

Physical education for students with attention deficit hyperactivity disorder: general considerations

Educación Física a educandos con trastorno por déficit de atención e hiperactividad: consideraciones generales

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Fecha de recepción: 8 de octubre de 2021

Fecha de aceptación: 9 de diciembre de 2021

ABSTRACT

The objective of this article is to assess the Physical Education process for students with attention deficit hyperactivity disorder, which today constitutes a priority within the teaching-learning process of this subject. That is why, the authors focus their study on the didactic-methodological treatment offered in Physical Education to students with attention deficit hyperactivity disorder who are at the primary educational level. To fulfill the objective proposed in the investigation, methods and techniques were used such as analysis-synthesis, induction-deduction, documentary, historical-logical study that allowed obtaining the necessary criteria from the consulted sources.

Keywords: Physical education; Students with attention deficit hyperactivity disorder; Teaching-learning process

RESUMEN

El presente artículo tiene como objetivo valorar el proceso de la Educación Física para educandos con trastorno por déficit de atención con hiperactividad, que constituye hoy una prioridad dentro del proceso de enseñanza-aprendizaje de esta materia. Es por esta razón, que los autores centran su estudio en el tratamiento didáctico-metodológico que se ofrece en la Educación Física a los educandos con trastorno de déficit de atención e hiperactividad que están en el nivel educativo primaria. Para dar cumplimiento al objetivo propuesto en la investigación se utilizaron métodos y técnicas tales como, análisis-síntesis, inducción-deducción, estudio documental, histórico-lógico que permitieron obtener a partir de las fuentes consultadas los criterios necesarios.

Palabras clave: Educación física; Educandos con déficit de atención con hiperactividad; Proceso de enseñanza-aprendizaje

INTRODUCTION

Education in Cuba is structured in educational levels, this has undergone improvement in recent years, one of these levels is the Primary Educational Level. The humanist perspective that characterizes the attention to students with special educational needs in Cuba, the author of this research considers that the inclusion of these students in the teaching-learning process of Physical Education, gives them the possibility of their instructive influence, educational and development

A study of the particulars of the methodological approach of the classroom for the insertion of students with special educational needs can indicate that the Physical Education teacher must be more involved in the teaching-learning process.

Therefore, the author agrees with Hernández (2016) when he considers “that the integral physical educational approach of the class, evidences as another of its essential features, giving maximum attention to each student in the collective work of group work, which implies personalization of the teaching-learning process”.

The teaching-learning process is conceived as an integrated element where the main protagonists are the teacher and the student. It is considered a bilateral process between teaching and learning.

At the national level, investigative work has been carried out that contributes positive elements to the theoretical assumptions about the teaching-learning process. Such are the cases of the investigative work carried out by (López, 1985; Santos, 1989; Silvestre, 1988; 1996; 2000; Rico, 1989; 1996; 2002; Zilberstein, 2000, all cited by Rico, 2004; Addine, 2004; Fariñas, 2005; Martínez, 2005).

In the investigative studies of these authors, the teaching-learning process is identified in a general way as the moment of the educational process in which the joint activity of the teacher and the students achieves a higher level of systematicity, intentionality and directionality.

These contributions are relevant to take into account in this research because they are based on the participation of the school as a socializing agent in the treatment of students with ADHD from Physical Education.

Currently, one of the problems that Physical Culture professionals present is the lack of awareness to provide differentiated attention to students with ADHD included in a regular teaching environment at the primary educational level.

Based on the above, the objective of this article is to assess the teaching-learning process of Physical Education for students with attention deficit hyperactivity disorder at the primary educational level.

DEVELOPMENT

Physical Education represents a particular dimension of the educational process, made up of a semantic unit composed of the noun education and the qualifying adjective physical. It constitutes, therefore, an expression that is not univocally understood, with very different meanings depending on the historical moment, the tradition and the sociocultural context, but whose scope is not reduced to a simple education of the physical.

According to (Echevarría & Morffi, 2002, p. 1), (Castillejo-Olán & Salas-Rodríguez, 2001, p. 1) and (Ruiz, 2010, p. 11), physical education is

(...) “a pedagogical process that is carried out in the school, aimed at the development of physical performance capacities, based on the morphological and functional improvement of the organism, training and improvement of motor skills, acquisition of knowledge and development of convictions for fulfill social tasks.”

Physical Education is framed as a specialized branch within Educational Sciences, although seen in its broadest sense it constitutes a generic term that also encompasses Human Movement Sciences. Today, it has a consolidated system of scientific and technological knowledge, with research processes in this field that allow obtaining new knowledge and a duly institutionalized profession that bears its own culture and with well-identified social functions by spheres of action.

Among the human activities that most favor the multilateral development of the human being are those related to Physical Education as proposed by (Sainz, 2010, p.9). Through it, children, adolescents, youth, and adults develop motor, psychological, and psychosocial skills, improve their movement culture, maintain their state of health, as

well as embellish and give meaning to their lives, in an environment that stimulates the mobilization of the best of each subject and their adequate insertion in society.

The authors of this article consider that Physical Education in its conception contributes to the harmonious development of students through the systematic practice of activities that favor the growth and healthy development of the organism, promoting the teaching and development of basic motor skills and abilities, as well as sports. through the possibilities of motor action of the student. This is organized carrying a logical and systematized order of the contents of all the tasks that, during school life, allow it to meet its objectives as a component of comprehensive education, also exerts an impact on the different spheres of educational influence.

Regarding these spheres (Valdes et al., 2009) states that

“...the cognitive sphere (theoretical knowledge, capacity for analysis and synthesis, creativity), the motor sphere (physical abilities and motor skills), the social-affective sphere (feelings, standards of conduct, convictions, formation of values), assuming their social responsibility, expressed in the development of the physical, intellectual and spiritual capacities of children and young people; promote, maintain good health; increase basic and sports motor skills, preparing them for life; promote human feelings and aesthetic tastes in children and young people.(p.17)

On the concept of Physical Education there are several authors who define it, these in their research raise its direct link to the activity of the human being, as its essential element is revealed the execution of physical exercises for the harmonious development of personality.

“Physical Education is a comprehensive physical-educational intervention process, not focused only on the physical and on educating through the physical, as a particular dimension of the educational phenomenon is a process of physical-educational relationship. Pedagogical intervention that addresses the cognitive, affective, motor and socio-cultural spheres of the person, to the enrichment of him (...) in relation to himself, with other people and with the world that surrounds him (...).” (Cecchini, 1996, p. 51; Sosa-Cabrera & Sosa-Loy, 2012, p. 16)

Regarding Physical Education (Chavez, 2003), (Espinosa, 2014) and (Núñez, 2019) consider it as

“A fundamental part of the human being, from the moment it provides cognitive, affective and motor stimulation, allowing the acquisition of skills, attitudes and habits to contribute to their harmonious development; This is achieved through activities according to his needs and interests in the different stages of his life, through the systematic and organized practice of planned actions, based on the principles of scientific pedagogy.” (p.23)

In the previous definitions, the essence of Physical Education is revealed as a pedagogical process that takes place in the school context; for the acquisition of skills, attitudes and habits to contribute to the harmonious development of students.

Regarding the above, (Lopez, 2006) coincides with (Blazquez, 2001) in that *“Physical Education can be considered as a true pedagogy of motor behaviors of individuals. Its purpose is education and the means used motor skills”.* (p.45)

When referring to the teaching-learning process (Labarrere & Valdivia, 1988, 2001), consider it as *“a set of activities and specific processes that are developed consciously, taking into account the conditions in which education takes place (...) and are directed towards the achievement of well-defined objectives”.* (p.166)

Of the aspects addressed in this definition, it is notable to highlight what is related to the conditions in which education takes place, since in order to meet the objectives that each teacher sets himself, he must take into account the characteristics of each of his students, that is, the process of teaching-learning should be developed on the basis of the needs, educational potential, tastes and preferences of each individual who participates in it, in addition to directing it towards a specific objective.

In the pedagogical field, Physical Education plays a fundamental role by constituting the path for teacher-student, student-student and student-teacher interaction that guarantees a higher quality teaching-learning process.

There are several authors who approach the term teaching-learning process of Physical Education from different points of view. On the face-to-face level, (Lopez, 2006) submits that

“Talking about teaching-learning of Physical Education as a process is to highlight the different aspects that materialize in it, through the pedagogical interaction of its personal components: the teacher and the students; as well as its non-personal components: objective, content, methods, means and evaluation. Said process has been colored by various conceptions, some more focused on the external (the movement), and others on the internal (the being that moves)”. (p.46)

This author also considers that the objectives are elaborated based on the student, in terms of multidimensional learning conceived as a developing aspiration and intentionality, focused on the formation of knowledge, habits, skills, strategies to know, to learn and to self-regulate the learning, also focused on the formation of motives, feelings, qualities, attitudes and values.

For his part, (Calderon & Col., 2006) defines the teaching-learning process of Physical Education as

“A form of educational-instructive work on body education, as a complicated process of interaction between its components, objectives and subjective with aims directed at motor and physical improvement, and the education of the qualities of man's personality.” (p.26)

This author reaffirms her premise and reflects that the teaching-learning process is integrated and its main core is the leading role of the students. In the teaching-learning process of Physical Education, as in every pedagogical process, one of its significant parts is constituted by the organic unit of the teacher's teaching activity and the student's learning activity. The unit of both activities is carried out on the basis of the contents of the teaching, which has a regulatory position during the direction of the process.

These criteria connote the importance of the teaching-learning process of Physical Education to achieve better results in the development of the class, manifested in the formation of the personality of the students not only from the classroom but in the different contexts in which this learner develops.

The Physical Education class has, as a fundamental premise, to give great importance to the student as an active subject, promoting harmony between their physical, cognitive, affective, moral and social development. This implies making efforts to

achieve availability, accessibility and choice of differentiated educational offers and respect individual differences and attention to diversity.

It is opportune to emphasize that the adequate attention to educational diversity constitutes in this sense an essential priority on which teachers must direct their efforts, to promote meaningful learning in students. Addressing diversity with a comprehensive physical-educational approach means, above all, addressing individual differences, helping, supporting, orienting in the teaching-learning process so that everyone can ensure the quality of their learning.

The organization of the teaching-learning process with a comprehensive physical-educational approach focuses its attention on the student, for this reason the methods, procedures and means used in the classes must be based on them, their learning and development. Respect their experiences, values, assume that each student has a peculiar and unique personological development. Raise their self-esteem, achieve in them a balanced concept of themselves, their strengths, stimulate individual effort, will and perseverance.

This focus is channeled through the practice of any manifestation of Physical Culture, specifically Physical Education; but in the case of human diversity, the concept of sport for all, seen from the aforementioned sphere of action, acquires relevant importance, since this is conceptualized in a general way by several authors as the performance of physical activities to achieve a harmonious development of the student, with the specific purpose of forming habits and motor skills necessary for life. This leads, according to (Lopez, 2006), *“to an optimization of physiological and functional capacities and a positive physical conditioning, together with an athletic, slender and healthy body image in the population that systematically performs physical and sports activities”*. (p.18)

The practice of Physical Education and its contemporary conception is what allows people with disabilities to join the activities that are planned in this order, thus allowing them enjoyment and the opportunity to develop physically. It is here where the inclusion process truly occurs from this perspective, since this is a theoretical concept of pedagogy that refers to the way in which the school must respond to diversity as a human right.

A comprehensive physical-educational approach is necessary to achieve pedagogical attention to diversity, which implies promoting equal opportunities, differentiating demands, favoring coeducation and, therefore, giving equal attention to both sexes. The development of activities that are only for the most skilled and gifted, that generate rejection or ridicule from the less capable, should be avoided. This aspect should be kept in mind by every teacher in their classes and activities. On the other hand, other aspects should be considered, such as the demands and conditions in which the teaching-learning process of students with special educational needs takes place, the state of psychophysical development of students and the level of preparation of teachers to face this problem. process.

Physical Education aimed at people with special educational needs, in its essence conceives adaptations to the programs and methodological orientations. Based on the background of this process and the conception assumed by its researchers in the consulted bibliography, it was possible to verify different terms that identify it, such as: Special Physical Education, Adapted Physical Education and Adapted Physical Activity. Physical Education currently becomes a space where the rights of students are radiated, in an inclusive process of equal educational opportunities. One of the elements to achieve the full inclusion of students with special educational needs from Physical Education in educational institutions at the primary educational level is the adaptation of activities.

Regarding Adapted Physical Activities, (Coppenolle, 2004) defines them as *“physical and motor activity and sports in which special emphasis is placed on the interests and abilities of people with limited conditions, such as the disabled, those with deficiencies in health or the elderly”*. (p.1)

In Physical Education, the adaptation of activities acquires a special significance since, being called Adapted Physical Education, it is designed for students who for whatever reason cannot participate correctly and safely in regular Physical Education. It is about the correct teaching that adapts (modifies) the program, the tasks or the means so that all students can participate fully in Physical Education.

Adapted Physical Education should not be seen only as the adaptation of study programs where only students with disabilities participate, but its concept is broader, it

covers the treatment of special educational needs in regular Physical Education, where students with disabilities attend. heterogeneity of potentialities and needs. Where the correct adaptation will allow their full participation in Physical Education, so it must be fully inclusive.

Regarding the special educational needs in regular Physical Education (Pompa & Twuemulilaty, 2017) match with (Ruiz, 2007) and (Gomendio, 2000) in that *“they are all those temporary or permanent circumstances that make the subjects find it difficult to participate in the sessions and need some type of curricular adaptation of a group or individual nature.”* (p.1)

In this sense, the importance of cooperative work to attend to special educational needs in regular education is highlighted. Cooperative work favors the formation of values, contributes to foster feelings of solidarity, respect, camaraderie and acceptance of diversity.

According to (Gomendio, 2000, p. 18)

“Performing physical activity in cooperation is a fundamental basis for the child to affirm himself as an individual and social person”, a statement that becomes a premise for the achievement of Adapted Physical Education for students with Attention Deficit Hyperactivity Disorder (ADHD). defined as “a developmental disorder associated with an ongoing pattern of inattention, hyperactivity, or impulsivity...This disorder begins in childhood and may continue into adolescence and even into adulthood.” (National Institute of Mental Health, 2021, p. 2)

However, it is valid to emphasize that this conception requires achieving the integral formation of the students, based on their individual characteristics, for which it is essential to know the factors that influence the achievement of this objective, the needs and physical-educational potentialities. In this way, the physical-educational work can be directed towards a specific purpose, in the case of students with ADHD, it should be directed towards the prevention of behavioral disorders.

Conduct disorders are issues addressed by various experts in different contexts and times, which has led to a conceptual diversity since the beginning of these studies,

among which stand out (Arias, 1982); (Betancourt, 2001); (Fontes, 2002); (Perez, 2004); (Pupo, 2006); among others.

For his part, (Fontes & Pupo, 2002) suggests that these disorders are

“varied and stable alterations of the volitional emotional sphere, which result from the dialectical interrelation of internal and external negative factors, which mainly cause difficulties in learning and in interpersonal relationships, all of which is expressed in deviations of personality development that have a reversible character. (p.32)

The aforementioned definition reveals the deviations in the development of students with conduct disorders; however, it does not address the necessary elements for the compensatory corrective work necessary for better care for students with special educational needs, particularly those with Attention Deficit Hyperactivity Disorder (ADHD).

On the other hand, (Perez, 2004 p.30) and (Téllez, 2011, p. 1) consider that these disorders

“They are a disturbance or disturbance in behavior where there is greater systematicity of the negative manifestations of behavior, this is maintained in different contexts of action and has an impact on learning performance, interpersonal relationships, self-esteem and self-control.”

This definition incorporates extremely important elements to take into account for physical-educational intervention, such as that related to the systematic nature of negative behavioral manifestations; that is, to characterize a student with conduct disorders, it is necessary to also assess the frequency and intensity with which said manifestations are externalized; however, once they appear, they must be followed up to prevent them from being internalized and becoming this diagnostic reality.

In this sense, the concepts discussed make it possible to identify when in the presence of a student with behavioral disorders, an issue that is of vital importance when trying to prevent these manifestations from being internalized, which requires an adequate physical-educational intervention that responds to the demands of the needs and potentialities of this type of students.

General Education is one of the contexts where the pedagogical intervention of Physical Education professionals plays an essential role in the constant search for solutions for students with special educational needs, for this reason the intervention for students with Attention Deficit Disorder with hyperactivity is currently a reason for constant research.

From this conception, Physical Education is considered the ideal space to educate the new generations, due to the characteristics of its contents. This is corroborated by what Picq and Vayer state, cited by (Lopez, 2006), who conceive it as a means in the pedagogical and psychological action that contributes to normalize and improve the behavior of students.

According to (Lopez, 2006), Physical Education as a comprehensive physical-educational intervention process, which does not focus only on the physical, but rather on educating through the physical, therefore, it is a particular dimension of the educational phenomenon, a process of physical-educational relationship.

Therefore, it must be recognized that Adapted Physical Education is specially designed instruction that has been adapted or modified to be as appropriate for a person with a disability as it is for a person without a disability.

Physical Activities Adapted as expressed (López-Cózar, 2009) who matches (Hernandez, 1994)

“They constitute a broad and general term that aims to include all areas of intervention that do not include formal physical activity. If the different approaches to physical activity have age, motor performance, leisure and recreation as a reference, adapted physical activities have the same object of study, but this materializes and does so in a different way when directed at people with different characteristics.” (p.1)

Physical Education should not only deal with instructing, but also contribute to prevention; proceeding that requires corrective-compensatory work scientifically argued, directed and controlled, to avoid the aggravation of the disorder in students with ADHD. In this regard, the school as the main socializing agent plays a determining role, since it has professionals trained for it; However, it is also required the influence of other agents such as the family and the community because they are closely linked with the students.

Due to the high educational component that the Physical Education contents have, it is considered that, if it manages to motivate the participation of the students, promoting the development of a positivist attitude and stimulating their personal enrichment, it helps to reduce the effects of ADHD.

Thus, the content in the planning of the Physical Education class is an element to develop it, therefore, a methodological organization of the content is required, where the selection and interrelation of the contents and the tasks of the different moments of the class, must be characterized by the utilitarian relationships that are established with the other didactic components; hence it is revealed that it must respond to a didactic conception.

Some authors have experienced that Physical Education constitutes a useful tool in the treatment of ADHD students, but for this the diversity of the group must be taken into account, based on a diagnosis that allows to conceive the variety present in the class, and to recognize to students who require differentiated physical-educational attention within group relationships to attend to corrective-compensatory work.

In the process of interaction between teacher-student, in students with ADHD, to mitigate the disorder, adjustments are required in the development of physical activity that allow treatment within the Physical Education class and thus allow systematic participation in the different activities being convenient to justify the theoretical-practical and methodological connection point that allows from the systemic relationships of the processes, to establish a relationship in the attention to the conditions in the cognitive order and to the object disorder, the use of suitable methods and procedures, achieve a satisfactory integration of the student in a regular school environment, taking into account the cognitive characteristics that they manifest.

CONCLUSIONS

The analysis of various sources related to the term Physical Education allowed us to determine that this is a comprehensive physical-educational intervention process, focused not only on the physical, but on educating through the physical, as it constitutes a particular dimension of the educational phenomenon. that promotes a process of physical-educational relationship, where this is inherent to the student, particularly the one diagnosed with Attention Deficit Hyperactivity Disorder, because it provides

cognitive, affective and motor stimulation, favoring the acquisition of skills, attitudes and habits to contribute to their harmonious development; this is achieved through physical activities according to their needs and interests in the different stages of life.

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