

The educational inclusion of students with postural conditions in the Physical Education class

Abstract

Inclusive education aims to respond to student diversity by increasing participation and reducing exclusion in the school environment. The study aimed to characterize the inclusion process in the Physical Education class of first-year students with postural disorders at the Faculty of Health Technology and Nursing in the province of Villa Clara. A descriptive cross-sectional study was conducted using empirical methods such as document analysis, observation, source triangulation, and theoretical and statistical mathematical methods. The study involved six students excluded from the Physical Education practical class due to postural disorders. The study resulted in five females and one male being affected; the average age was 18.2 years, and the predominant condition was scoliosis. No medical prescriptions for abstaining from physical exercise were found. The greatest deficiencies reported by students were found in the "Access and Participation" dimensions; with contradictions regarding interpersonal relationships in the former, and poor perception by respondents of the responsibility and commitment of the Faculty's administrators and teachers to the necessary adaptations and support to ensure participation. It is concluded that the existing gaps in "Access" and "Participation" in the Physical Education classes of the students participating in the study interfere with the inclusive education process in these classes.

Keywords: *Physical Education, inclusive education, conditions, posture.*

Introduction

Inclusive education is a process aimed at responding to student diversity, increasing participation and reducing exclusion in and from education. Its main purpose is to provide quality education to all students, ensuring their presence, participation, and learning, with special emphasis on those who, for various reasons, are excluded or at risk of being excluded or marginalized.

Currently, educating in and for diversity is becoming one of the main challenges of 21st-century schools, as it is assumed that quality education cannot exist without addressing student diversity. (Rangel, A., 2021)

Inclusion in the Cuban education system has transitioned from having students with "special educational needs" as its primary objective to the modern conceptualization of the term as a process open to all with complete equity. (Hernández, T., 2022)

In this regard, research has been found focused on inclusion in Physical Education classes in this area. Studies such as those by Valencia-Peris et al. (2021) and Gómez Valdés et al. (2021) have recognized the importance of initial teacher training in this subject regarding attention to diversity. They have also mentioned the existing shortcomings both at this level and in continuing education, which limit teachers' ability to meet training needs and thus respond more appropriately to the diversity and characteristics of students. Physical Education provides many benefits for students. These include psychomotor competence, the development of physical abilities and self-esteem, responsibility, and socialization skills—in short, a well-being for students' physical and mental health. However, despite the above, in Cuban university classrooms, a group of students are frequently excluded from practical activities in Physical Education classes due to a chronic illness or condition. To allow them access to the curriculum, alternatives are provided by related classrooms, which are responsible for instructing and assessing students from a theoretical perspective. Alternatively, they are assigned to therapeutic areas to address their conditions, which results in limited achievement of the course objectives.

Various authors, such as Romero and Montenegro (2018); Perera Villegas, D. A., et al. (2020); Sánchez, JF (2021), have focused their studies on solving this problem and conclude that:

- ✓ There are limitations in the teaching of Physical Education in therapeutic areas.
- ✓ Students must receive developmental instruction that promotes cognitive-therapeutic independence for self-management of the disease.
- ✓ Physical Education classes have potential, given their diverse range of activities, for working with students who present a medical certificate.

This situation also occurs in the Faculty of Nursing and Health Technology in Villa Clara. Therefore, the study aimed to characterize the process of inclusion in Physical Education classes of first-year students with postural disorders at the Faculty of Health Technology and Nursing in the province of Villa Clara. Based on their opinions and perceptions, the main limitations and strengths of this setting can be determined for implementing inclusive education. This will provide teachers and administrators with the necessary knowledge to improve their performance and provide higher-quality teaching, enabling

the inclusion of these students in physical education classes. This will benefit both the students and those who appear to have postural integrity.

Materials and Methods

A cross-sectional descriptive study was conducted in 2022 and 2023 at the Faculty of Health Technology and Nursing of the University of Medical Sciences of Villa Clara. The study involved a population of six first-year students who were excluded from practical activities in Physical Education class due to having been diagnosed with postural disorders.

For the development of the research, theoretical methods were used, including historical-logical methods, which made it possible to analyze the origin of the concept of inclusive education and the study of its evolution until its contextualization in Physical Education classes. Inductive-deductive methods allowed for generalizations between the research elements derived from the inference process, especially those related to inclusive Physical Education for students with postural disorders. The analysis and synthesis method was also applied throughout the research process to determine the foundations of educational inclusion for these students, as well as to analyze the theoretical and conceptual foundations and their essential relationships with postural correction.

The empirical level of the method used was in-depth interviews, document analysis, participant observation, and source triangulation. The objective was to identify the factors associated with the limitations and possibilities for inclusion in the Physical Education class. These factors were used to assess the status of the dimensions established by Palacio, DM, et al. (2022) for the inclusion process at the Faculty.

- ✓ "Health" dimension: refers to the postural problems suffered by these students.
- ✓ "Access" dimension: to determine the conditions and possibilities available to the Faculty for accessing Inclusive Physical Education.
- ✓ "Participation" dimension: the activities and content taught in the class that allow students to participate in addition to their personal, social, and professional development.

The mathematical statistical method was used to process and interpret the quantitative data. This allowed us to determine the students' sociodemographic characteristics, as well as quantify their frequency of various postural conditions and their responses to interview questions.

Throughout the study, the ethical principles stipulated for research involving human subjects, as formulated in the Declaration of Helsinki, were followed.

Results and Discussion

Using empirical methods, we were able to understand the real possibilities of implementing inclusive education in physical education classes, taking into account the previously established dimensions. The results can be seen in the following tables.

Table 1. Characterization of the student population with postural disorders.

Variables	No.	%
Age		
18 years	4	66,70
19 years	1	16,70
20 years	1	16,70
Sex		
Female	5	83,30
Male	1	16,70
Type of condition		
Kyphoscoliosis	1	16,70
Scoliosis	4	66,70
Kyphotic scoliosis	1	16,70
Indicated treatment		
Doctor	1	16, 70
Rehabilitation doctor	2	33,30
Physiotherapy	3	50,00

Source: Student Medical Records. Average age: 18.2 years

As shown in Table 1, six students suffered from postural problems, which represents 1.8% of the population. Although the frequency found in this study can be considered low, it can be said that the purpose of inclusive education is to allow all students to participate regardless of their characteristics. It is considered that these students deserve to be included in Physical Education classes and enjoy the benefits supported by the criteria of Alfonso, R. A., et al. (2021), which states that Physical Education is a fundamental right that promotes the integral development of individuals, families, the community, and society. It encourages the habit of physical activity, as well as the quality of life of

individuals, and influences motor, physiological, psychological, and cognitive development, academic performance, and the promotion of personal and social values.

Of the students, five (83.30%) were female and one was male. The majority of the students were 18 years of age; One student was 19 and the other was 20 years old, with an average age of 18.2 years. Regarding postural problems, one student was found to suffer from symptomatic kyphoscoliosis, representing 16.7% of the sample; one was affected by mild scoliosis, approximately 25 degrees, with moderate kyphosis; while four, representing 66.7% of the sample, were diagnosed with scoliosis.

In the reviewed medical records, it was observed that two students (33.30%) were prescribed rehabilitation treatment; one (16.7%) received medical treatment, without specifying the type; and three, representing 50% of the total, were prescribed physical therapy. It is noteworthy that none of the reviewed medical certificates found a contraindication to physical exercise.

Scoliosis is common in growing adolescents; its early management is important, as if left untreated, it can lead to further deformities that may require surgical treatment. According to Blanch, J. (2021), the implementation of a physical activity program as a treatment method to slow the scoliotic curve could provide benefits, in addition to reducing it, in terms of improving flexibility, muscle strength, and quality of life.

Table 2. Results of the student interview

QUESTIONS

Health Dimension

1. ¿Do you know what your doctor's diagnosis is for your postural condition?
2. ¿Do you have limitations when performing practical activities in Physical Education class?

Access Dimension

1. ¿Are you interested in attending Physical Education class and participating in practical activities with your classmates?
2. ¿Is there a favorable climate and environment (physical, social, attitudinal) in the Faculty and the class group to facilitate access of students with postural conditions to all Physical Education activities?

3. ¿Do you perceive adaptations at the Faculty and group level that facilitate your full access to the Physical Education program?

4. ¿Do your interpersonal relationships with your teachers and classmates allow you to access the Physical Education class?

Participation Dimension

1. ¿Do you consider your participation with the rest of the group in all Physical Education activities important?

2. ¿Do you feel that you are in a context of equity, acceptance, and respect in your group and faculty, which facilitates your participation in Physical Education class?

3. ¿Do you perceive responsibility and commitment from your faculty's administrators and teachers regarding the adaptations and support you need to participate in Physical Education classes?

Table 2 presents the results of the interview with the students in the population. Regarding the "Health" dimension, 100% of them knew their doctor's diagnosis of their postural condition and acknowledged having no contraindications to physical exercise.

Regarding the "Access" dimension, all students are interested in attending Physical Education classes and, to the same extent, do not perceive any adaptations at the faculty or group level that would facilitate their full access to the Physical Education program. On the other hand, only 16.7% considered that there is a favorable environment within the faculty and class to facilitate their access to all Physical Education activities; while 66.7% considered that interpersonal relationships with teachers and classmates allow them to do so. These data show that students with disabilities are motivated to participate in physical education, as they perceive acceptance from their peers and teachers. The lack of flexibility in the faculty's programs and management is considered a barrier to access. Regarding the "Participation" dimension, 100% of those interviewed consider their participation with the rest of the class in practical activities in Physical Education class important, and 66.7% feel they are in a context of equity, acceptance, and respect within their group and faculty, which facilitates their participation in said class. However, 83.3%

do not perceive the responsibility and commitment of faculty leaders and teachers to provide the necessary adaptations and support to ensure such participation.

The results presented in this table could be explained by the approaches of Moriña, A., and Cotan, A. (2017), who highlighted among their conclusions that there continue to be problems with access to education and retention in classrooms for students with special needs throughout their academic careers, which limit the learning process. Furthermore, existing regulations do not guarantee quality education, nor do they recognize the importance of support services for guidance and counseling throughout their careers, nor, for example, the importance of administrative and service staff as a resilient factor.

These authors argue that some teachers are not sufficiently trained to respond to the individual needs of students or, at times, how to make the necessary adjustments for the learning and participation of students with disabilities.

However, Cornejo Valderrama, C. G., et al. (2017) believe it is essential to guarantee a quality school, that is, a school that recognizes and respects the rights of children and young people, and that becomes an educational community committed to carrying out, on an ongoing and permanent basis, processes of reflection around the conceptions and perceptions that each member of the educational community has regarding attention to diversity in educational contexts and, in this way, generate shared conceptualizations that are subsequently reflected in educational practices. Furthermore, Physical Education at the Faculty of Technology and Nursing is considered to have the potential to address the inclusion process for these students, taking into account the therapeutic and developmental criteria linked to postural correction, which are covered in some of the Faculty's programs. Therefore, the content is aligned with the students' educational profile.

The presence of students with postural disorders in Physical Education classes is in itself a source of learning for their peers, as this population is part of a public health academic space. Therefore, knowledge about postural correction is consistent with their professional training.

Conclusions

The results of the analysis of the information collected in this research allowed us to characterize the study group to promote inclusive education in Physical Education classes for students with postural disorders enrolled in the Faculty of Health Technology and Nursing at the Medical University of Villa Clara.

The existence of programs within the faculty with profiles related to postural disorders, such as the Bachelor's Degree in Physical Rehabilitation, represents a potential opportunity. This program could contribute, through interdisciplinary work, elements of content for theoretical and practical classroom treatment and the development of Physical Education teachers.

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