical sphere, also having an educational and integrative dimension, through which it supports the overall development of the child with special educational needs.

Specific physical therapy exercises aim to:

- develop gross and fine motor skills;
- improve balance and coordination;
- increase body resistance and mobility;
- develop autonomous motor skills, useful for everyday life.

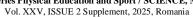
The main goal of physical therapy is the recovery and overall development of the child with SEN. Adapted physical exercise stimulates not only bodily functions, but also mental processes, facilitating concentration and improving selfesteem. Physical therapy also has a social value, supporting the integration of the child with SEN by developing the functional skills necessary to participate in everyday activities and school interactions. Physical therapy is not limited to recovering lost functions, but promotes compensatory strategies, which allow the child to overcome their limitations and achieve a higher degree of autonomy. Therefore, the discipline has a pedagogical dimension that complements the medical dimension, supporting equal access to education and school integration.

A fundamental element in the success of educational and therapeutic interventions in special schools is the attitude and perception of parents. The family is the school's main partner in the education and recovery process, and the way parents view physical therapy directly influences the degree of involvement and continuity of exercises at home. Specialized studies show that most parents express positive appreciation for physical therapy carried out in special schools, considering it an essential discipline for the child's development (Bughirică-Georgescu et. al., 2024). They perceive physical therapy as a form of concrete support, which not only improves motor difficulties, but also contributes to increasing autonomy and self-confidence.

Parents of children who receive physiotherapy in special schools generally have a favorable opinion about this discipline, because they perceive it not only as a medical therapy, but also as a real chance for progress for their children. In the specialized literature and in the reports carried out in educational centers, several clear directions regarding the perception of parents appear. Many parents consider physiotherapy to be one of the most important activities in special schools, because it helps children gain autonomy and better cope with everyday motor difficulties (Bughirică -Georgescu, 2020).

Some parents say they see visible progress in vision, coordination or posture, which gives them hope and confidence. Parents appreciate that the school provides an organized setting for physiotherapy, which reduces the pressure on the family. In many cases, parents would have to take their child to private clinics, which entails other additional costs. Thus, the inclusion of discipline in school is perceived as an important support. Parents note that, in addition to the physical benefits, physiotherapy has effects on behavior, relationships and self-confidence. Children become more active, more willing to participate in group activities and more independent, which increases their chances of school and social integration.







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However, there are also parents who have very high expectations and want quick results and more hours allocated to this discipline. Some believe that this discipline should also be introduced into mainstream education (Bughirică-Georgescu, 2024). At the same time, parents require constant communication with the physiotherapist in order to better understand the realistic objectives of the therapeutic intervention. In the opinion of Bratu (2014), communication represents a defining dimension of human existence, without which social reality and beyond is practically impossible.

Communication is also an essential component in physiotherapy, a path to understanding, motivation, and mobilizing the beneficiary's internal resources to restore health (Rusu, 2021). Parents are encouraged to play the role of partners in education - to be involved and trained by the physiotherapist to continue the exercises at home with their child. This school-family collaboration is essential for the success of recovery and is perceived as a strong ally in supporting the

In recent years, more and more studies have focused on assessing body posture in children with special needs (SEN). The authors pointed out that in children with CES, spinal deformities are common. A study conducted by Wolan-Nieroda et al. (2018) points out that 63% of them have physical deficiencies in the spine and only 37% of them have correct posture. The results of international research highlight the unfavorable situation regarding the increased incidence of spinal static disorders in children and young people (Brzek et al., 2019).

### **Objectives**

The purpose of this study is to analyze parents' opinions and attitudes regarding the importance of physical therapy in special schools, with a focus on its role in the recovery of spinal static disorders, the development of children's autonomy, and their educational and social integration.

### Methods

The sociological survey method was used and as a research technique - the questionnaire that allows obtaining the answer to the research questions.

The frequency table is the most commonly used way to descriptively present the results of a questionnaire-based investigation in order to answer the research questions. Correlations, Sperman ( $\rho$ ) or Kendall's tau-b ( $\tau$ ), Likert scale.

The research was conducted in 15 special education units. The questionnaire addressed to parents was completed by 283 people (parents/legal representatives of children/adolescents with spinal static disorders. Most people are from Bucharest 60.8%, female 82.7%, with a family income that is enough for a decent living, but without allowing the purchase of more expensive goods 29.7%, with university or postgraduate studies 44.2%, whose children diagnosed with SVT and benefiting from physiotherapy are enrolled in secondary education 51.9%.

## Results

1. Parents' opinions on the usefulness of physiotherapy

Regarding the role of physiotherapy in the recovery of spinal static disorders (SSD) in students, most people believe that this form of therapy can contribute to a large or very large extent to the correction of these spinal deviations (figure 1). It is also observed that there are no significant differences between the level of confidence regarding the effectiveness of physiotherapy in treating children's problems in general and that regarding treating their own children's problems.

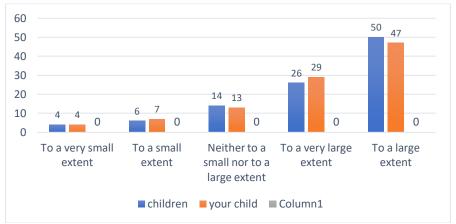


Figure 1. To what extent can physiotherapy treat children's spinal static disorders (%)



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## 2. The discipline of physiotherapy in schools. What parents say

The majority of parents, namely 74%, believe that this discipline should be allocated at least four hours per week in class. A small percentage, 4%, considers that only one hour per week is necessary, and 8% support the allocation of two hours per week in class. The results therefore highlight a clear trend: parents show a preference for increasing the number of hours of physiotherapy in special schools (figure 2). Currently, in the framework curriculum for special education preschool, primary and secondary levels, developed with applicability for students with mild/severe disabilities, 1-2 hours are allocated in class.

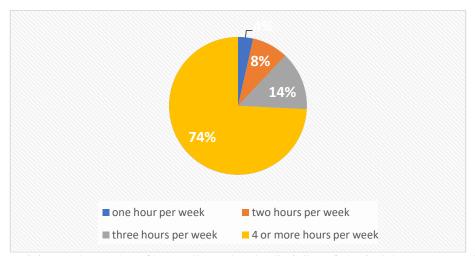


Figure 2. Parents' opinion on the number of hours allocated to the discipline of physical therapy per week within special education

According to Table 1, there is no significant correlation between the number of hours per week that parents consider necessary for the discipline of physical therapy in special education and the willingness to work with children at home on a physical therapy program in order to recover from SVT. There is also no significant correlation with the opinion that physical therapy performed in special school can contribute to reducing the child's static vertebral disorders. Therefore, regardless of the optimism that physical therapy in special school corrects children's static vertebral disorders, parents want more hours in the discipline of physical therapy.

Table 1. Kendall's tau-b correlations between opinion on the number of hours in the discipline of physiotherapy and

opinion on practicing physiotherapy at school and home

How many hours per week	Would you be willing to	The parent can work	Physical therapy performed		
would you like to be	do a physical therapy	effectively at home with the	in a special school can help		
allocated to physical therapy	program at home with	child according to the	correct a child's spinal		
in the classroom within	your child?	recommendations of	static disorders		
special education?		physiotherapists to correct			
		spinal static disorders			
	-0.053	-0.062	-0.083		

According to the data in Figure 3, parents not only want more hours of physical therapy in special schools, but also largely and very strongly believe, 89%, that it would be necessary to introduce the subject of physical therapy into mainstream education.



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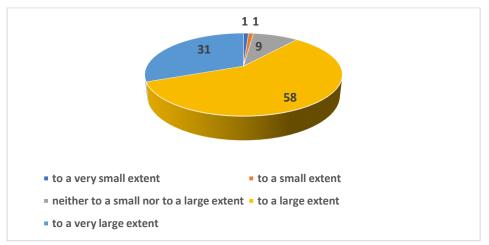


Figure 3. Parents' opinion on the introduction of physiotherapy into mainstream education

A final aspect analyzed, regarding the ways in which schools and physiotherapists can support students with spinal static disorders, concerns the usefulness of a specialized guide for parents. According to the results, 66% of respondents consider that such a guide would be useful to a great or very great extent for supporting the recovery process of spinal static disorders in children (figure 4).

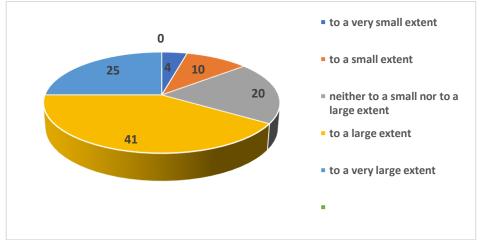


Figure 4. The usefulness of a guide for parents for the recovery of spinal static disorders in children

According to the data in Table 2, the interest in a specialist guide addressed to parents does not correlate with the opinion that the parent can work at home with the child a physiotherapy program, with the family's residence and income. However, there is a small but significant correlation with the level of education of the respondents. Therefore, the higher the level of education of the parents, the greater the interest in a guide addressed to parents for the correction of SVT in students.

Table 2. Spearman correlations between the opinion regarding the usefulness of a specialist guide and sociodemographic variables

Do you think a guide for	The parent can work effectively at home	Parents'	Family	Parents'
1	with the child according to the	residence	income	level of
static disorders in children would be useful?	recommendations of physiotherapist teachers for the recovery of the child's spinal			education
would be useful:	static disorders			
	0.019	0.025	0.113	0.133*

<sup>\*</sup>Correlations are significant for p<0.05





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#### **Discussions**

- 1. The results indicate that parents perceive physiotherapy as an educational and medical necessity, not just as an additional activity.
- 2. The majority request for more hours reveals a gap between the current educational offer and the real needs of children.
  - 3. The interest in a guide for parents shows their desire to be actively involved in supporting recovery at home.
- 4.Trust in specialists and positive relationships with teachers are essential resources for the development of integrated prevention and recovery programs.

## Recommendations

- 1. Expand the number of hours of physiotherapy in special schools, to meet the needs expressed by parents.
- 2. Integrate physiotherapy into mainstream education, as a preventive measure and early intervention for spinal static
- 3. Strengthen the school-family partnership, through constant communication and collaboration between parents and physiotherapist teachers.

#### **Conclusions**

- 1. The results highlight that parents show a major preference for increasing the number of hours of physiotherapy in special schools; 74% of respondents (n=210) consider it necessary to allocate at least four hours per week for this discipline.
- 2. A significant proportion of parents, respectively 89%, appreciate the need to include physiotherapy in mainstream education. At the same time, 66% (n=187) consider it useful to develop a specialized guide for parents, as a support tool in the recovery process of spinal static disorders in children.
- 3. The high level of trust given to physiotherapy, together with the positive relationship between parents and school staff – especially physiotherapy teachers – constitute essential factors for the success of the recovery efforts of children diagnosed with spinal static disorders.

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