

**PEDAGOGICAL PRACTICES FOR SUBJECTS DIAGNOSED WITH ADHD:  
AN INTEGRATIVE REVIEW**

***PRÁTICAS PEDAGÓGICAS PARA SUJEITOS COM DIAGNÓSTICO DE TDAH:  
UMA REVISÃO INTEGRATIVA***

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UNA REVISIÓN INTEGRATIVA**



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**ABSTRACT:** This study aims to present an integrative review based on the following guiding question: “What pedagogical practices aimed at students diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) are described in the literature of the educational area?”. The review was performed through the Capes Journal Portal and focused on full articles written in Portuguese, published between 2014 and 2018. Nine articles were found and the analysis of their underlying theoretical assumptions indicated two distinct positions: 1) the 'medicalizing', centered on organic-functional and emotional issues of diagnosed students, called medicalizing; 2) the 'contextualized', focused on aspects of history, culture and social interactions. Complementarily, it was observed that there is a shortage of publications based on contextualized practices, although these encompass a planning that welcomes the heterogeneity of the subjects in the school as well as the promotion of literacy. Thus, the need for more research based on the socio-historical perspective is advocated to broaden the debate on pedagogical practices for ADHD.

**KEYWORDS:** Pedagogical practice. Literacy. Attention Deficit Hyperactivity Disorder.

**RESUMO:** O objetivo desta pesquisa é apresentar uma revisão integrativa pautada na seguinte questão norteadora: “Quais práticas pedagógicas dirigidas para estudantes diagnosticados com Transtorno de Déficit de Atenção/Hiperatividade (TDAH) são descritas na literatura da área educacional?”. A busca compreendeu artigos completos em língua portuguesa, publicados no período de 2014 a 2018, no Portal de Periódicos da CAPES. A análise dos pressupostos que fundamentaram os nove artigos selecionados indicou duas posições teóricas distintas: 1) centrada em questões orgânico-funcionais e emocionais dos estudantes com TDAH, denominada ‘medicalizante’; 2) voltada para aspectos de história, cultura e interações sociais, designada ‘contextualizada’. Observou-se que, embora as práticas contextualizadas avancem na direção de um planejamento pedagógico voltado à heterogeneidade do público estudantil e promoção do letramento, há escassez de publicações pautadas nesta abordagem. Nessa direção, aponta-se para a necessidade de mais pesquisas considerando a perspectiva sócio-histórica, a fim de expandir o debate sobre o tema estudado.

**PALAVRAS-CHAVE:** Prática pedagógica. Letramento. Transtorno do Déficit de Atenção e Hiperatividade.

**RESUMEN:** El objetivo en este estudio es presentar una revisión integrativa con la cuestión orientadora: “¿Cuáles prácticas pedagógicas para estudiantes diagnosticados con TDAH han sido descritos en la literatura del área educacional?” Fueron abordados trabajos en la base de datos del sitio de periódicos de la CAPES, siendo que fueron considerados artículos completos en la lengua portuguesa, con publicaciones en el período de 2014-2018. Los análisis de los presupuestos teóricos que han fundamentado las nueve publicaciones indicaran dos posiciones diferentes: 1) con el centro en cuestiones orgánico-funcionales y emocionales de los estudiantes con diagnóstico en TDAH, que ha sido llamado de ‘medicalizante’; 2) con una mirada para aspectos históricos, cultura e interacciones sociales, llamada ‘contextualizada’. Aunque las prácticas contextualizadas avancen en la dirección de una planificación pedagógica con una acogida para heterogeneidad del público estudiantil y la promoción de letramiento, hay escasez de publicaciones pautadas en esa corriente teórica. En esa dirección señalase para la necesidad de más investigaciones considerando la perspectiva sociohistórica, con fines de expandir el debate sobre el tema estudiado.

**PALABRAS CLAVE:** Práctica pedagógica. Letramiento. Trastorno del Déficit de Atención e Hiperactividad

## Introduction

The democratization of education in Brazil owes its attribution to the exercise of citizenship, which is linked to rights and duties conferred on everyone. However, the success of education may run into conditions of children with so-called school difficulties, which may be linked to what is treated, according to Araújo, Anjos and Pereira (2020), as a student job required by the school, which, in general, goes beyond cognitive aspects and content learning, but encompasses an expectation of adults regarding a 'way of being at school'.

Among the school difficulties that may result in possible diagnoses, Attention Deficit Hyperactivity Disorder (ADHD) stands out. ADHD is categorized in the Diagnostic and Statistical Manual of Mental Disorders (DSM V) as a neuropsychiatric disorder, whose main characteristics are inattention, hyperactivity/impulsivity (ARAÚJO; ANJOS; PEREIRA, 2020), with complaints such as 'does not pay attention to details, does not follow instructions to the end, butts into other people's conversations, talks too much, is often at a mile a minute', among others.

On the other hand, the official concept of ADHD is challenged by numerous researchers. Moysés and Collares (1992), for example, explain that, in general, the approach to disorders such as ADHD is based on 'traditional clinical reasoning', considering that "This type of reasoning (if A causes B, B only can be caused by A) is structured at the origin of medicine itself as a science, at a time when the object of study was basically infectious-contagious diseases, in which A is a well-defined biological agent and external to man [...]" (MOYSÉS; COLLARES, 1992, p. 33, our translation). According to the authors, currently, the limitation of this reasoning is admitted even in this group of diseases. However, as a result of the training of health professionals, the hypothesis of cause and effect prevails, even when there is no significant involvement of biological aspects.

It should be noted that there are different views and positions on ADHD, with emphasis on two that are opposed: the organicist current, which defends the neurobiological nature of the disorder and the consequent need for treatments, often supported by stimulant medications; and the socio-historical aspect, which supports studies that reveal the need to investigate all the complexity of factors involved when there is a complaint that the child does not learn at school (SIGNOR; BERBERIAN; SANTANA, 2017).

According to Untoiglich (2013), current diagnoses respond to a reductionist view that captures objective interpretations of reality, transforming normal characteristics of life into diseases. There are multiple factors that must be considered when trying to understand the

growing phenomenon of medicalization in the school space: society itself, which historically excludes and stigmatizes those who are different – those who deviate from an average considered acceptable; the desire to adapt the subject to the proposed social system; the role of the pharmaceutical industry, which finances research that proves the existence of disorders and the supposed effectiveness of medications; the role of the media; the diagnoses that bring comfort to teachers who, many times, are unable to handle even the student considered “average”; students considered to have specific educational needs that end up revealing gaps and failures in teacher training, who are “fragile” (in terms of knowledge) and allow themselves to be captured by the biomedical/organicist discourse (UNTOIGLICH, 2013; SIGNOR; SANTANA, 2016).

The problem is aggravated because, commonly, educators only have access to the hegemonic view of ADHD. Cordeiro, Yaegashi and Oliveira (2018) state that social representations about this disorder are anchored in concepts propagated by the media and teacher training courses, as well as guidance given by health professionals. Thus, it is more and more frequent for students with suspected ADHD and their families to seek in the diagnosis the hope of having the right to an inclusive educational process, which is opposed to a perspective of promoting literacy in the teaching-learning process, which addresses, simultaneously, discursive, textual and normative dimensions that make up written language and, therefore, its processes of appropriation and use, highlighting with whom, for whom, with what purpose the speeches are written and where they circulate, which defines conditions of production, that is, different textual structures called discourse genres (VIEIRA; TONOCCHI; BERBERIAN, 2020).

On the other hand, in general, educational institutions follow guidelines that recommend obtaining health reports so that they can claim benefits from their students, including specialized educational assistance, pedagogical support after school hours and even arrangements for curricular adaptations. Regarding the adaptations, what we see are actions that, in the case of ADHD, end up related, to a large extent, to the extension of the deadline for handing in work, the possibility of taking tests in a quiet environment, the possibility of having extended time during the evaluations, among other indications that lead to believe that the inclusion process is not effective because the pedagogical practices do not incorporate the subject, but the diagnosis.

As for the impacts of the diagnosis, Caliman (2013) emphasizes that ADHD does not only produce political, social and subjective effects. The act of classifying works as a

technology that controls and stigmatizes, producing a phenomenon known as bioidentity. And bioidentities participate in biosociability, that is, they act in the constitution of sociabilities, often desired by the diagnosed subjects, as the author points out. In these biosocieties, what is sought is access to a set of rights that also impact subjectivity insofar as they transform the individual into a subject of rights.

Caliman (2013) also discusses, as effects of the diagnosis, apology, on the one hand, and accountability, on the other. This means relief and comfort for family members and subjects who adhere to the diagnosis, as, in a way, they are no longer judged morally, that is, they are no longer 'procrastinators, agitated and weird', and become 'neurodivergent'. However, these same subjects are led to assume responsibility for their treatment, mobilizing a veritable industry of medicalization.

In view of this, it is necessary to understand proposals and discourses constituted around pedagogical practices alluding to subjects taken with special needs in the context of teaching/learning, such as those diagnosed with ADHD, in order to launch a critical look at what is happening with students at school. From the above, the objective of this study is to analyze publications in the area of Education, from 2014 to 2018, focused on pedagogical practices aimed at subjects diagnosed with ADHD.

## Method

This work was carried out based on an integrative review of the literature in the field of Education, in the format of scientific articles, which had ADHD, pedagogical practices and school inclusion as their central theme. By determining the concentrated search in the area of education, the point of view is defended that the pedagogical practices are carried out in the classroom in the school routine between teachers and their students.

The integrative review is a form of research that provides a synthesis of research carried out on a chosen topic in an orderly and systematic way, collaborating to improve and understand the investigated topic (MENDES; SILVEIRA; GALVÃO, 2008).

This study was guided by the following question: "Which pedagogical practices aimed at subjects diagnosed with ADHD are described in the educational literature?"

For this purpose, in the CAPES Periodicals Portal database, electronic searches were carried out in two phases. In a first phase, a search was carried out using only the descriptor *Attention Deficit Hyperactivity Disorder*. Subsequently, an advanced search was carried out, selecting the

period of publications stipulated in this work, using the descriptor *Attention Deficit Disorder with Hyperactivity* plus the Boolean AND operator, combining it with the descriptors *Pedagogical Practices*, *School Inclusion* and *Education Inclusive*.

For the selection of articles, the following inclusion criteria were determined: complete scientific articles in Portuguese; accessible *online*; published from 2014 to 2018, in the area of education, which discussed the object of this study. The exclusion criteria were: duplicated/repeated articles in the searches with the selected descriptors; only abstracts available *online*; articles published in journals outside the field of education; that did not refer to the object of this study; that covered populations with diagnoses other than ADHD (such as autism); works such as bibliographic reviews, letters, reviews, editorials, books and chapters, theses, dissertations, monographs and course conclusion works.

After applying the inclusion and exclusion criteria, scientific articles were collected based on the analysis of titles, abstracts and complete readings (when just reading the abstract left doubts about the possibility of including the study). Finally, with the careful reading of the articles in full, the *corpus* of analysis of this study was selected.

From the selected articles, the following fundamentals were observed: presentation and distribution of the articles listed and selected in the period from 2014 to 2018; categorization of articles according to the nature of the study: Intervention (INT)<sup>4</sup> and Case Study (EC). In each category – INT and EC – the theoretical assumptions that underpinned the research were analysed, which provided discussions of the data from a socio-historical conception versed in this work, and derived in two perspectives considered in this study : 1) centered in organic-functional and emotional issues of subjects considered to have ADHD, called 'medicalizing'; 2) focused on aspects of history, culture and social interactions, designated 'contextualized'.

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<sup>4</sup>The studies mentioned here as INT were thus considered in terms of the method applied in the articles designated in this category, such as the application of interviews/questionnaires, forms, evaluation tests, protocols, continuing education, among others.

## Results

Based on the foundations stipulated in this study, 146 works were found only in step 1 of the search performed, that is, using the descriptor Attention Deficit *Hyperactivity Disorder*, 135 being excluded and, thus, resulting in nine selected articles, identified with a letter A, followed by ascending numerical order between numbers 1 to 9 – A1 to A9, which are presented in Table 1, below, which includes an exposition of the articles selected in terms of: title; journal/year; category marked according to the nature of the study: INT and EC; defined theoretical perspective – 'medicalizing' and 'contextualized'; excerpt from the article.

**Table 1** – Selected articles

A	TITLE	JOURNAL/ YEAR	CATEGORY	PERSPECTIV E	ARTICLE EXCERPT
T O 1	Teaching strategies and pedagogical resources for teaching students with ADHD in physical education classes	Rev. Bras. Ed. Esp. 2015	Intervention (INT) Type of intervention: practical activity	medicalizing	<i>The teacher, when selecting the environment for the class with the child with ADHD, should choose calm environments, with few stimuli to reduce the distraction of the students.</i> (p. 122)
A2	Attention deficit hyperactivity disorder (ADHD): a pedagogical look	Journal Events Pedagogical 2015	Intervention (INT) Type of intervention: interview/questionnaire	medicalizing	<i>ADHD or Attention Deficit Hyperactivity Disorder is a neurobiological disorder that makes it difficult for children and adolescents to learn to control their own behaviors, but it does not mean that they are unable to control them. And the teacher and the school need to know that hyperactivity, impulsivity,</i>

					deficit or lack of attention today affects many children [...]. (p. 229)
A3	The Attention Deficit Hyperactivity Disorder (ADHD) case and the medicalization of education: an analysis based on the reports of parents and teachers	Interface Health Communication Education 2016	Intervention (INT) Type of intervention: interview	Contextualized	<i>Thus, the task of medicine is reduced to categorizing behaviors, gestures and attitudes considered inadequate and determining diagnoses and treatments, mostly medication, without restrictions. Thus, children's behaviors that differ from what is expected in diseases are transformed, sustaining a process of pathologization that has supposedly unquestionable scientific and medical endorsement. (p. 711)</i>
A4	Attention deficit hyperactivity disorder in the teaching-learning process in elementary school	Journal Even. Pedagog. 2016	Intervention (INT) Type of intervention: observation/questionnaire	medicalizing	<i>The child with ADHD demonstrates difficulties in learning, in concentrate on activities proposed in the classroom, constantly moving, and ends up for having fun. Many end up being impatient to carry out the activities or</i>



					<i>even impulsive ones, not waiting for the turn of other colleagues. (p. 1221)</i>
A5	ADHD at school methodology strategies for the teacher to work in the classroom	Journal Events Pedagogical 2014	Case Study (CE)	medicalizing	<i>Hyperactive behavior interferes both in the child's family life and in school and social life. They find it very difficult to pay attention and sometimes also to learn. As they are unable to filter stimuli, they are easily distracted, are always on the move, and unable to sit still. Diagnosing a child with ADHD is not easy, it takes a lot of observation from a very early age, and only a team from the specialized health area can diagnose and give a report to the child. (p. 107)</i>
A6	The medicalization of education: implications for the constitution of the subject/learner	Educ. Pesqui 2017	Case Study (CE)	Contextualized	<i>[...] attributing school difficulties to the student's organic/cerebral characteristics hides the social, cultural, political, educational, affective and ideological conditions</i>

					<i>involved in the production of the so-called ADHD. (p. 748)</i>
A7	Attention Deficit Hyperactivity Disorder: learning difficulties	Journal Pedagogical Events 2015	Intervention (INT) Type of intervention: observation/questionnaire	medicalizing	<i>This type of disorder is often responsible for the student's learning difficulties, which brings with it an attention deficit that is also responsible for a lack of concentration and, therefore, poor school performance. (p. 44)</i>
A8	Training of parents and teachers of students with attention deficit hyperactivity/impulsivity disorder: implementation in collaborative partnership	Colloquium Humanarum 2015	Intervention (INT) Type of intervention: continuing education	medicalizing	<i>Topics such as; characterization and knowledge of students with ADHD and medication use; types of ADHD and teaching strategies and teaching resources that can be used at home or at school with students with ADHD, among others. (p. 139)</i>
A9	The child with ADHD: analysis of school performance and motor engagement	Cinergis 2016	Case Study (EC)	medicalizing	<i>The engagement attitudes analyzed demonstrate that the child with ADHD performed most of the skills with difficulty concentrating, consequently reflecting on the delay in their</i>

*performance in  
the skills  
proposed during  
the Physical  
Education class.  
(p. 5)*

A: Article.

Source: Elaborated by the authors

With regard to the level of education, the nine selected publications were related to elementary education (which is an integral part of basic education in Brazil, serving kindergarten and high school). As for the populations analyzed in the chosen publications, it is observed that all of them converged to the work of teachers with children (average age between 7 and 11 years). Concerning the participants in works related to the INT category, the publications involved family and subjects with ADHD, as well as education professionals.

Regarding the theoretical assumptions indicated in the selected publications, there is a predominance of the one marked, in this work, as 'medicalizing' – A1, A2, A4 A5, A7, A8 and A9 – and only two, A3 and A6, talk about a position that takes into account discursive, subjective, social and cultural aspects around the ADHD theme, characterized, in this study, as 'contextualized'.

## Discussion

Studies dealing with ADHD reveal that this is a controversial topic. There are those who argue that ADHD is an organic, neurobiological, genetically based disorder that negatively interferes with the subject's teaching/learning process. On the other hand, there are those who confront this view and understand ADHD as a result of medicalization in the educational field. For Meira (2012), medicalization is a process by which the conflicting issues of everyday life are transferred to the medical field. That is, there is a transformation of social and political aspects into organic-functional problems, that is, life processes are reduced to a dysfunction in the brain organ.

The diagnosis of ADHD is built, above all, through school complaints and the direct observation of teachers about learning and behaviors that are manifested in the classroom. According to Dunker (2015), the diagnostic process is one of the most valued activities in today's society, as it assigns a name to the 'symptoms'. Ideologies around the diagnosis reflect and sustain the hegemony of pathologizing discourses. What is specific in relation to ADHD is that the diagnosis makes it possible to guide the teacher about behaviors based on a label and not on the

historicity and uniqueness of the students, insofar as this label presents a nomenclature to school failure and shifts responsibility from the school for the subject (NATAL, 2020). From a non-medical point of view, teachers are advised to plan their pedagogical practices for a subject-learner, considering, along the way, their interests, needs, abilities, limitations and possibilities. What is also proposed is that the school should be a space for promoting literacy and that the teacher should focus on the pedagogical nature of learning (LABES, 2020).

With regard to the topics addressed in the selected articles, it should be noted that, in general, they dealt with motor aspects supposedly involved in ADHD, learning difficulties linked to ADHD, strategies developed by teachers for students with ADHD, as well as support for their families; only two articles declared circumscribed discussions about medicalization with a focus on ADHD.

The medicalization theme involving studies on ADHD, although incipient, reveals a disturbing reality corroborated by supporting literature. Cordeiro, Yaegashi and Oliveira (2018), for example, when monitoring and observing students diagnosed with ADHD in Brazilian schools, reported that if these students had not been previously identified, it would not have been possible to identify them only by the behavioral aspect, since that none of them presented, according to the researchers, hyperactivity and/or impulsivity. These findings, which call into question the diagnosis attributed to the students, promote the need for reflections on the subject of ADHD. As a consequence, they produce the urge to implement the pedagogical work aimed at diagnosed students, with teaching and learning strategies and practices consistent with their needs and not with the acronym received. Therefore, for purposes of analysis of this work, below, the themes will be discussed from four axes involved in the studies presented: ADHD and motor aspects (A1 and A9); ADHD, pedagogical strategies and training for teachers (A2, A4, A5, A7 and A8); ADHD and medicalization (A3 and A6). The discussion also includes aspects related to “medicalizing recommendations” present not only in the articles selected in this research, but in health reports, manuals and documents produced by representatives of associations dedicated to the defense of people with suspected or diagnosed ADHD.

## ADHD and motor aspects

Research dealing with motor aspects in ADHD is justified by the fact that it is widely publicized that people with this disorder can be clumsy, fall more frequently; when children take time to learn to tie their shoelaces and button their clothes; at school, they injure themselves and break objects more often than other students, and often have handwriting difficulties.

With regard to handwriting, Lima and Albuquerque (2003) state that the notebooks of children with ADHD are dirty, crumpled and torn, highlighting their difficulty in motor planning, spatial organization and letter tracing, which, many times, sometimes it is of the illegible type. These symptomatic manifestations are understood based on a current that defends that the symptoms present in students with specific reading disorder and ADHD occur due to a wider sensorimotor deficit (RAMUS, 2003). This view can be seen in an excerpt from A1.

*During the interventions, we observed that the psychomotor, recreational activities and strategy games are interconnected, that is, they complement each other and enable stimuli to memory, attention and concentration (A1, p. 123, our translation).*

It should be clarified that those affiliated with the socio-historical current do not deny that psychomotor activities can bring benefits to cognitive fields that affect learning for students in general. What is questioned is whether there would be, in the so-called ADHD, a cerebellar deficit. Bishop (2007), bringing up the role of the cerebellum for aspects involved in reading, writing and hyperactivity, presents a critique of a therapeutic approach based on motor coordination training. Dore (2006), a supporter of the cerebellar deficit theory, believes that delay in cerebellar development is the cause of learning problems and that training cerebellum-mediated skills would lead to improvement in several domains, such as handwriting, attention and hyperactivity. But, for Bishop (2007), the treatment that promises the 'cerebellar cure' for people with ADHD and dyslexia lacks scientific evidence.

Bishop (2007) agrees that possible damage to the cerebellum could lead to learning difficulties. According to her, imaging studies and also analysis of the *post-mortem brain* have revealed cerebellar abnormalities in these groups. In addition, some studies have shown deficits involving balance and automation of motor skills in the group of people with symptoms in the field of learning, in line with the cerebellar deficit theory. But, for the author, it is premature to conclude that abnormal cerebellar development would cause a neurodevelopmental disorder. Bishop (2002) explains that the cerebellum is a plastic structure that can be modified through social practices. Therefore, cerebellar abnormalities may be a consequence of limited

handwriting experiences in people with low levels of literacy. Also noteworthy are studies that reveal that, after treatment, the regions considered hypoactive in the brains of children with difficulties in reading and/or handwriting may change, corroborating the notion of brain flexibility.

It is also necessary to reflect on the labels that tend to modify the interactional processes, so that children with a more active profile, when identified as agitated or hyperactive, end up incorporating these conditions. From the point of view of adults, it is common to see mothers or guardians taking care of themselves (tying the shoelaces, dressing, bathing and, sometimes, even feeding the child) for a longer period of time than would occur with typical children. It is understood, therefore, that relational changes, resulting from pathologization, end up compromising processes that end up being postponed in the course of development, reiterating the idea that these children with the so-called ADHD would have (psycho)motor changes.

### ADHD and Pedagogical Strategies

This section is timely for the purposes of this study as it discusses the pedagogical strategies developed in schools. To start the discussion, it is suggested to observe the excerpts taken from A4, A5 and A8:

*[...] it is important that the teacher observes the students' behavior in the proposed activities, if they are carried out and how they are done, if they have any difficulties, allowing the identification of ADHD symptoms such as inattention, hyperactivity, impulsivity and so on, referring him to a medical evaluation (A4, p. 1220, our translation).*

*Students with ADHD are fully capable of developing their creative potential, but when they lose focus, they leave their activities half done, thus failing to complete them. [...] It is therefore necessary to constantly stimulate the attention of students with ADHD, so that they do not get lost to any new stimulus in the environment (A5, p. 107, our translation).*

*In the teachers' statements, it was identified that one of the difficulties is how to identify which is the best pedagogical resource or teaching strategy for students with ADHD. In some reports, it was also identified that the teacher says he needs support from other professionals, because during the planning and elaboration of his classes he is able to perceive the needs of the student, but he cannot identify which resources and strategies can be used (A8, p. 143/144, our translation).*

In relation to the strategies, what is seen, in general, is a belief, on the part of the educator, that he would not have the capacity to contemplate the specificities of students who do not meet

expectations. It is frequent to hear from teachers complaints like 'he won't sit down; I can't get her involved in activities; live in the moon world'. In fact, the teacher experiences the anguish of having to deal with a diverse and heterogeneous context without having comprehensive training, with a lack of resources and lack of support in the (SIGNOR; SANTANA, 2016). This fact can be verified in the articles selected here that tried to discuss the pedagogical strategies.

It is worth mentioning that when these teachers say, as seen in the excerpts, that it is important to “identify the symptoms, refer them to a medical team, work together with the resource room”, they are already signaling that the problem is not pedagogical, but of the order of health. This discourse reveals a pathologizing view of education that was historically constructed and has as a consequence the annihilation of possibilities for a deeper understanding of the manifestations that are presented at school (UNTOIGLICH, 2013). It is argued here that understanding the reason why a student is more prone to distraction than others or who gets up from the desk at inappropriate times is extremely relevant when the objective is precisely to develop coping strategies.

What is suggested in this work is the need to generate individualized pedagogical proposals and verify whether they are being efficient in promoting literacy and inclusion. The notion of “special educational needs” emphasizes the interaction of students' individual characteristics with the educational and social environments, calling regular education to the challenge of meeting differences. With the perspective of inclusive education, it is considered that people change continuously, transforming the context in which they are inserted. This process is dynamic and requires a pedagogical action aimed at modifying the situation of exclusion, emphasizing the importance of heterogeneous environments that promote learning for all students.

Modifying the historical situation of social and educational exclusion implies, in the understanding of Abed (2016), reviewing the paradigmatic dimension. This means, for the educator, to become aware of the values underlying the pedagogical practice, namely, the vision of subject, knowledge, teaching and learning; which would favor the constitution of a transformation agent teacher. “Knowing the theoretical foundations about how human beings develop, how they learn and how they teach, prepares teachers to assume the role of mobilizing changes based on their role in the triangulation between the teacher, the learner and the objects of study” (ABED, p. 126, 2016).

As for the medical evaluation or multidisciplinary team, as pointed out in A4 and A8, it should be noted that the need for diagnosis, health care, therapies and medications under

specific and strictly necessary conditions is not relativized. But it is worth questioning whether medicating or offering additional time to take tests (benefit achieved on account of a report) are inclusive and effective actions to overcome the problem. It is considered, according to Signor, Lisboa, Riesinger and Althaus (2022), that inclusion based on a medical diagnosis implies the exclusion of those who also have educational needs, but do not have access to the health system. Understanding inclusion as a right for everyone (without distinction), the achievement of benefits should be based more on the needs of each student – on the pedagogical diagnosis – and less on health diagnoses. The “requirement” of medical diagnosis (on the part of many schools) should not be to gain rights, but rather to broaden the understanding of learning needs and forms of help.

### **ADHD and medicalization**

Two of the articles selected in this research discussed ADHD from the “medicalizing logic”, as pointed out in A3 and A6:

*[...] it is considered that the way of understanding the alleged difficulties of the students is immersed in the medicalizing logic that has as a tool the use of technologies and knowledge to control the behavior of children, which reduces the entire subjective constitution, composed of family, school and social relationships to just one diagnosis and, therefore, to a disease that would justify failures, difficulties and suffering (A3, p. 712, our translation).*

*Susi was subjected to unfavorable social interactions and ineffective literacy practices - and she objected to them. It turns out that this resistance was understood by the school as a sign that something was not going well. [...] what is denied is that these difficulties are early considered as individual disorders, without considering the social and discursive practices that mediate the process of appropriation of writing (A6, p. 753, our translation).*

These articles pointed to the effects of pathologization arising from the unfavorable discursive process of the student within the school. In this discursive process, what happens are children being pointed out as someone who is failing at school, which leads to serious compromises for children's subjectivity, as children begin to orient themselves through labels that are attributed to them (UNTOIGLICH, 2013).

Article A6 presented a case study of a child (Susi) who was mentioned in a pejorative way since the age of two and, due to her behavior considered resistant, was constantly excluded from living with her peers. “Sent to the 'corner of thought' to reflect on her actions considered inappropriate, Susi kept assimilating that children who do not meet an expected standard should



be removed from their social group” (SIGNOR, BERBERIAN, SANTANA, 2017, p. 756, our translation). As a result of this excluding and stigmatizing process, which lasted throughout childhood education, at the age of six, Susi was diagnosed with ADHD. However, even though diagnosed and medicated, the complaints related to behavior and learning persisted until the child, already in the third year of elementary school, came across a 'sweet' teacher, in her mother's terms. For this mother, as stated in the article in question, that year was very peaceful because there were no complaints and complaints about her daughter, but, on the contrary, there were praises. It appears here that, contrary to the process in which she was disqualified, in the third year, the child entered a favorable discourse process and, as a result, managed to become literate.

For Signor, Berberian and Santana (2017, p. 757, our translation), “[...] evidencing the importance of establishing interactions from which the child is put in the place of a capable subject, we were able to understand the advances in learning reported by the mother from Susi”. The authors point to the relevance of affectivity for the child's development at school, because by committing to the student and their learning, the teacher receives the student's commitment as well. This process is inherent to the nature of human relationships and is consistent with the notion of a responsive subject (BAKHTIN, 2006).

Research A6 points to the need for a broad reflection on the adversities related to the Brazilian school, which would lead to a critical review of the established conceptions about man himself and the society that needs to be built, about the role of the State and the school and the knowledge production process. It also points to the relationship between family and school, and to the values that the school needs to work with its students. Finally, a broad oxygenation of the political and ideological references underlying the educational system is necessary. For Leite (2007, p. 303, our translation), this reflective process must take place in a collective dimension, “[...] preferably within the school itself, involving the community and educators committed to education and who dream of the possibility of transforming the world through its educational action”. It would promote, following what Leite (2007) proposes, health and literacy within the school space. What supporters of the socio-historical perspective understand is that this movement would lead to the de-pathologization of education, as teachers would eventually realize that in meaningful learning contexts, students engage and, with that, learn; that is, the symptoms of inattention and hyperactivity (or alienation from what is proposed by the school?) would be replaced by other signs: commitment, progress, appropriation of knowledge, interest in reading. Signor, Berberian and Santana (2017) state that only in this way,

through the empowerment of education professionals, will it be possible to detach from paradigms based on idealized students and engage in the search for social transformation.

### Medicalizing recommendations

With regard to the medicalizing recommendations that attempt to promote the inclusion of students with school difficulties, and which are contained in manuals, documents and health reports, it is worth highlighting the indications directed at students with ADHD that are contained in the 'Cartilha da Inclusão Escolar - Inclusion Based on Scientific Evidences ' (2014).

*The student should be placed to sit close to the area where the teacher spends the most time and away from other places that may cause distraction (window, door, etc.) or restless and inattentive classmates (p. 23, our translation).*

*The teacher must make the learning process as concrete and visual as possible; the instructions must be short and objective (p. 23, our translation).*

What one sees in these “recommendations” are indications that do nothing more than artificialize interactional processes. Thus, 'sitting close to the teacher, away from distractors and restless colleagues' are part of a package of measures considered, only by the positivist current, as effective.

Unlike the tradition that has the practice of listing this list of procedures, what is proposed here is not a standard, model plan, based on a diagnosis (for example: 'students with ADHD should sit next to the teacher'), but a planning exclusive, produced by all those involved (SIGNOR; LISBOA; RIESINGER; ALTHAUS, 2022). Following another way of understanding the educational process, critics of medicalization suggest individualized plans, based on the subjects' needs and not on the disease. This means making efforts to understand what actually happens when something does not go well at school.

In order to investigate processes involved in the school complaint, it is necessary to start with qualified listening to the speeches of the student, the family and the teachers, rescuing the history of the difficulties and how they manifest themselves. It is also necessary to analyze the quality of the social interactions to which the student is submitted (SIGNOR; SANTANA, 2016). Such an analysis could be supported by questions that could help in this understanding process, namely: Who is this student, what does he really need? How would the student like the inclusive process to take place? How does he imagine a school context more favorable to his learning? What are your suggestions for making learning and socializing at school more effective? It is necessary for the school to welcome the student, inviting him to actively

participate in this process, so that he awakens the necessary commitment to the effectiveness of any inclusive proposal.

The unique pedagogical plan also involves a reflection by the school on the strategies it proposes – or which it implements based on the indications it receives in health reports – and how many of them are not always efficient. For example, why, as a rule, does a student diagnosed with ADHD need to sit in front of others? Is it the position in the room that will favor attention? If this student has a history of social exclusion, won't he be more distant from the group at the front? It is necessary to analyze each action taken and its implications for student learning and well-being. With that, it is not stated here that sitting in the first seat is an action that should be avoided. What is proposed is, only, to think about whether this action is indicated for every student who presents a behavior considered more active or with a tendency to distraction. Each situation needs to be considered in its complexity (SIGNOR; LISBOA; RIESINGER; ALTHAUS, 2022).

Other reflections that are necessary on the subject of inclusion are: Is the school too rigid? Is the assessment system primarily focused on tests? As for evaluations, it is difficult to get the school to abandon the test system, but it could reduce the number of evaluations, replacing many of them with projects. As explained by Vygotsky (2010), the assessment of learning through the application of tests tends to modify the processes of knowledge formation. That is, when the student focuses on memorization in order to be tested, there are substantial losses in the acquisition of concepts and notions, as the objective is no longer learning and becomes performing well in the test. “Experience has shown that memory learning takes place in an entirely different way and gives completely different results depending on the type of verification the experimenter undergoes” (VYGOTSKY, 2010, p. 170, our translation). Thus, for students to be able to assume a commitment to their learning, the system must be flexible to individual needs and possibilities.

For Leite (2008), the aversive effects of traditional assessment are notable, making it difficult for some students to bond with the object of knowledge. The author proposes that the diagnostic function of the evaluation be rescued, arguing that a test only makes sense (in a democratic society) if its results are used in favor of the student. This means that the evaluation results should not serve to promote low self-esteem, but to understand the teaching and learning conditions, aiming at improving this process. Only then, as a diagnostic function, will the tests serve to favor pedagogical mediation, providing a growing affective involvement of the subject with the content conveyed by the school.

In short, what is observed in the medicalizing recommendations are palliative solutions that, in addition to not promoting learning, generate more stigma and accentuate school exclusion. In other words, these documents contain a cluster of actions based on behaviors and reward systems; that is, they 'enable' the teacher to propose experiences that sometimes have the opposite effect of what the inclusion proposal aims at. The countercurrent, in turn, bets on solutions permeated in contextualized pedagogical practices; which implies, among other actions, considering significant mediations, accepting the subjects' experiences and building collective practices supported by historical and social processes. In this sense, what is proposed is to actually achieve a conception of literacy, not as solely related to academic practice, but also to the most varied activities of everyday life (LUSTOSA *et al.* 2016). Therefore, more than pedagogical practices, it focuses on literate practices in the context of ADHD.

### **Final remarks**

In this integrative review, it was found that pedagogical practices aimed at subjects diagnosed with ADHD are, in general, anchored in the 'medicalizing' line; that is, they promote a cycle of fragmented actions that distance content from practice and generate feelings of failure and lack of interest in learning.

It was argued, in this study, that maintaining a biological determinism for learning difficulties involves a paradigmatic question. In this sense, it is important to consider that a theoretical perspective supported by a paradigm is nothing more than a hypothesis and, therefore, cannot be listed as the true nature of reality. It happens, however, that the paradigms began to be established as true academic-scientific doctrines, prevailing in a society that defined by the science of greater political eloquence. And, in this way, the phenomenon of medicalization is perpetuated in academic, medical and school environments, precisely because an ideal subject remains - perfect, abstract and universal.

Based on the approach adopted here, the relevance of 'contextualized'/literate pedagogical practices is reiterated, in particular, given the weight of the pedagogical discourse for students and their families. It is urgent to develop a humanized view aimed at rescuing a place of impossibility attributed to those considered 'resistant', inattentive and incapable' to a position of competence and capacity in relation to school learning. It is necessary, in this way, to promote the redefinition of pedagogical practices, from a dialogic perspective, namely, that considers the relationship of subjects with written language, since, regardless of the stage of life, the

development of literacy happens as a movement integrator of social practice in the space of human activity, conferring authorship, as well as the social and relational dimension of the subject in the school environment.

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