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**LEARNING DISORDERS: HOW CAN PSYCHOPEDAGOGY HELP IDENTIFY AND TREAT LEARNING DISORDERS SUCH AS DYSLEXIA, DYSCALCULIA, AND DYSORTHOGRAPHY, AND HOW CAN PEDAGOGY BE ADAPTED TO MEET THE NEEDS OF THESE STUDENTS?**

**TRANSTORNOS DE APRENDIZAGEM: COMO A PSICOPEDAGOGIA PODE AJUDAR A IDENTIFICAR E TRATAR TRANSTORNOS DE APRENDIZAGEM, COMO DISLEXIA, DISCALCULIA E DISORTOGRAFIA, E COMO A PEDAGOGIA PODE SER ADAPTADA PARA ATENDER ÀS NECESSIDADES DESSES ALUNOS?**

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**ABSTRACT:** This article aims to discuss learning disorders, their causes, symptoms, and treatments, as well as the importance of inclusive schools, pedagogical adaptations, emotional and social aspects, partnership between school and family, and the challenges faced in the diagnosis and treatment of these disorders. Through literature review, it was possible to conclude that learning disorders require a multidisciplinary approach, involving professionals from various fields, such as psychologists, psychopedagogists, speech therapists, and educators, considering not only cognitive but also emotional and social aspects. Inclusive schooling and pedagogical adaptations are fundamental to ensure access and permanence of students with learning disorders in the school environment, as well as the partnership between school and family, which should be established from diagnosis to treatment and student follow-up. However, there are still many challenges and limitations in the diagnosis and treatment of learning disorders, such as prejudice, lack of resources, and specialized professionals. Therefore, investment in the training of qualified professionals and public policies aiming to ensure access to quality health and education for all students is necessary.

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**Keywords:** Learning disorders 1. Inclusive school 2. Pedagogical adaptations 3. School-family partnership 4. Challenges 5.

**RESUMO:** Este artigo tem como objetivo discutir os transtornos de aprendizagem, suas causas, sintomas e tratamentos, bem como a importância da escola inclusiva, adaptações pedagógicas, aspectos emocionais e sociais, parceria entre escola e família, e os desafios enfrentados no diagnóstico e tratamento desses transtornos. Através da revisão da literatura, foi possível concluir que os transtornos de aprendizagem requerem uma abordagem multidisciplinar, que envolva profissionais de diversas áreas, como psicólogos, psicopedagogos, fonoaudiólogos e educadores, e que considerem não apenas aspectos cognitivos, mas também emocionais e sociais. A inclusão escolar e as adaptações pedagógicas são fundamentais para garantir o acesso e a permanência dos alunos com transtornos de aprendizagem no ambiente escolar, bem como a parceria entre escola e família, que deve ser estabelecida desde o diagnóstico até o tratamento e acompanhamento do aluno. Porém, ainda há muitos desafios e limitações no diagnóstico e tratamento dos transtornos de aprendizagem, como o preconceito e a falta de recursos e profissionais especializados. Portanto, é necessário um investimento na formação de profissionais capacitados e em políticas públicas que visem garantir o acesso à saúde e educação de qualidade para todos os alunos.

**Palavras-chave:** Transtornos de aprendizagem 1. Escola inclusiva 2. Adaptações pedagógicas 3. Parceria escola-família 4. Desafios 5.

## 1. Introduction

Learning is a complex and multifaceted process that involves a range of cognitive, emotional and social skills. However, for some people, this process can be hampered by several factors, including learning disorders, which directly affect the way the individual processes, stores and uses information.

Learning disorders are neurological conditions that interfere with the individual's ability to learn and use cognitive skills, such as reading, writing, mathematics, among others. These disorders can have a significant impact on the academic, social, and emotional lives of affected students, and often go unnoticed or are mistaken for laziness or lack of ability.

Given this scenario, it is essential to understand and study learning disorders, as well as to develop intervention strategies and techniques to identify and treat these

disorders. In this context, psychopedagogy and pedagogy play crucial roles, providing knowledge and tools to identify and meet the needs of students with learning disorders.

Psychopedagogy, for example, uses therapeutic and pedagogical approaches to help individuals overcome their learning difficulties, promoting autonomy and self-esteem. Pedagogy, on the other hand, seeks to adapt teaching methodologies and techniques to meet the specific needs of students, using didactic resources and assistive technologies.

In view of this, the present article has the general objective of investigating how psychopedagogy can help in the identification and treatment of learning disorders, such as dyslexia, dyscalculia and dysorthography, and how pedagogy can be adapted to meet the needs of these students. With this, we seek to contribute to the improvement of the teaching and learning process, promoting the inclusion and academic and social development of students with learning disorders.

## **2. Hipótese**

A abordagem multidisciplinar, que envolve profissionais de diferentes áreas, como psicopedagogos, psicólogos, fonoaudiólogos e educadores, aliada à inclusão escolar e adaptações pedagógicas, é fundamental para identificar e tratar os transtornos de aprendizagem, como dislexia, discalculia e disortografia, e atender às necessidades desses alunos, melhorando seu desempenho acadêmico e sua qualidade de vida.

## **3. Main goal**

To investigate the contribution of psychopedagogy in the identification and treatment of learning disorders, as well as the importance of pedagogical adaptation for the academic and social development of students with these disorders. It allows the article to explore the main aspects related to learning disorders and how psychopedagogy can help in the identification and treatment of these disorders. In

addition, it allows the article to address the importance of pedagogical adaptation to meet the needs of these students and promote their academic and social development.

#### 4. Specific objectives

- Carry out a literature review on the main learning disorders, such as dyslexia, dyscalculia and dysorthography, in order to understand their causes, symptoms and diagnosis.

- Investigate the contribution of psychopedagogy in the process of identifying and diagnosing learning disorders, as well as the main approaches and techniques used in psychopedagogical intervention.

- Analyze the importance of pedagogical adaptation for the academic and social development of students with learning disorders, including teaching strategies, teaching resources and assistive technologies.

- Identify the main challenges faced by psychopedagogy and pedagogy professionals in the identification and treatment of learning disorders, as well as possible solutions to overcome these challenges.

- Evaluate the effectiveness of psychopedagogical intervention and pedagogical adaptation in the academic performance and self-esteem of students with learning disorders.

- Discuss the ethical and legal implications of diagnosis and psychopedagogical intervention in learning disorders, including the role of parents and school in this process.

- Present practical cases of psychopedagogical intervention and pedagogical adaptation to illustrate the main strategies and techniques used in promoting the academic and social development of students with learning disorders.

With these specific objectives, the article will be able to explore in more depth the main aspects related to the proposed theme, providing useful and relevant information for professionals in the area and for those who wish to know more about learning disorders and the importance of psychopedagogy and adaptation. pedagogy in the teaching and learning process.

## 5. Methodology and Method

**Methodology:** To achieve the objectives proposed in this article, a literature review will be carried out, with a survey of studies and research published in scientific journals, books and other materials related to the subject. The selection of materials will be based on specific keywords, such as "learning disorders", "psychopedagogy", "dyslexia", "dyscalculia" and "dysorthography". Studies in Portuguese, English and Spanish, published from 2010 to date will be included.

**Method:** The method used will be a systematic literature review, which consists of a rigorous process of selection, evaluation and analysis of the included studies. Initially, searches will be carried out in electronic databases, such as PubMed, Scopus, ERIC and PsycINFO, using previously defined keywords. Next, the titles, abstracts and full texts of the identified studies will be screened, according to established inclusion and exclusion criteria. Selected studies will be evaluated for methodological quality and relevance to the topic in question. Data analysis will be carried out through a narrative synthesis, presenting the main results found in the literature review and their relationship with the objective proposed in this article.

## 6. Data Analysis Methodology

For the analysis of data from the article on learning disorders and how psychopedagogy can help to identify and treat these disorders, a qualitative approach can be used. It would be possible to conduct interviews with educational psychologists, educators, parents of students with learning disorders and health professionals, in order to obtain more detailed information about their experiences, perceptions and opinions on the subject.

The interviews can be recorded and transcribed for qualitative content analysis, which would allow identifying the main themes and emerging patterns in the participants' responses. Furthermore, it would also be possible to use standardized

questionnaires to assess the participants' perception of school inclusion, pedagogical adaptations and school-family partnership in the context of learning disorders.

The data obtained can be analyzed qualitatively through categorization and coding of the data, in addition to descriptive statistical analysis to identify frequencies and patterns in the responses of the participants. Finally, the results of the analyzes can be presented in a descriptive and interpretative way, in order to highlight the main findings and conclusions of the study.

## **7. Risk of the Approached Topic**

The theme addressed, brings in its essence; as psychopedagogy can help to identify and treat these disorders, then, it does not present significant risks. On the contrary, it is an important and relevant subject for the education and mental health of children and adolescents who face learning difficulties. In addition, it is a subject widely studied and discussed by professionals from different areas, including psychology, pedagogy, psychopedagogy, neurology and speech therapy, which increases the quality and reliability of the available information. However, it is important that the article is based on reliable and up-to-date sources and that it avoids generalizations or unsubstantiated claims.

## **8. Basic concepts: explaining what learning disorders are, their causes and main characteristics, with emphasis on dyslexia, dyscalculia and dysorthography**

Learning disorders are neurological conditions that affect an individual's ability to learn and use specific cognitive skills, such as reading, writing and math. According to the Diagnostic and Statistical Manual of Mental Disorders - DSM-5 (2013), learning disorders are defined as a group of disorders that significantly interfere with the acquisition, use and understanding of oral and written language, mathematical skills and spatial reasoning.

Learning disorders can be caused by genetic factors, environmental factors or a combination of both. Several studies have demonstrated the association between learning disorders and abnormalities in brain functioning, such as difficulties in neural connectivity and in the activity of certain areas of the brain involved in language and mathematical skills (Gross-Glenn, Duara, & Barker, 2008; Katusic, Colligan, Barbaresi, Schaid, & Jacobsen, 2001).

Among the most common learning disorders, dyslexia, dyscalculia and dysorthography stand out. Dyslexia is characterized by persistent difficulties in reading, understanding written language and spelling, despite adequate instruction and learning opportunities (Snowling & Hulme, 2012). Dyscalculia, in turn, is characterized by difficulties in the ability to understand and use numbers and mathematical concepts, such as basic arithmetic operations and problem solving (Butterworth, Varma, & Laurillard, 2011). Dysorthography is a disorder that affects the ability to write correctly and fluently, with frequent errors in spelling, punctuation and textual organization (Santos, 2009).

In order to understand learning disorders, their causes and characteristics, it is essential to early identify and adequately treat these conditions. In the next topic, we will discuss how psychopedagogy can contribute to the identification and treatment of learning disorders, with a special focus on dyslexia, dyscalculia and dysorthography.

#### **9. Diagnosis: describing the main methods and instruments used to identify learning disorders, including neuropsychological assessment, specific tests and interviews with teachers and family members**

The diagnosis of learning disorders is an important step towards identifying and treating these conditions. For this, several methods and instruments are used by psychopedagogy and pedagogy professionals.

One of the main tools used is the neuropsychological assessment, which consists of a complete assessment of the individual's cognitive and emotional functions. According to Gomes (2012), neuropsychological assessment is important to identify possible brain dysfunctions that may be related to learning disorders.



In addition, there are specific tests for each learning disorder, such as the School Performance Test (TDE) to assess dyslexia and dyscalculia (Santos & Kida, 2011) and the Orthography Test to assess dysorthography (Fernandes & Santos, 2017).

Another important method is conducting interviews with teachers and family members, who can provide relevant information about school performance and student behavior. According to Costa et al. (2015), the interview with family members and teachers can be an important tool to assess the impact of learning disorders on the student's life.

It is important to emphasize that the diagnosis of learning disorders must be carried out by qualified and experienced professionals in the area, to guarantee the accuracy of the results and the indication of an adequate treatment.

In addition to the mentioned methods and instruments, other procedures can also be used in the diagnosis of learning disorders, such as the analysis of the student's academic and clinical history, as well as direct observation of their performance in the classroom and in other activities. According to Rotta, Leite and Freitas (2015), the evaluation must be carried out in a comprehensive and multidisciplinary way, involving not only professionals from psychopedagogy and pedagogy, but also from psychology, speech therapy, among other areas.

However, it is important to emphasize that the diagnosis of learning disorders should not be seen as labeling or stigmatizing the student. On the contrary, the diagnosis should be used as a tool to identify the student's specific needs and ensure that he receives adequate and individualized treatment to overcome his learning difficulties.

To summarize, the diagnosis of learning disorders is a complex process that requires a comprehensive and multidisciplinary approach. Psychopedagogy and pedagogy professionals play a fundamental role in this process, using different methods and instruments to identify the specific needs of the student and ensure that he receives the appropriate treatment to overcome his learning difficulties. However, it is important to remember that the diagnosis should not be used as a label or

stigmatization of the student, but rather as a tool to help him reach his full potential in school and in life.

#### **10. Psychopedagogical intervention: presenting the main approaches and techniques used by psychopedagogy in the treatment of learning disorders, such as individualized psychopedagogical intervention and psychomotor re-education**

The psychopedagogical intervention is an approach that aims to treat learning disorders in an integrated way, considering both the cognitive and affective aspects of the student. Among the main approaches and techniques used by psychopedagogy, we can highlight individualized psychopedagogical intervention and psychomotor re-education.

Individualized psychopedagogical intervention is a technique that seeks to understand the student's specific difficulties and develop personalized strategies to overcome them. According to Bzuneck and Guimarães (2004, p. 56), "the individualized intervention allows a specific work with the needs of the student, taking into account their particularities, interests and limitations". In this process, the educational psychologist performs a detailed diagnostic assessment of the student and, based on the results, prepares a personalized intervention plan, which may include recreational activities, educational games, cognitive stimulation techniques and other strategies aimed at improving reading skills, student writing and calculation.

Psychomotor re-education is a technique that seeks to work on the student's motor coordination and sensory perception, helping to develop their ability to learn and interact with the world. According to Fonseca (2016, p. 89), "psychomotor re-education can be useful in the treatment of learning disorders, as it allows the student to improve his coordination, his ability to concentrate and his body perception". In this process, the psychopedagogue uses physical activities, games and games that aim to stimulate the student's motor coordination, attention and concentration, in addition to working on sensory perception and spatial organization.

It is important to emphasize that the psychopedagogical intervention must be personalized and adapted to the specific needs of each student, considering their limitations and potential. In addition, it is essential that the intervention process be carried out together with the family and the school, aiming at building a support network that favors the student's development and social inclusion.

In short, psychopedagogical intervention is an approach that aims to treat learning disorders in an integrated way, considering both the student's cognitive and affective aspects. Individualized psychopedagogical intervention and psychomotor re-education are some of the main techniques used in this process, aiming to improve the student's reading, writing and calculation skills, in addition to working on their motor coordination, sensory perception and spatial organization.

### **11. Pedagogical adaptations: discussing the main pedagogical adaptations that can be made to meet the needs of students with learning disorders, such as the use of technological resources, the use of differentiated teaching strategies and the support of specialized human resources**

Students with learning disorders may have difficulties in several areas, such as reading, writing and calculation, among others. To meet the needs of these students, it is important that adequate pedagogical adaptations are made. According to Bzuneck and Guimarães (2004, p. 89), pedagogical adaptations can be defined as "modifications carried out in the teaching-learning process, which aim to meet the specific educational needs of students with learning difficulties".

Among the main pedagogical adaptations that can be made to meet the needs of students with learning disorders, the use of technological resources stands out. According to Fonseca (2016, p. 123), "technological resources can be of great help in the learning process, allowing students to have access to educational materials adapted to their needs". In addition, technological resources can also help motivate students and promote social interaction.

Another important strategy is the use of differentiated teaching strategies. According to Bzuneck and Guimarães (2004, p. 72), "differentiated teaching strategies

are those that seek to meet the individual needs of students, considering their abilities and difficulties". This may involve using educational games, carrying out group activities and using concrete materials.

Finally, it is important to highlight the importance of the support of specialized human resources, such as educational psychologists and specialized educators. According to Fonseca (2016, p. 142), "the support of specialized human resources can be fundamental for the success of the teaching-learning process of students with learning disorders". These professionals can help identify students' needs and design appropriate intervention strategies.

In summary, pedagogical adaptations are essential to meet the needs of students with learning disorders. The use of technological resources, the use of differentiated teaching strategies and the support of specialized human resources are some of the strategies that can be used to promote these students' learning more effectively.

## **12. Inclusive school: approaching the importance of inclusive school for students with learning disorders and discussing strategies to promote the inclusion of these students in the school environment**

The inclusive school is an educational environment that values diversity and recognizes that all students have different needs and should have the same learning opportunities. For students with learning disabilities, an inclusive school is essential for educational and social success. It is important that the school provides a welcoming and safe environment that supports the learning needs of students with disabilities.

One of the main strategies to promote the inclusion of students with learning disorders is training teachers to work with these students. Teachers must be aware of the different types of learning disorders and the specific educational needs of these students. In addition, teachers must be trained in differentiated teaching strategies that can meet the needs of students with learning disorders.

Another important strategy is the use of technological resources, which can help students with learning disorders to follow the content and get involved in learning. For



example, the use of specific educational software can help students with dyslexia to improve reading and writing, while the use of scientific calculators can help students with dyscalculia to understand mathematical concepts.

In addition, the inclusive school must offer emotional and social support to students with learning disorders, promoting their inclusion and well-being at school. It is important that students feel welcomed and valued at school, so that they can feel motivated and engaged in learning. So, to ensure an inclusive school, it is essential that there is a change in the mentality of education professionals, as well as in society in general, so that differences are accepted and the potential of each individual is valued. It is necessary that schools are prepared to receive and serve students with learning disorders, providing them with the necessary support so that they can develop their potential and become full and active citizens in society.

In this sense, the continuing education of teachers and other education professionals is essential so that they can understand and meet the needs of these students. It is important that adapted resources and teaching materials are made available, as well as the use of assistive technologies to assist in the learning process.

In short, the inclusive school is a necessity to ensure that all students, regardless of their differences and limitations, have access to education and the development of their skills. It is the role of pedagogy and psychopedagogy to work together to promote school inclusion and the appreciation of diversity.

### **13. Emotional and social aspects: highlighting the importance of addressing the emotional and social aspects of students with learning disorders and presenting techniques to improve their self-esteem, self-confidence and interpersonal relationships**

Learning disorders not only affect students' academic performance, but can also have a significant impact on their emotional and social well-being. Therefore, it is essential that education professionals address these aspects and provide adequate support to students with learning disorders.

Bzuneck and Guimarães (2004, p. 67) state that students' self-esteem and self-confidence can be negatively affected by learning difficulties, which can lead to a vicious cycle of failure and demotivation. To improve students' self-esteem, it is important to recognize their strengths and encourage them to engage in activities that they enjoy and are good at. In addition, it is essential to provide positive and encouraging feedback, emphasizing progress and not just the end results.

Socialization can also be a challenge for students with learning disabilities. Fonseca (2016, p. 105) highlights the importance of developing social skills, such as communication and conflict resolution, and providing opportunities for students to practice these skills. Group activities such as collaborative projects and team games can be beneficial in improving students' interpersonal relationships.

Education professionals should also be alert to signs of anxiety, depression, and other emotional problems among students with learning disabilities. Early intervention and proper support can prevent more serious problems in the future. Specialized therapists can help students develop coping skills and strategies for dealing with stress and anxiety.

In summary, addressing the emotional and social aspects of students with learning disorders is essential to ensure the well-being of these students and promote their inclusion in the school environment. Education professionals must be prepared to provide adequate support and use techniques that promote students' self-esteem, self-confidence and social skills.

#### **14. Partnership between school and family: discussing the importance of partnership between school and family for successful treatment and pedagogical adaptation of students with learning disorders**

The partnership between the school and the family is fundamental for the success of the treatment and pedagogical adaptation of students with learning disorders. It is important that the school communicates with the family clearly and effectively, sharing information about the student's performance and the strategies used to help them.

According to Gomes (2008, p. 32), the partnership between the school and the family is essential for the success of the school inclusion process, as "the active participation of the family in the educational process is fundamental to guarantee the continuity of the pedagogical work developed in the school". In addition, the partnership between the school and the family can help to identify the main challenges faced by the student at home and at school, which can lead to adjustments in the strategies used to help them.

An effective way to establish a partnership between the school and the family is through regular meetings, in which parents can share information about the student and the school can provide feedback on their performance and strategies used. In addition, the school can encourage parental participation in school activities, such as lectures and cultural events, which can strengthen the bond between the school and the family.

It is important to remember that the partnership between the school and the family must be based on dialogue and mutual respect. The school must be open to listening to the concerns and suggestions of the parents and, in turn, the parents must be willing to work together with the school to help the student overcome his difficulties.

It is worth noting that it is important for the school and family to communicate frequently to exchange information about the student, share strategies that have worked in each setting, and work together to achieve the student's learning and development goals. The partnership between school and family can also help to identify possible problems that the student may be facing at home or at school and to find solutions together.

In this sense, it is essential that the school is open to listening to the concerns and suggestions of the family and to working together to offer the best support to the student. Likewise, the family must be willing to actively participate in the student's educational process and collaborate with the school to ensure that the student receives the necessary support.

In summary, the partnership between school and family is an essential tool for the successful treatment and pedagogical adaptation of students with learning

disorders. Together, school and family can provide a supportive and supportive environment that helps the student overcome challenges and reach their full potential.

### **15.Challenges and limitations: presenting the main challenges and limitations faced in the identification and treatment of learning disorders, such as prejudice, lack of resources and lack of specialized professionals**

Learning disorders are a significant challenge for education and public health. Early identification and treatment are essential to minimize the negative effects of these disorders on students' cognitive and emotional development. However, there are many challenges and limitations in identifying and treating learning disabilities.

Prejudice is one of the biggest obstacles to the proper identification and treatment of these disorders. Many people still believe that students with learning disabilities are lazy or uninterested and do not recognize that these students have a medical condition that requires specialist treatment. In addition, often the lack of financial and material resources, such as diagnostic tests and specific teaching materials, makes it difficult for these students to access adequate health and education services.

Another challenge is the lack of professionals specialized in identifying and treating learning disorders. It is essential to have educational psychologists, psychologists and other health and education professionals trained in the identification and treatment of these disorders. However, many regions have a significant shortage of these professionals, which makes it difficult for students with learning disabilities to access quality services.

Collaboration and teamwork are key to overcoming these challenges and limitations. It is important that the school, family and health and education professionals work together to identify and treat learning disorders. In addition, it is necessary to invest in financial and material resources to guarantee access to adequate services and the training of trained professionals.

Thus, despite the challenges and limitations faced in identifying and treating learning disorders, it is possible to promote the inclusion and proper development of



these students through collaborative work and adequate investment in resources and trained professionals.

## 16. Discourses and Results

From the bibliographic review carried out on learning disorders, their causes, characteristics, diagnostic methods, psychopedagogical interventions, pedagogical adaptations, inclusive school, emotional and social aspects, partnership between school and family, challenges and limitations, it is possible to make some considerations and reflections.

First, it is important to highlight that learning disorders are complex and multifactorial, and may be caused by several genetic, neurological, psychological and environmental factors. In addition, these disorders can affect different areas of development, such as reading, writing, calculation, oral comprehension, among others.

Neuropsychological assessment, specific tests and interviews with teachers and family members are the main methods used to identify learning disorders. Individualized psychopedagogical intervention and psychomotor re-education are some of the techniques used in the treatment of these disorders.

Pedagogical adaptations are essential to ensure the inclusion of students with learning disorders in the school environment. The use of technological resources, the use of differentiated teaching strategies and the support of specialized human resources are some of the strategies that can be adopted.

The inclusive school is essential to ensure access and full participation of students with learning disorders in school and social life. For this, it is important that there is a partnership between the school and the family, with the aim of promoting communication, the exchange of information and mutual collaboration.

However, there are several challenges and limitations in the diagnosis and treatment of learning disorders, such as prejudice, lack of resources and lack of specialized professionals. These factors can hinder access to health and education services, compromising the development and well-being of students with learning disorders.

Therefore, it is essential that professionals in the field of psychopedagogy are aware of the needs of students with learning disorders, working in an integrated and multidisciplinary way, and always looking for new strategies and resources to promote the inclusion and success of these students in school and social life.

## 17. Benefits

The study brings many benefits, both for the professionals involved in the teaching and learning process and for the students who suffer from these disorders. Some of these benefits include:

**Early identification of learning disorders:** psychopedagogy can help to identify learning disorders at an earlier stage, allowing interventions to be carried out before learning problems get worse.

**Appropriate and personalized treatment:** the psychopedagogical intervention can be customized to meet the specific needs of each student with learning disorders, allowing them to overcome difficulties and improve their academic performance.

**Adaptation of the school environment:** pedagogy can be adapted to meet the needs of students with learning disorders, allowing them to feel more integrated and included in the school environment.

**Greater self-esteem and self-confidence:** Appropriate treatment and pedagogical adaptation can help improve the self-esteem and self-confidence of students with learning disorders, allowing them to feel more capable and motivated to learn.

**Social Inclusion:** Including students with learning disabilities can help them develop social skills and better integrate into society, reducing discrimination and stigma associated with learning disabilities.

**Better school performance:** with proper treatment and pedagogical adaptation, students with learning disorders can significantly improve their school performance, allowing them to have more life and career opportunities in the future.

The study of the subject can bring significant benefits to the education and mental health of children and adolescents who face learning difficulties, in addition to contributing to the construction of a more inclusive and fair society.

### **18. Primary outcome**

The study of learning disorders is extremely important for psychopedagogy and pedagogy, as it allows understanding the difficulties faced by students and developing strategies to help them overcome them. The early identification of these disorders is essential so that treatment can be started as early as possible, ensuring better results and increasing the students' chances of academic and social success. It is necessary that the school, the family and health professionals work together to promote the inclusion and development of students with learning disorders. Despite the existing challenges and limitations, it is necessary to continue seeking solutions and investing in resources to ensure that these students have access to quality education and can develop their full potential.

### **19. Secondary Outcome**

The awareness and sensitization of society in relation to learning disorders, as well as the search for public policies and investments in the area, aiming to guarantee access for all students to an inclusive and quality education. It is fundamental that there is a collective effort to overcome the existing challenges and limitations, promoting the inclusion and integral development of students with learning disorders.

### **20. Final considerations**

In this article, it was possible to discuss the main aspects related to learning disorders and psychopedagogical practice in the school context. First, the concept of learning disorders and their main characteristics were approached, as well as the methods and instruments used in the diagnosis of these disorders, such as

neuropsychological assessment, specific tests and interviews with teachers and family members.

Then, the main approaches and techniques used by psychopedagogy in the treatment of learning disorders were presented, such as individualized psychopedagogical intervention and psychomotor re-education. In addition, we discuss the importance of pedagogical adaptations and the inclusive school to meet the needs of students with learning disorders, as well as the need to address the emotional and social aspects of these students.

We also address the importance of the partnership between the school and the family for the success of the treatment and pedagogical adaptation of students with learning disorders, as well as the main challenges and limitations faced in the identification and treatment of these disorders.

Based on these points discussed, we conclude that psychopedagogical practice in the school context is essential to meet the needs of students with learning disorders and ensure the educational and social inclusion of these students. It is recommended the training of education professionals for the identification and early intervention of learning disorders, the adoption of differentiated pedagogical strategies, the use of technological resources and the promotion of partnership between the school and the family. In addition, it is important to highlight the need for investments in public policies and in the training of specialized professionals, so that we can face the challenges and limitations that exist in the context of learning disorders.

For future research, the following topics are suggested:

- Cognitive development and learning: How psychology and psychopedagogy can help to understand the cognitive development of children and young people and how this understanding can be used to inform more effective teaching strategies.
- Learning Theory: Exploring different theories of learning, including behaviorism, constructivism and cognitivism, and discussing how these theories can be applied in pedagogical practice.
- Inclusive education: Discussing how pedagogy and psychology can be applied to create inclusive educational environments and how psychopedagogy can help develop strategies to meet the needs of students with special needs.



- Student Motivation and Engagement: How psychology can be used to understand student motivation and engagement in the classroom and how pedagogy can be adapted to promote greater motivation and engagement.
- Socio-emotional development: Exploring how psychology can be used to understand the socio-emotional development of children and young people and how pedagogy can be adapted to promote social-emotional skills such as empathy, conflict resolution and effective communication.
- Assessment and feedback: How psychopedagogy can help develop more effective assessment strategies and how pedagogy can be adapted to provide constructive feedback and help students improve their performance.
- Technology and Education: Exploring how technology can be used to improve teaching and learning and discussing how psychology and psychopedagogy can help develop effective strategies for integrating technology into the classroom.

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