

## LITERACY CHALLENGES CHILDREN WITH ADHD IN REGULAR EDUCATION

### A ALFABETIZAÇÃO DESAFIA CRIANÇAS COM TDAH NO ENSINO REGULAR

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**RESUMO:** Este trabalho trata da hiperatividade e da falta de atenção de muitas crianças encontradas no ambiente escolar, apresentando distúrbios comportamentais que é mais conhecido como TDAH- Transtorno de Déficit de Atenção e Hiperatividade, prejudicando assim o desenvolvimento da aprendizagem das mesmas. Sendo assim teve como objetivo geral analisar a hiperatividade na educação infantil e suas dificuldades de aprendizagem, e com específicos verificar os fatores causados pela hiperatividade na sala de aula; observar como os professores caracterizam o transtorno; investigar como esses profissionais encaminham os alunos nessas situações dentro da escola. O interesse pelo tema surgiu através das observações em sala de aula e na própria escola, tendo sido levantada a seguinte problemática: de que forma a hiperatividade dificulta na aprendizagem da criança? Como a hiperatividade nas turmas de Educação infantil pode prejudicar a aprendizagem? Para isso foi realizado um estudo bibliográfico de autores que tratam tais como Rizzo (2003), Didonet (2001) e Peres (2013). Os resultados apontaram que o TDAH é um transtorno que deve ser apoiado tanto pela família quanto pelos professores, criando um elo efetivo para a melhora do seu comportamento de atenção e hiperatividade.

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**Palavras-chave:** TDAH. Crianças. Professores. Escola. Família.

**ABSTRACT:** This work deals with the hyperactivity and lack of attention of many children found in the school environment, presenting behavioral disorders that is better known as ADHD- Attention Deficit Hyperactivity Disorder, thus impairing the development of their learning. Thus, the general objective was to analyze hyperactivity in early childhood education and its learning difficulties, and with specific findings of the factors caused by hyperactivity in the classroom; observe how teachers characterize the disorder; investigate how these professionals refer students in these situations within the school. The interest in the theme arose through observations in the classroom and in the school itself, and the following problem was raised: how does hyperactivity make it difficult to learn the child? How can hyperactivity in early childhood education classes impair learning? For this, a bibliographic study of authors who treat such as Rizzo (2003), Didonet (2001) and Peres (2013) was carried out. The results showed that ADHD is a disorder that should be supported by both the family and teachers, creating an effective link to improve their attention and hyperactivity behavior.

**Keywords:** ADHD. Children. Teachers. School. Family.

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## 1. INTRODUCTION

Attention Deficit Hyperactivity/Impulsivity Disorder (ADHD) is a neurobehavioral, multifactorial disorder, whose main characteristic is a persistent pattern of inattention and or hyperactivity/impulsivity, which results often in emotional, social and, above all, functional impairments (SILVA, 2009).

The symptomatic triad, in most cases, is perceived after the subject's entry into the school environment, since, in this period, behaviors characteristic of the disorder are in evidence and result in learning difficulties (ROHDE; HALPERN, 2004a). The diagnosis of ADHD is fundamentally clinical, based on criteria from classification systems established by the Diagnostic and Statistical Manual of Mental Disorders, in its fourth edition (DSM-V, 2011) and by the International Classification of ICD-10 Diseases (WHO, 1993).

Given the complexity of the theme addressed, this study seeks to point out parameters for the identification of the disorder, since there is great difficulty in distinguishing hyperactivity from other problems that generate the emotional agitation of the individual, helping to understand that the ability to depend, to a large part, on the integrity of the nervous system. This also varies by virtue of the degree of maturity of the brain and personality. It is observed that the small child and the pre-adolescent are less able to concentrate on a given activity for a long period of time than are more adult people. However, this is not a criterion for classifying them as hyperactive.

Among the most discussed subjects in Education, we highlight the diversity of students' behavior, as well as their learning difficulties. In this context, hyperactivity, a component of Attention Deficit Hyperactivity Disorder, simplified by the acronym ADHD, has been increasing its space in school environments.

Educators often come across students who have hyperactivity and do not know how to deal with them in the classroom, making a pre-trial and confusing their ADHD with bad behavior, which ends up significantly impairing the teaching process - students' learning. This is considered a worrying factor, as it is in the school environment that most young people have contact with reading and writing, which requires attention and concentration.

According to Barkley (2008), in 1902, George Still, an English pediatrician, presented ADHD, in which he observed changes in the behavior of several children

he attended, believing that such behaviors were not linked to educational failures, but rather to something biological, almost impossible to detect. These children would not currently be considered with ADHD, as they had mental disabilities, brain injuries and epilepsy. Still noted that they had, in common, great restlessness, attention deficit and learning difficulties.

Playful activities are indicated in the literature as beneficial to children diagnosed with ADHD. According to Vygotsky (2001), through ludicity, the child learns to put into practice his curiosity, acquires initiative, self-confidence, develops language, thought and concentration. The game is evidenced by Lorenzini (2002) as an element of playful activity that provides the child with sensory, motor, perceptual, cognitive and cultural experiences necessary for development.

The research is a qualitative approach from which a qualitative research was conducted through a literature review to unveil and explain the phenomenon researched and has as general objective to investigate the importance of the use of music as didactic resources can contribute to the process of literacy and literacy, and based on the general objective, "Analyze how music can be pedagogical tools to assist in literacy", were determined the specific objectives: discuss what literacy and literacy; describe the importance of music in literacy; identify and present reports of experiences that show the toothy music of the use of didactic resources in the practice of literacy.

## **2. General characteristics of ADHD**

It is quite composed the discussion of the causes that are involved in the determination of inattention and hyperactivity. As in the other developmental disorders there is also in this condition a whole variety of factors that may be intervening and will not always be the same for all children.

The diversity of cases is such that we would have to discern the possible causes for each individual. We say that possible, because it cannot always be certified that a specific condition, which proposes to be drastically important in a defined case, is the sole and exclusive reason responsible for all occurrences. Moreover, what may be more feasible is that the picture of AD-H is revealed in an individual providing for a sum of triggering factors. (CYPEL,2006)

Some studies in the medical literature suggest possible genetic motives.

For example, it was noticed that monozygotic twins had a higher incidence of AD-H than dizygotic twins (Willerman, 1973; Goodman and Stevenson, 1989). Safer conducted an interesting study in 1973, analyzing a higher incidence of hyperactivity among complete siblings than in half-siblings.

Other references highlight the presence of hyperactive children whose parents showed marked dominance of psychiatric problems when resembling parents of normal children (Morrison and Stewart, 1971). Interestingly, the same disorders were reported in non-biological parents of adoptive and hyperactive children (Cadoret et al., 1975), relativizing the action of the genetic factor.

However, existing studies especially due to the small number of subjects do not authorize the application of HDD as a genetic entity (Rutter, 1982) or that there is a gene responsible for this condition. The great clinical heterogeneity noted has not allowed the identification of specific genes; a perhaps still remote possibility that may uncomplicate this identification will be the determination of subphenotype studies.

It can be seen, therefore, that these observations allow that even if there is the possibility of participation of a genetic factor, it is very feasible that other family and environmental factors intervene in the determination of AD-H. (CYPEL,2006).

According to some studies, hyperactivity can be caused by emotional problems, because its causes may be reasons for hyperactive behavior, in this case, the clinical picture is circumstantial. Usually, family environmental factors, such as disagreements between the couple, aggressive behaviors, psychopathologies in the family, may be associated with the onset of hyperactivity. Individual or family psychological therapy will be of great value to help circumvent the clinical picture and environmental divergences. (TOPCZERWSKI,2010).

In the process of brain-level hyperactivity, there may be a brain imbalance caused by inappropriate production and reuse of neurotransmitters (dopamine, adrenaline, serotonin) in certain regions of the brain (prefrontal, frontal, parietal, limbic system, base nuclei, cerebellum, ascending reticular system) responsible for the level of attention, control of emotions, motor control, and wakefulness state. This biochemical confusion intervenes in the performance of the various activities, called executive, which need perception, planning, monitoring and organization for the correct preparation and execution of tasks. Therefore, these biochemical changes modify neurophysiological performance, because they interfere in the mechanisms of

sleep and wakefulness, contribute to the appearance of hyperactive, aggressive, impulsive, depressive behavior and attention disorders.

Most patients with hyperactivity picture portray normal development, but some denote some inequality in motor development. In these cases, the patient is most closely involved with changes in motor coordination and balance, partially computing his activities of daily living.

Most hyperactive patients manifest normal intelligence level. And part of hyperactive individuals have an above-average IQ, even if this condition is not palliative for good academic performance, due to behavior.

However, hyperactivity is not a manifestation that only occurs in children with normal intelligence, as this is a condition that children and adolescents with chronic encephalopathy may also present. Children with Down syndrome are mostly hyperactive most of the time; Many patients with mental disabilities are also. In this case, they need special attention to treatment because the hyperactive reaction in a child with mental disabilities becomes a complicating factor. (TOPCZERWSKI,2010).

Hyperactivity is a symptom that is not always isolated, as it may be accompanied by other manifestations such as low aptitude for concentration and difficulty in maintaining attention. This picture is called ADA (Attention Deficit Disorder). The absence of attention and concentration intervenes in the memorization process; memory engagement will have a negative effect on the learning process. It should be noted that hyperactive children do not always have poor school performance, because several of them can perform tasks quickly and efficiently, because attention is not compromised.

Children with AD have some manifestations that should be considered:

1. Difficulty in maintaining attention in activities;
2. They make mistakes that are not justified by lack of attention;
3. Any stimulus diverts attention from the tasks being performed due to lack of concentration;
4. They forget to do their day-to-day duties;
5. They don't seem to pay attention when they're talking to them;
6. Avoid or give up activities that require prolonged mental effort;
7. You have difficulty following the instructions to the end;

8. They easily forget the requests made to them.

It can be noted that these children present important difficulties related to the organization, development and execution of tasks.

It should also be considered that one of the characteristics of the DDAH picture is impulsive behavior, which is manifested by:

1. Difficulties to wait your turn in group activities;
2. Difficulty to keep quiet in a queue;
3. Being intolerant;
4. Try to answer the questions before they are completed;
5. Talk a lot;
6. Aggressive behavior, both physical and verbal.

Students with attention deficit scare students show great difficulty in inhibiting irrelevant stimuli during a task. In the classroom, the proposed activities often stimulate relative interest for the student and, if we add to this the little possibility of maintaining good attention and adequate concentration, we obtain, as a final result, the frustration for learning. Also in the classroom, when distracted during a task, they can hardly return in time to complete it, because they get lost in the content. The same procedure is examined at home, and, in this circumstance, the weariness in the relationships are enormous due to the charges by the parents and, on the other hand, the inability of the child to be able to meet the requests made to him. (TOPCZERWSKI,2010).

### **3.ADHD and teaching: Coping and challenges**

Hyperactive young people are often reckless and impulsive, and their relationships are marked by an absence of social inhibition, with lack of caution and reservations. They are unpopular with others and tend to isolate themselves socially. Despite the large number of studies on the subject, the causes of ADHD are still uncertain, considering that this disorder is the result of genetic and/or biological factors added to environmental issues.

According to Borella (2002), ADHD can be genetically found in genes encoding systems that regulate the supply of dopamine and serotonin, hormones found in the human body. There are still biological factors, which are not genetic, among which stand out the use of alcohol, drugs and certain medications during

pregnancy, by the mother, premature births, intracranial hemorrhages and lack of oxygen during childbirth. Also, environmental factors that interfere in psychological and emotional development, as well as family conflicts, mental disorder in parents, low socioeconomic status, crime on the part of parents, among others.

Silva (2003) states that attention deficit disorder (AD) derives from an altered functioning in the brain neurological system, and the chemicals produced by the brain, called neurotransmitters, called neurotransmitters, presented altered quantitatively and/or qualitatively within the brain systems that are responsible for the functions of attention, impulsivity and physical and mental activity in human behavior. The author also ensures that children seem agitated, moving non-stop in the classroom, at home or anywhere else. Sometimes they need to move several objects at the same time, "devil", "clumsy", etc. In adulthood, this agitation is less salient, but continues. It doesn't end with adolescence.

It is increasingly common to find, at school, students with ADHD, who are confused with young people who have bad behavior, who resist the guidance of the teacher, who become restless, agitated and anxious by a certain situation. Because they are not identified with this disorder and, consequently, have not identified their difficulties, these students cannot concentrate, question, reflect on a problem presented in the classroom, which leaves them "late" in their contents in relation to their colleagues. In this situation, the rates of repetition, low school performance, dropout and emotional and social difficulties increase.

The school has always been understood as a space for the development, learning of diverse contents and training of citizens capable of entering the social context in an appropriate and competent way. However, the development of this society, especially in the last 20 years, has revealed that this function destined to the school has become an extremely complex process due to the transformations that families have gone through and consequently society as a whole. The educational model that considered it correct teacher to teach because it is the holder of knowledge and student learn because it is his obligation no longer fits in the formatting of society that we live today.

The fact is that whatever the cause or causes of school failure, it(s) need to be investigated, both by the pedagogical team and by the family, with the help of appropriate professionals, because seeking information is the most efficient way to



understand and help these students develop their potentialities, whether they have a syndrome or not. The second article of the Law of Guidelines and Bases of Education of 1996 says that citizenship should be built through family and formal education (BRASIL, 1996)

There are many challenges of doing quality education in today's world and among them is the inclusion in regular schools of students with ADHD. Fostering cognitive development, the construction of knowledge, and the insertion of the individual lauded as ADHD in their social context, is presented as the core of this search for their effective inclusion, not only in the educational process but mainly in the holistic formation of the individual. We need to understand these points to fulfill our role as teachers who mediate in this construction of ethics and citizenship.

Historically, we can note that the school environment is excluding individuals who cannot correspond to the learning model considered satisfactory by society, especially those who have some kind of special need. Although today it is a consensus in the academic environment that they should and have the right to attend so-called regular schools, very little has been done to train pedagogical teams and families to assist in this inclusion.

The educational policies existing in most Brazilian schools unfortunately still crawled with regard to the conceptual domain of what is school inclusion. Receiving a student with special needs is a great responsibility, because it is necessary to adapt planning and activities that really function as integrators of these individuals, and this requires, among other actions, qualification of teachers, adequacy of physical spaces and mainly fostering teaching methodologies that value differentiated forms of knowledge and appreciation of diverse skills.

According to Glat and Blanco (2007), inclusive education is a progressive and continuous process of absorption of students with special educational needs by the regular school. This presupposes, at the same time, the adaptation of the institution and school culture to act with the student and the adaptation of this student so that he can fully enjoy the educational process. Our focus here will focus on the inclusion of students diagnosed with ADHD.

It is known, therefore, that ADHD significantly compromises the life of the child and the adults around it, as it is a condition that promotes difficulties, such as impulse control, concentration, memory, organization, planning and autonomy. And



it involves a great plurality of implied dimensions, such as behavioral, intellectual, social and emotional (BENCZIK, 2010, p. 26).

Making a diagnosis of ADHD is a complex task, as it must be done by a trained professional, through the observation of the general behavior of the child and/or adolescent in various environments, such as school, home, and other collective and individual environments frequented by the same, because there is no clinical or laboratory examination that presents this diagnosis. The Diagnostic and Statistical Manual of Mental Disorders, published in 2014, describes some symptoms of ADHD and says that the person needs to present at least six of these symptoms in more than one environment in which he/she attends for at least six months. There are several possible symptoms, but we can cite as an example of inattention, difficulty in following instructions or finishing tasks, lack of temporal and/or spatial organization, distraction with ease, demonstrates not listening to commands or questions, bodily and mental agitation, difficulty in waiting for your turn to speak, getting up frequently, lack of interest in long or silent activities, among others.

To develop a correct diagnosis of this condition, several evaluations are necessary, often with a multidisciplinary approach. The clinical evaluation with the doctor should collect information not only from the observation of the child during the consultation, but also to conduct an interview with the parents and/or caregivers of that child, request information from the school that the child attends about his/her behavior, sociability and learning, in addition to the use of scales to assess the presence and severity of symptoms (REIS ET AL, 2011, p. 11).

## FINAL CONSIDERATIONS

In the course of this work, the objective was to understand their relationship with ADHD to the professionals, characterizing the ways for the appropriate treatment of the student with this disorder.

ADHD is clinically considered by a neurological disorder that appears in childhood, of genetic etiology represented by changes in the functioning of the frontal lobe, area responsible for the control of attention, memory and self-control. Its diagnosis is based on the DSM-IV criteria, being dimensional in duration, frequency and intensity.

From this perspective, the school not only detects the evidence of ADHD but can also produce its symptoms. This requires educators to position themselves in the face of symptomatic and, in the existence of a professional, if the demand is favorable.

The data researched showed that educators still need a professional qualification so that the didactics in the classroom is favorable to not repeat learning and that it is done in a creative and dynamic way to hold the student's attention, because large majority of professionals have only heard about the disorder in the course without a greater focus on how to be working in a mixed environment.

Frailty and inconsistency are still pointed out in the school environment; therefore, several forms are presented, because the disproportionate attention of the family to education with these children, the inadequacy of the educational system for the care of children said as different are still causes found. For, through the teacher's gauze, inattention and behavior is still the main difficulty of students with this disorder.

Thus, in this proposal for the elaboration of knowledge, we observed crucial points seen by teachers in early childhood education, since it is necessary a search for understanding and discussion or a misunderstanding that accepts the problematization of educational searches that respond to an educational proposal with the look of children with ADHD.

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