

+ INCLUSIVE EDUCATION:
FROM REFLECTION TO ACTION

[GOOD PRACTICES MANUAL]

INCLUSIVE EDUCATION IN PRACTICE:
**STUDENTS WITH ATTENTION
DEFICIT HYPERACTIVITY DISORDER**



MODULE
07

MODULE 7

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7 - STUDENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

*“It is not a disturbance not to know what to do,
it is a disturbance not to do what one knows”*

Unknown author

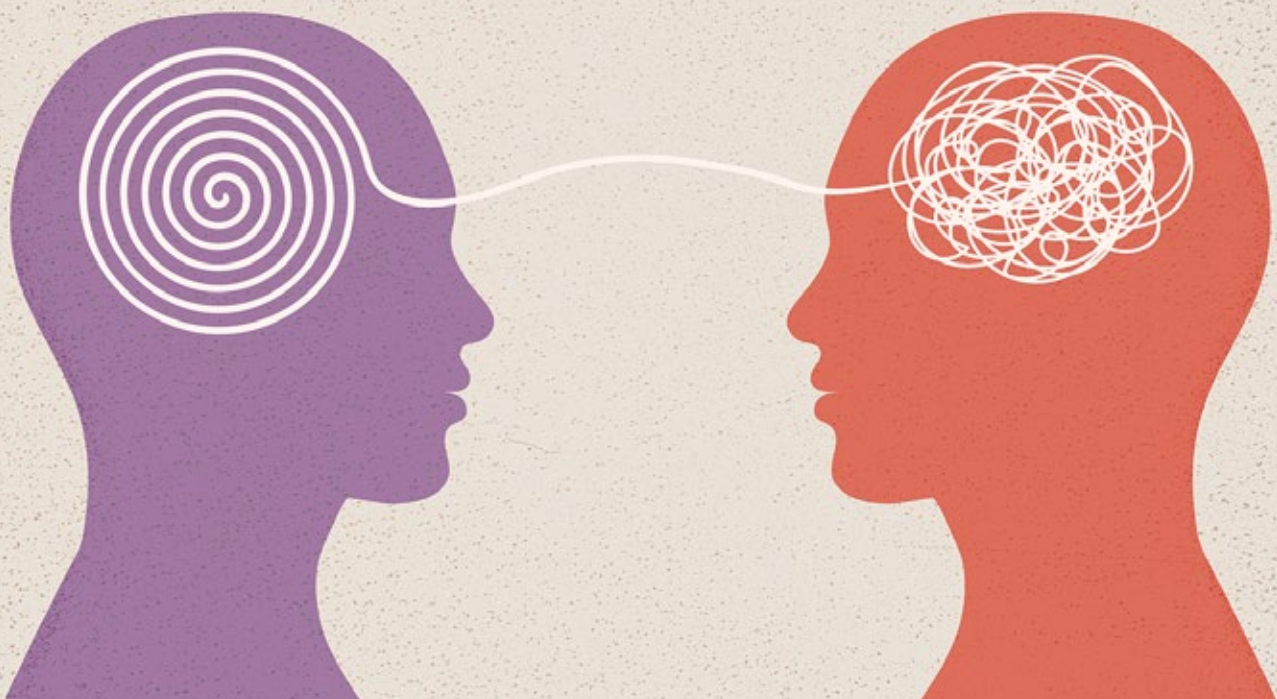


7.1. KNOWING TO UNDERSTAND ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

Attention-deficit hyperactivity disorder (ADHD) is the most commonly diagnosed neurobehavioural disorder in school-age children (Cordinhã & Boavida, 2008). This condition is more easily diagnosed at this stage of the subject's life, much due to the greater demands, not only social but also academic. However, the diagnosis may also occur during adulthood (Perdilhão, et. al. 2009).

Studies show that there is a higher prevalence of this condition in male children (three to four times more frequent) than in female children. In females, the most common symptoms are inattention, while hyperactivity and impulsiveness are less intense. Given this evidence, the number of underdiagnosed cases in female children is thought to be significant (Perdilhão, et. al. 2009).

There is a set of characteristics associated with this disorder which are reflected in behavioural change, as well as in the subject's normal development, with specific characteristics accentuated in terms of inattention, hyperactivity and impulsivity (Branco, 2018), which are evidenced for a continuous period of six months in at least two of the following contexts (school, home, social situations) (Cordinhã & Boavida, 2008).

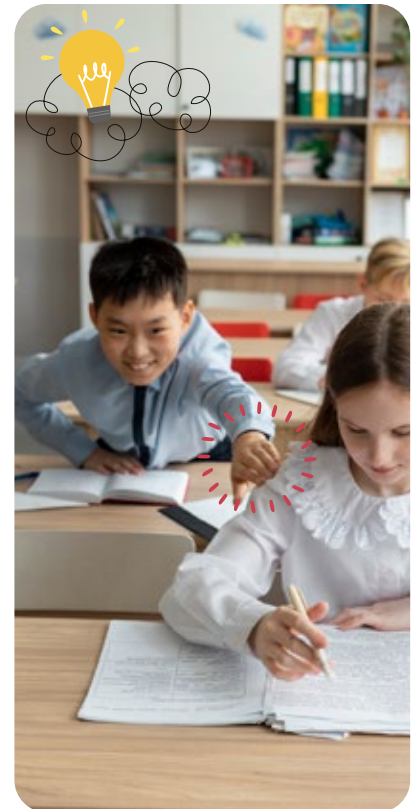


7.1.1 THE DIAGNOSIS

Diagnosis is not straightforward and easy to reach as the symptoms are non-specific, i.e. not inherent only to this condition. On the other hand, diagnosis may become difficult, since there are no medical tests (imaging or laboratory) that can confirm or exclude with precision the diagnosis of ADHD. Therefore, the clinical diagnosis involves an analysis based on behavioural criteria, always using multiple sources of information (parents, teachers, educators, among others). The key point of this stage is to ascertain not only activity levels, but also impulsiveness and attention deficit of the subject and how these interfere with the normal functioning of the various environments surrounding the subject (family, school, social).

It is important to bear in mind that the clinical picture may vary according to the age and development of the child, so the assessment and consequent diagnosis in children at an early age must be cautious.

For that purpose, the recommended evaluation criteria contained in the Diagnostic and Statistical Manual of Mental Disorders of the American Academy of Psychiatry (DSM 5) are used. For the diagnosis to be confirmed, the subject must meet at least six criteria from one of the following categories:



INATTENTION SYMPTOMS

- Easily forget to carry out daily tasks.
- Being easily distracted by irrelevant stimuli.
- To easily and frequently lose material necessary for the accomplishment of activities he/she has to carry out.
- Avoids starting tasks that require too much attention.
- Difficulty in organising tasks as well as activities.
- Do not follow instructions and do not finish tasks.
- Increased difficulty in concentrating on activities or tasks.
- Lack of focus on details. make mistakes due to inattention.

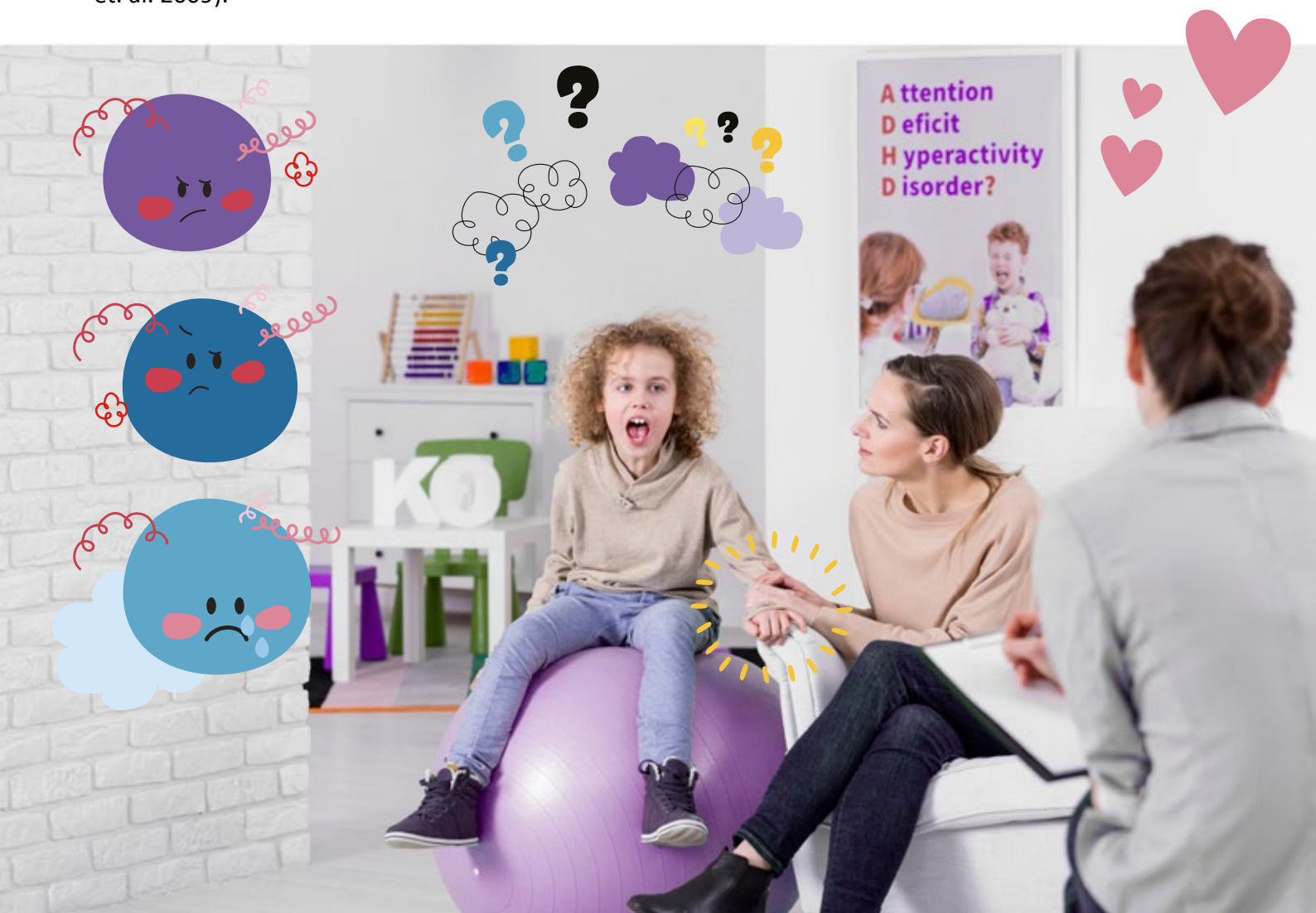
IMPULSIVITY AND HYPERACTIVITY SYMPTOMS

- Hyperactivity.
- Restlessness (excessive moving of hands and feet).
- Not sitting up when they should.
- Excessive behaviour (running, climbing, for example) in inappropriate situations.
- Difficulty in engaging in activities, in a concentrated and calm way.
- Talks excessively.
- Hasty answers (they answer before completing the question).
- Difficulty in waiting.
- Interrupt others, or disturb them, interfering with the development of their activities/work.

We **must not neglect** to mention that although ADHD is mostly diagnosed in the school phase, some children may manifest characteristics at an earlier stage:

- ✓ Difficult temperament with presence of stubbornness.
- ✓ Defiant behaviours.
- ✓ Presence, in some situations, of language delay.
- ✓ Characteristics associated with Autistic Spectrum Disorder.
- ✓ Difficulties at learning level and sensory problems.

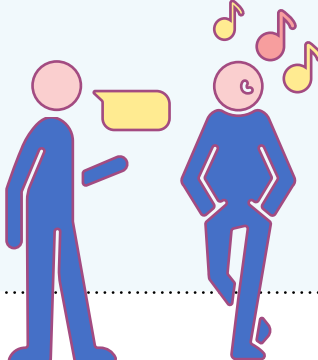
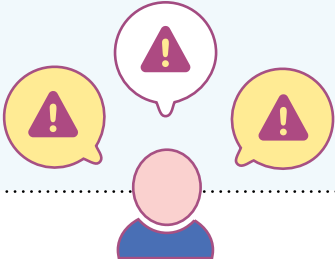
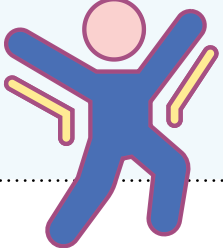
Despite the above, the symptoms associated with this disorder tend to diminish during the student's school period, especially in terms of hyperactivity and impulsivity symptoms. However, studies indicate that the attention deficit and the easy distraction remain, leading to situations of difficulty in impulse control, as well as in complying with instructions. This reality ends up causing slow performance of tasks and, consequently, the development of feelings of ineffectiveness, frustration and low self-esteem (Perdilhão, et. al. 2009).



In addition to the above, in order to establish a **diagnosis of ADHD**, it is essential that the subject meets all of the following criteria:

QUANTITY:	DURATION OF SYMPTOMS:	ONSET:	CONTEXT:	EVIDENCE:	EXCLUSION:
presence of at least 6 of the 9 symptoms mentioned in category I (inattention symptoms), or category II (hyperactivity and impulsivity symptoms), or both.	presence of symptoms during a minimum period of 6 months.	symptoms usually appear before the age of 7 and especially before the age of 5.	manifestation of symptoms in at least two contexts/environments (school, home or work).	clear evidence of the impact of ADHD on the subject's social, academic or professional level. The diagnosis implies not only evidence of the gravity and frequency of the symptoms , but also the interference that these have in the several contexts of the subject's life (home, school, work).	symptoms do not occur exclusively during a global development disorder, schizophrenia or other psychoses and are not better explained by another mental disorder (mood disorder, anxiety disorder, dissociative disorder or personality disorder).

Three subtypes of ADHD can be considered (Cordinhã & Boavida, 2008), depending on the predominance of symptoms of inattention and hyperactivity-impulsivity:

COMBINED OR MIXED	PREDOMINANTLY INATTENTIVE	PREDOMINANTLY HYPERACTIVE AND IMPULSIVE
both types of symptoms coexist, fulfilling at least six of the nine behaviours of both categories	when fulfilling at least six of the nine inattention behaviours	when fulfilling at least six of the nine hyperactivity-impulsivity behaviours
		

EVALUATION

When the diagnosis of ADHD is suspected, the subject should be carefully assessed by a multidisciplinary team. This type of process should include a medical approach (clinical history) and a behavioural approach (focusing on the three components associated with ADHD:

attention, activity and impulsiveness). However, parents should also be interviewed about the behaviours included in the diagnostic criteria defined by the Diagnostic and Statistical Manual of Mental Disorders of the American Academy of Psychiatry (DSM 5), already discussed in this module.



MEDICAL EVALUATION:

- Identification and characterization of symptoms (attention deficit, agitation, impulsivity) over time and in different contexts (home, school, extra-curricular activities).
- Subject's temperament: aggressiveness, low self-esteem, opposition, antisocial behavior and frustration.
- Emotional skills, excessive fears and depressed mood.
- Sleep routines.
- Information about your academic performance (year attended, retentions, areas of greater difficulty, educational support, etc.)
- Relationship with peers and communication skills.
- Family environment: stress factors, recent changes in the socio-familial level, traumatic experiences; discipline rules, family social context and parental expectations.



PERSONAL BACKGROUND:

FAMILY BACKGROUND:

- Motor and language development.
- Difficulties at school level.
- Pre-, peri-, and post-natal risk factors for brain injury (examples: exposure to alcohol or drugs during pregnancy, prematurity or low birth weight, infections or trauma to the central nervous system, etc.).

- Family history of ADHD.
- Psychiatric disorders (depression, bipolar disorder, anxiety, tics).
- Genetic illnesses.
- Social context of the subject's family.

It is important that, together with this assessment, a neurological examination is included, as well as a careful assessment, not only of the psychomotor development of the child, but also of its hearing and vision. To emphasize that the evaluation based on the direct observation of the child's behaviour may prove insufficient and, in this sense, one may resort to behavioural scales, namely the Conner's (aimed at parents and teachers) and Achenbach's (aimed at parents, teachers and the subject himself) questionnaires, which provide important information, not only regarding the subject's behaviour, but also in terms of hyperactivity, attention and opposition behaviours.

Also associated with assessment, whenever necessary, cognitive and psycho-pedagogical assessments may also be used in cases of specific learning difficulties or suspected cognitive deficit (Cordinhã & Boavida, 2008).



RISC FACTORS

There is no specific cause of ADHD, but there is evidence that the combination of genetic and environmental factors may be at the origin of the development of this condition (Yemula, et al, 2022).

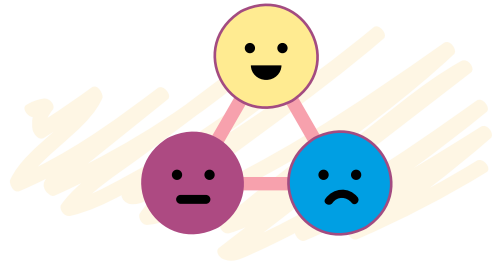
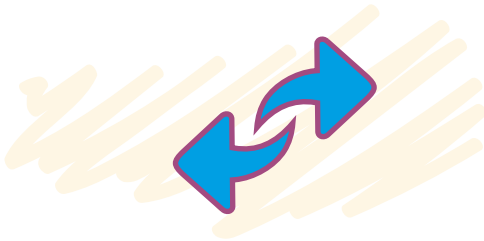
According to Cordinhã & Boavida (2008) there is a set of risk factors associated with Attention Deficit Hyperactivity Disorder, namely:

- ✓ Genetic factors: the development of this condition can be explained from the point of view of genetics. The probability of developing this condition is higher in case there is a family history of it. This is likely due to several genes involved.
- ✓ Pre- and peri- natal factors such as exposure to alcohol and drugs during the gestational period.
- ✓ Neurological disorders, e.g. epilepsy.
- ✓ Disrupted family background, with presence of parental conflict.
- ✓ Parental mental health, e.g. maternal depression, substance abuse and cognitive deficits.
- ✓ "Relational (severe early affective deprivation, institutionalisation, family incapacity to understand, contain and organise the child's behaviour)".

Despite the relevance of the environmental context, there is no scientific study that demonstrates that isolated social problems may be at the origin of ADHD (Barkley, 2015). Evidence makes clear the importance of genetic factors related to brain development and function, as well as non-genetic neurological factors, in the origin of this disease.

7.1.2 COMORBIDITIES

Comorbidities associated with this medical condition are very common. More than half of the subjects diagnosed present other developmental, psychological or medical conditions that coexist or overlap with Attention Deficit Hyperactivity Disorder. We can highlight a few, as examples:



OPPOSITIONAL DISORDER

A fairly common condition in subjects diagnosed with Attention Deficit Hyperactivity Disorder. Typically, the child exhibits characteristics such as stubbornness, hostility and often:

- ☑ Loses his/her temper and argues with adults.
- ☑ Displays defiant behaviour towards adults and/or refuses to follow instructions given.
- ☑ Blames others for his/her mistakes.
- ☑ Gets upset very easily.
- ☑ Shows anger frequently.
- ☑ Displays vindictive behaviours.

BEHAVIOURAL DISORDER

Condition where the child presents a persistent pattern in breaking social rules/ norms. As characteristics, we can mention:

- ☑ Theft.
- ☑ Destruction of property.
- ☑ Assaults.
- ☑ Cruelty to people and animals.



In order to help children in this situation, parents and guardians should seek training to provide them with support:

- *Various strategies to deal with the child's challenging behaviours.*
- *Cognitive Behavioural Therapy (CBT) and/or Family Therapy.*



It is important that parents and carers adopt a positive behavioural approach to this situation. It is crucial that they acquire skills and strategies, through effective parenting programmes and participation in parents' groups, in order to better deal with this reality and help their children.



DEVELOPMENTAL COORDINATION DISORDER

Many children diagnosed with ADHD are also diagnosed with Developmental Coordination Disorder. This is a condition that causes difficulties in coordination with repercussions in the subject's daily life. The clinical features are:

- ☑ Poor handwriting.
- ☑ Difficulties in dressing (tying shoelaces, buttoning a shirt. using the zips of clothes).
- ☑ Difficulty in using cutlery (constant struggle in using it).
- ☑ Problems related to balance, affecting the development of certain skills such as riding a bicycle. They also show poor performance in sports.



Children with this condition are often considered clumsy, however they can be helped through the development of appropriate therapies provided by occupational therapists or physiotherapists..



MOOD DISORDER

This is a mental disorder that causes sudden and atypical changes in mood, energy, activity levels, affecting the ability to perform daily life tasks. From a clinical point of view, the subject may present the following symptoms:

MANIC PHASE:

- ☑ Heightened feelings of euphoria.
- ☑ Difficulties sleeping.
- ☑ Talking too fast on diversified subjects.
- ☑ Presence of anxiety, irritability and/or sensitivity.
- ☑ Among others.

DEPRESSIVE PHASE:

- ☑ Feeling of excessive sadness.
- ☑ Uncontrolled sleep (sleeping a lot, or not sleeping at all).
- ☑ Difficulty concentrating.
- ☑ Memory lapses.
- ☑ Negative thoughts (thinking about death and suicide).
- ☑ Among others.



SPECIFIC LEARNING DISORDER

In 25 to 40% of cases of ADHD will have specific learning difficulties:

- ☑ Reading (known as dyslexia) - the most frequent, characterized by problems with accuracy and fluency in word recognition, decoding and spelling.
- ☑ Writing (known as dysorthography) - difficulties in composing, structuring and planning the text, which is characterized by spelling and grammatical errors.
- ☑ Mathematics (known as dyscalculia) - characterized by problems processing numerical information, learning arithmetic facts and performing calculations fluently and accurately.



Children with this condition need curriculum accommodation in order to achieve their academic goals. It is therefore crucial that they receive adequate support at school.



DEPRESSION

Depression is one of the comorbidities present in children with ADHD. It is important to stress that being in a depressive state transcends the state of sadness. When we talk about depression in children, we must consider the following symptoms, stressing that they must be present for a long period of time:

- ☑ Constant and motiveless crying.
- ☑ Sleeping problems.
- ☑ Loss of interest in activities which were pleasurable until then.
- ☑ Little energy, spirit and lack of appetite.



Faced with this situation, parents/guardians should be attentive and seek medical advice. It is also important that they liaise with the school, in order to understand if there is something at school that may be the origin of such a condition. This articulation is crucial for the child to overcome this condition.



ANXIETY DISORDER

It coexists in up to 30% of ADHD cases, characterized by the presence of feelings of high tension, worry and insecurity, and may be accompanied by physical complaints such as palpitations, dry mouth, stomach ache, increased blood pressure, among others.



OBSESSIVE COMPULSIVE DISORDER

Reflects on obsessive and compulsive behaviour towards something or something. This condition causes great distress.

SOME EXAMPLES OF OBSESSIVE BEHAVIOURS:

- ☑ Exaggerated worry about illness and getting sick.
- ☑ Worry about losing control, among others.

SOME EXAMPLES OF COMPULSIVE BEHAVIOURS:

- ☑ Frequent and excessive cleaning of clothes.
- ☑ Repeated and excessive checking of something, e.g. checking whether the door is locked.
- ☑ Putting things in order.



SENSORY PROBLEMS

Some children diagnosed with ADHD have sensory problems, visible in atypical sensory responses, such as exaggerated reactions to external stimuli (hypersensitivity) (Lane & Reynolds, 2019). Nevertheless, the inability to respond to sensory stimuli from the environment, can be perceived according to the following three subtypes, to be mentioned:

- ☑ Sensory hypersensitivity.
- ☑ Sensory hypo-responsiveness.
- ☑ Sensory search.



In cases of ADHD diagnosis, it is more frequent to find Hyper responsiveness with incidence:

- ◇ *In the tactile system, tendency to avoid textures and stiffness in the fabric of clothes.*
- ◇ *Auditory, tendency, for example, to cover the ears in noisy environments.*
- ◇ *Visual, avoiding, for example, places with a lot of light.*
- ◇ *Olfactory, discomfort in the presence of strong smells.*

Alterations in sensory modulation in children diagnosed with ADHD are related to inappropriate behaviour in different environments (school, home, social, for example). They are also directly related to the student's failure and performance at school (Koziol & Budding, 2012).



AUTISM SPECTRUM DISORDER

This is a neurodevelopmental disorder often present in children diagnosed with ADHD. The autism spectrum disorder, brings challenges in two aspects:

- ☑ Communication and social interaction.
- ☑ Repetitive behaviors.



For more information on this topic, see module 5 of this manual.



TOURETTE'S SYNDROME

This is a rare neurological disorder characterised by the presence of simple or complex motor or vocal tics. Drugs are one way of alleviating the symptoms, however other treatments may include psychotherapy and behavioural therapy.



TICS

It is a condition that can include both motor and vocal tics, these often come and go and are rooted in stress. Motor tics include: atypical repetitive body movements, such as eye blinking, shoulder shrugging, facial twitching, among others.

On the other hand, vocal tics can include, for example, clearing the throat or coughing.



INTELLECTUAL DEVELOPMENTAL DISORDER

This is a disorder which starts in the period of the subject's development. Its characteristics are the presence of deficits, not only at functional level (reasoning, planning, problem solving and acquisition of learning), but also at the adaptive level (personal and social independence).

7.1.3. MYTHS AND TRUTHS ABOUT ADHD


◇ **ADHD is an invented disease.**

Currently this medical disorder is considered one of the most researched to date. It has been extensively studied and there is scientific evidence that it causes damage to neurological functioning, motor problems, delayed neuro-psychomotor development, cognitive dysfunction, and impaired performance at work and in academic activities.


◇ **ADHD equals hyperactivity.**

These issues are distinct. Being hyperactive, agitated, does not mean you suffer from this disorder. Agitation may just be a personality trait of the subject.


≡ MYTHS ≡



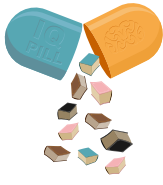
It's an invented disease



ADHD = Hyperactivity



Passes with age



Ritalin is the cure

≡ TRUTHS ≡



Psychology helps but does not solve



It is not a diagnosis created with purpose for medicating children



It persists throughout life and can lead to problems at work and in the family



7.1.4. INTERVENTION STRATEGIES

As we have seen so far, ADHD is not easy to understand and/or diagnose. It is therefore a complex condition, which requires a set of intervention methods and strategies.

The intervention will always depend on the characteristics presented by the subject. If the child has a normal neurodevelopment, the intervention will involve, above all, **the promotion of positive and appropriate parental attitudes in the relationship with the child, namely the sharing of information** about the characteristics associated with this condition, as well as the **advice of a greater approximation and relationship between parents and school.**

On the other hand, and if the child has difficulties in relationships with peers, school performance and adaptation to environments, **it is essential that there is a deeper intervention.**



AT FAMILY LEVEL:

It is fundamental that ALL of us understand that a child diagnosed with ADHD is not a problem child, but rather a child who needs support and understanding. In this sense, it is important that the family adopt a set of behaviours and strategies in order to help their child. Let us consider the following strategies:



- ♥ Understand the child's strengths and weaknesses.
- ♥ Parents should remain calm, avoiding moments of discussion with the child. If the child does something wrong, they should not shout. It is important to understand that shouting or punishing are behaviours that do not work and will only harm the child.
- ♥ As parents of a child with ADHD, they should give frequent and immediate feedback, since children do not always know if they are behaving well or not.
- ♥ Parents should use positive reinforcement frequently, as well as praise for good behaviour.
- ♥ Explain and demystify the issues associated with ADHD, for example, the idea that the child is "bad".
- ♥ Adopt positive behaviours towards the child's condition.
- ♥ Establish well defined rules, as well as setting limits.
- ♥ Promote a close relationship between parents and school.
- ♥ As parents of a child with ADHD, you should use reward instead of punishment. Good behaviour should be rewarded by, for example, allowing the child to do something he likes. Material rewards should not be used, opting instead for rewards such as play activities, hugs or praise.
- ♥ Transmit to the child that they don't like the child's bad behaviour and don't pass on the idea that they don't like the child as a person.
- ♥ Allow the child to work at his/her own pace.
- ♥ Encourage parents to seek out programmes, the aim of which is the acquisition of relationship reinforcement strategies. These are seen as important tools in managing the relationship with children with ADHD.



By way of example, here are **some programmes available in English:**

- ➔ [123 Magic](#) - offers parents, pediatricians, mental health professionals, grandparents, teachers, and even babysitters a simple and gentle - yet firm - approach to managing the behavior of children ages 2 to 12, with and without specific educational needs. With over 1.8 million copies sold and translated into over twenty languages, 1-2-3 Magic has consistently been the #1 child-discipline book on Amazon.com. The *1-2-3 Magic Parenting* programs also include the popular *1-2-3 Magic Teen and All About ADHD*. Since 1984, Dr. Phelan, founder of the program has spoken to hundreds of thousands of parents and professionals.
- ➔ [Triple P](#) - created in Australia it is one of the most studied programmes, aimed at parents of children aged 0-12 and teenagers aged 12-16.
- ➔ [Incredible Years - Webster – Stratton](#), developed in the United States and also much studied, is aimed at children between 0 and 12 years of age.
- ➔ [Programa Parental STAR](#), developed by Fox & Fox, is a preventative as well as educational programme that uses family strengths.

Spanish Programme:

- ➔ Parenting Education Programme "Building Families" by Maria José Rodrigo of the University of La Laguna aimed at individuals between the ages of 0 and 18.

Some programs in portuguese:

- ➔ Parental Education Programme "Criança", by Maria Filomena Gaspar is aimed at parents with children aged between 2 and 8 years old.
- ➔ Programme "Mission C," created by Ana Melo, Isa Gomes, Joana Prego and Verónica Parente is aimed at children and teenagers between the ages of 13 and 16. It consists of 20 sessions for young people and their families. In this programme, families will face several challenges, namely those focused on dimensions related to emotional, vocational and family development. This programme arose from the [School 4All Monção](#) project and is run by the technical team of the Family Support and Parental Counselling Centre of the Family Support Office.



- ➔ [The Incredible Years Program](#), for parents seeks to reduce family risk factors by promoting parenting skills, strengthening families and increasing their understanding of various aspects of child development and the different temperamental characteristics of the child. It is aimed at parents/other carers of children aged between 3 and 8 years old and consists of 14 weekly sessions (20 for parents of children with a diagnosis) lasting approximately 2 hours.



SCHOOL LEVEL:

- ♥ Enhance the relationship with a reference figure (teacher, educator).
- ♥ Carry out pedagogical assessment, development and implementation of a study plan suitable to the student's real needs and interests.
- ♥ Evaluate the presence of difficulties and require specific intervention (speech therapy, psychomotricity, for example).
- ♥ Implementation of strategies that help control inattention, hyperactivity and impulsivity (behavioural therapeutic strategies, educational, family therapy, etc.)..



We had the opportunity to address a set of strategies that are essential when dealing with ADHD issues. Nevertheless, and due to the complexity inherent to this disorder, it is important to address therapies, which are also essential for improving ADHD symptoms. It is important to mention that each child is one child, with its own personal characteristics, interests and goals and, therefore, it is up to the team accompanying the child to select and adapt the most appropriate responses. In this sense, we highlight the following therapies:

Behavioural therapy

This is an intervention aimed at re-educating the child in the behavioural, emotional and cognitive domains, with a view to reducing inappropriate behaviours and enhancing adjusted behaviours. To this end, therapists use mainly playful and expressive activities (Rocha, 2012).

Cognitive behavioural therapy

This type of intervention is based on stimulating the child to use self-directed speech and self-reinforcement as problem-solving strategies, as well as motivational strategies, in order to develop self-control mechanisms for their impulsive behaviour.

7.2. LEARNING DIFFICULTIES

ADHD has implications for learning acquisition as well as for language. Children diagnosed with this condition normally present difficulties in writing, reading and mathematics, not because they have a lower intellectual capacity, but because of the attention, hyperactivity and impulsiveness problems characteristic of this disorder. There are some characteristics associated with the above-mentioned **problems that teachers and parents should be aware of:**

READING AND WRITING	MATHS	ORALITY
<ul style="list-style-type: none"> • Difficulty in recognising words by their shape. • Difficulty in reading comprehension. • Comprehension problems due to poor working memory. 	<ul style="list-style-type: none"> • Most students with this disorder have difficulty with mental arithmetic. • Difficulty in specific areas of mathematics (in some cases). • Presence of dyscalculia (in some cases). 	<ul style="list-style-type: none"> • They express themselves in a very particular way. • Difficulties in expressing themselves orally, due to difficulties at the level of attention, memory and executive control. • Difficulty in selecting the contents to be expressed (they get lost in irrelevant details). • Interrupted speech, frequently interrupted by hesitations, such as "hummm" that serve as a stick to disguise the difficulty in finding the appropriate word or expression for their speech. • Difficulty in adapting the speech to the occasion and the interlocutor due to lack of vocabulary and oral language skills.

It is fundamental that children with this diagnosis receive the appropriate attention and follow-up so that their normal development is not conditioned. According to Maia & Verejão, **an inadequate and not timely intervention may lead to:**

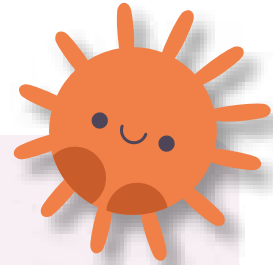


- ✘ Low self-esteem on the part of the student.
- ✘ Difficulty in the acquisition of learning.
- ✘ Presence of emotional problems.
- ✘ Difficulties in the relationship with family members and peers.

On the other hand, a timely and correct diagnosis together with an education adapted to the real needs of these children are essential factors for these children to develop positively and happily. It is important to mention the role of the families, as well as their relationship with the school.

7.3. EDUCATIONAL ENVIRONMENT

Students with Attention Deficit Hyperactivity Disorder are challenged daily in various contexts, including the educational context. Therefore, it is crucial to adopt a set of strategies so that these children are included and feel happy and fulfilled in the school environment. Let us take into consideration the following strategies:



CLASSROOM ENVIRONMENT

- ⚙️ Ensure students are seated close to the teacher and away from sources of distraction (windows, radiators, fans...).
- ⚙️ Establish clear rules regarding the functioning of the classroom environment.
- ⚙️ Provide a quiet classroom environment with a small class size.
- ⚙️ Provide specialised educational support, always considering the student's needs, interests and potential.
- ⚙️ Avoid as far as possible sources of distraction (visual and auditory).
- ⚙️ To provide a place in the classroom where the student can work on his/her own, if necessary.
- ⚙️ Give breaks when necessary.
- ⚙️ Carry out assessment during the morning.
- ⚙️ Carry out tasks that require more concentration during the morning.
- ⚙️ Keep the student's work area free from unnecessary material.
- ⚙️ Develop tasks that involve some motor activity.
- ⚙️ The teacher should take care to give short, clear instructions, repeating them several times.
- ⚙️ Support the organisation of thought.
- ⚙️ Encourage the student to participate in educational activities.
- ⚙️ Avoid as much as possible the exposure of the child to situations where he/she may disorientate him/herself, such as queues.
- ⚙️ The teacher should take care to plan homework and, whenever possible, should have parental support.
- ⚙️ The teacher should take care to keep the classroom structured.
- ⚙️ Review the previous day's work, in order to consolidate what has been covered.
- ⚙️ Allow extra time to complete tasks.
- ⚙️ Use appealing materials such as presentations, drawings, objects, etc.
- ⚙️ Be careful not to use visual stimuli or write slogans on the blackboard while talking about a certain topic.
- ⚙️ Ask, whenever possible, for the participation of the student.
- ⚙️ Use visual organisers.
- ⚙️ Use group learning or learning in pairs.
- ⚙️ Ask students to carry out tasks such as erasing the blackboard, as well as exercises to reduce tension (moving their feet, scribbling in a notebook, for example).
- ⚙️ Allow the student to carry out the assessment over several moments, allowing for short periods of concentration.



It is important to remember that students with ADHD, due to the particularities inherent to this disorder, need a set of clear rules, which need to be enunciated and frequently reminded. Therefore, every day, at the beginning of each lesson, the teacher should remind the students of the classroom rules, as well as the consequences of not complying with them. It is essential to keep in mind that all rules directed specifically at children with ADHD should be done in private.

Children with ADHD need routines and tend to show resistance to the unexpected. Therefore, it is essential to draw up a daily plan with the activities and tasks to be developed by the student. It is also important to instil in the child the habit of making lists of the tasks to be carried out each day, as well as the material needed for such tasks.

PLAYGROUND ENVIRONMENT

The presence of unstructured times may be harmful to children diagnosed with ADHD, since they may lead to difficulties in self-control and self-management of emotions and behaviours. Thus, when students are enjoying the playground space, it is essential to encourage structured activities, such as traditional games, skipping rope, among others. These work very well with primary school students.

Nevertheless, it is crucial to consider communication in the playground space. Thus, **we should consider the following suggestions:**

- ⚙ Rules should be clear, direct and short, e.g. "walk in front of the swing, not behind".
- ⚙ The tone of voice to be calm.
- ⚙ Priority should be given to eye contact.
- ⚙ Close relationships should be established between the student and the teachers/ carers so that the child can share his/her likes and interests.
- ⚙ Giving positive verbal reinforcement. For example, praise when the child successfully completes a play activity.

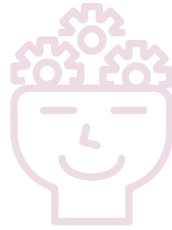


7.3.1 PEDAGOGICAL PRACTICES

Some general, pedagogical strategies for students with Attention Deficit Hyperactivity Disorder (ADHD):

AT THE LEVEL OF MEMORY:

- Ask students to repeat the teacher's instruction, or share it with a colleague, before the task is done so that they do not forget it.
- At the end of, or during the completion of a task, the teacher should take care to give positive reinforcement through praise, or by awarding prizes, such as stars in the notebook. It is important to note that the teacher's behaviour should be continuous and immediate.
- The teacher should not criticise or point out the errors inherent in the student's performance.
- Assign the student and the rest of the class various tasks. It is important to bear in mind that working in groups and giving students the opportunity to choose the activities they want to do will arouse the students' interest and motivation.
- Use visual and/or oral signals, previously agreed upon with the student and the teacher, in order for the student to understand what the teacher wants from him/her. For example: the touch on the shoulder of the student may mean a request to return to focus.
- Labels, underlining the most important parts of a certain task. This suggestion is also valid for written assessment.



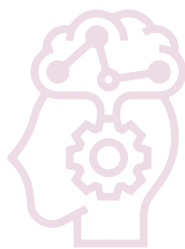
ORGANISATION AND STUDY METHODS:

- Share with the student strategies of study organisation, so that he/she can more easily develop study habits. Encourage the use of diaries, post-it notes, calendars, audio reminders, or other tools, namely technological ones, that the student finds useful.
- Whenever possible, help the student in the organisation of his/her notebook, lockers and desk.
- Suggest to the parents and the student himself to separate the material of each subject by colour. Example: the maths material with red colour (cover the book with red colour, for example).
- Encourage the use of folders, in order to file all the important material, for example documents addressed to parents. This strategy will prevent the loss of important documents.
- Establish a means of communication between parents and school, e.g. using a diary.
- Provide time management support for tasks that require long-term performance. For example, when completing an assignment due in 30 days, the teacher should break the assignment down into smaller tasks.



INFORMATION PROCESSING:

- Use graphic organisers, so that the student can better understand the task.
- Allowing, instead of traditional written tests, diversified evaluation moments: oral presentations, manual work, for example.
- Encouraging the use of technology which may help the student in the acquisition of learning, focus and motivation. For example, using the recording of lessons, or the use of the computer during lessons.
- Allowing and respecting the breaks between tasks. For example: propose a pair work before a whole class discussion on the topic.
- Always respect the student's time when completing an assignment.



SELF-MONITORING:

- Anticipate possible learning difficulties that may arise and structure solutions.
- Use audio-visual techniques to signal transitions or changes in activities/tasks, for example: speaking loudly and making hand signals to remind students to change from one activity to another, or the end of it.
- Allowing the student to stand up at certain times, previously agreed with the teacher. ADHD students need motor activity at certain times, so it is crucial that the teacher does some activities, such as: asking them to erase the blackboard, asking them to fetch some material, etc.



SUMMARY TABLE
SOME STRATEGIES TO CONSIDER, ACCORDING TO GARCIA (2013):

STRATEGIES		AUTHORS
Arrangement of the classroom	<ul style="list-style-type: none"> • Seat the student in the room at the front desks to avoid distractions. • Sitting so that the student has a good view of body language and facial expressions while the teacher is speaking. • Sitting the student next to one or more model students (positive role model).. 	<p>Lopes e Silva (2010)</p> <p>Vásquez (1997)</p> <p>Sosin (2006)</p> <p>Robin (2009)</p>
Instructions	<ul style="list-style-type: none"> • Give clear and precise instructions. • Reinforce instructions by maintaining eye contact. • Simplify complicated instructions. Break them down into steps. 	<p>Sosin (2006)</p> <p>Antunes (2009)</p> <p>Kutsher (2011)</p>
Communication	<ul style="list-style-type: none"> • Establish frequent communication with the family. • Use praise rather than criticism. 	<p>Sosin (2006)</p> <p>Robin (2009)</p> <p>Lopes e Silva (2010)</p>
Classes	<ul style="list-style-type: none"> • Use visual association and written repetition to improve memory. • Use multimedia. • Keep verbal discourse short and to the point. • Use direct involvement, physical manipulation and manual activities to improve motivation, interest and memory. • Include various activities in each lesson. • Encourage cooperative learning and peer coaching • Provide periodic breaks during lessons. • Allow some physical movement (e.g. shaking legs, going to the board). • Use some computer programmes to work on problems. 	<p>Sosin (2006)</p> <p>Dendy (2011)</p>
Works	<ul style="list-style-type: none"> • Allow more time for testing. • Divide the research papers into small segments. • Set different dates for the delivery of each segment. 	<p>Sosin (2006)</p> <p>Dendy (2011)</p> <p>Robin (2009)</p>
Organisation	<ul style="list-style-type: none"> • Make organisation and study skills part of the educational programme. • Use diaries to record tasks. • Use clearly visible calendars at workplaces with dates for tests and presentations. 	<p>Sosin (2006)</p> <p>Robin (2009)</p> <p>Kutsher (2011)</p> <p>Antunes (2009)</p>

SPECIFIC STRATEGIES ACCORDING TO THE CURRICULAR UNITS:

Portuguese

- Encouraging students to re-read and re-write their texts, so that they develop strategies for self-correction.
- Creating collective writing moments. This promotes writing in students with ADHD (figure 1).
- Encourage the student to write texts that can be read as well as used in situations outside the classroom context, e.g. recipes, travel guides, etc.
- Encourage and promote reading moments in the student on a regular basis.
- The teacher should bring different books to the classroom, as well as providing the student with frequent trips to the school library.



Mathematics

according to Silva et, al (2016):

- From their first contact with mathematics, ADHD students have difficulty in solving simple subtraction, addition and division operations. This difficulty stems from attention deficit, as well as organisation. Therefore, the teacher should:
- Stimulate the student's interest in learning mathematics, by demonstrating the usefulness of a certain subject in daily life.
 - Use materials that capture the students' attention, namely technology .
 - Introduce play, in a planned way, as a method of teaching mathematics.



Physical Education

Due to their restlessness, physical education classes are an asset for students with ADHD, as it allows the student to release their energy. It is important to bear in mind that, due to the characteristics of pupils with ADHD, group games can be confusing for these children due to excessive activity, but they can benefit more from individual activities. In this sense, it is important for physical education teachers to consider the following strategies:

- Maintaining disciplined, clear and concrete attitudes.
- Giving feedback constantly, as well as concrete suggestions, so that the student can develop appropriate behaviour in the space.
- Provide and work with moments of relaxation and stretching.
- Developing varied activities in different spaces (dance room, swimming pool, basketball court, etc).
- Providing activities that work on winning and losing for students with ADHD (football, handball, paddle tennis, etc.).
- Developing psychomotor activities (walking, running, jumping) in order to improve not only overall motor coordination, but also fine motor coordination, balance, laterality, body, temporal and spatial awareness, which are important for carrying out everyday tasks.

Science

- Promote, whenever possible, lessons in a natural environment, according to the subject to be taught. For example, searching for perennial and deciduous plants in the school garden.
- Dynamic classes, using diversified materials, in order to capture the attention and interest of students with ADHD.
- Use of laboratory space, whenever possible.



7.4. EDUCATIONAL RESOURCES

Educational resources are concrete, manipulable tools for teaching purposes. They are a support whose function is to assist not only the student's thinking, but also their imagination. Nevertheless, it allows for a closer approach of the student to reality (Schmitz, 1998, cited in. Costa et. al, 2015). However, it is essential to highlight that the pedagogical resource is not, by itself, something that promotes teaching, being crucial the presence of the teacher figure, in order to provide teaching opportunities to the student (Silvia, 2010, cited in. Costa et. al, 2015). It is also important to emphasize that it is imperative that the teacher selects and/or builds the resource according to the students' needs and characteristics, so that they can access a better acquisition of learning and, consequently, a better performance (Audi, 2006, cited in, Costa et. al, 2015).

When addressing the issue of educational resources aimed at students with ADHD, the literature mentions playful activities a beneficial for children with this condition, since it promotes development, thinking, and concentration. According to Cunha (2012), play is an important and effective tool for the teaching and acquisition of learning in children with ADHD, since:

- ♥ Attenuates and minimizes problems related to inattention, as well as irritability.
- ♥ Minimizes the child's hyperactive behaviors.

Here are some resources that help promote learning:

WORK ON GEOMETRIC FIGURES:

Organize the children in a circle and explore with the children their knowledge of geometric figures and colours. Use paper or cardboard with various colours, with each colour corresponding to a specific geometric figure. Afterwards, show the students and ask them to identify the geometric figure.

ARTISTIC ACTIVITIES AS A WAY OF STIMULATING CONCENTRATION:

Activities such as painting, sculpting or drawing allow children to express their emotions with minimal distractions, as they require a great deal of concentration. This type of activity allows the child not only to control their hyperactivity, but also to control their impulsiveness.



USE OF THE "FLIPPED CLASSROOM" METHODOLOGY:

This is a teaching methodology where the logic of traditional classes is inverted. In other words, the student does at home the activities traditionally carried out in the classroom context, and, on the other hand, carries out in the classroom the projects, activities carried out at home.

This teaching methodology allows the student to assimilate the contents better, since he had to develop a research work and previous study at home, through the materials prepared and selected by the teacher, thus allowing the opportunity to put into practice what was previously studied through the realization of projects, group work or other dynamics proposed by the teacher.



It is important to note that this methodology stimulates the interest and curiosity of all students, in particular students with ADHD.

GAMIFICATION OF EDUCATION:

This is a dynamic that consists of applying common tools and strategies in games for other purposes, namely teaching and learning. In this sense, the adoption of this method in education implies the adoption of logic, rules, as well as, design to motivate and enrich the teaching and learning processes.

This is a methodology that places the student at the centre of the educational action, as they actively participate in their teaching process, as well as in the construction of their own knowledge, through dynamic, practical and fast educational processes.

Here are some platforms that enable **free gamified** educational activities:

DUOLINGO:

A number, letter or syllable is written on each star. The aim of the game is to match the required sequence. It is suitable for pupils aged between 5 and 9 years and involves portuguese and maths.



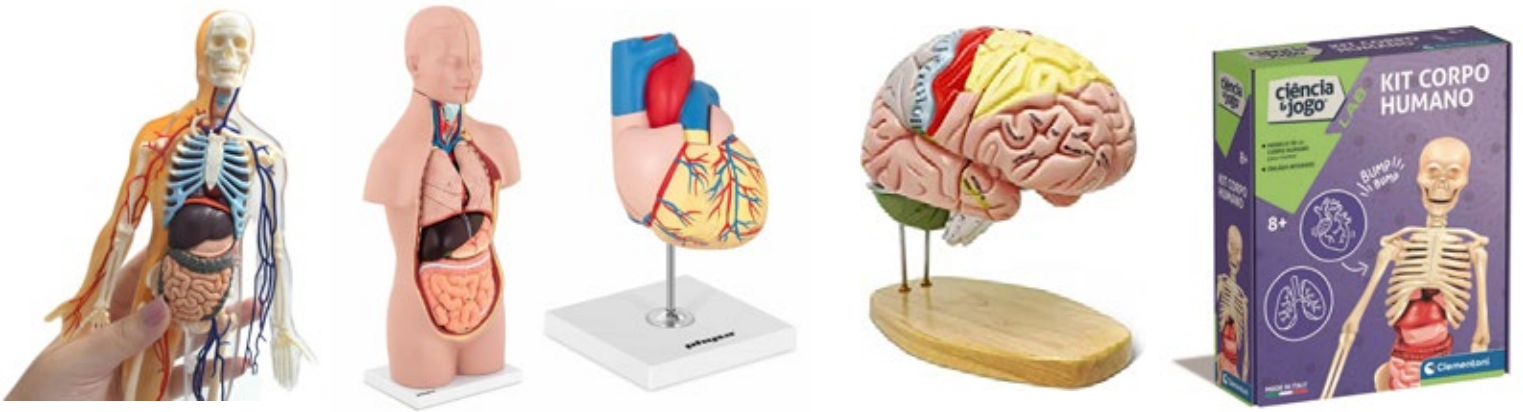
EDUCATIONAL FLIGHT:

A number, letter or syllable is written on each star. The aim of the game is to match the required sequence. It is suitable for pupils aged between 5 and 9 years and involves portuguese and maths.



CONCRETE DIDACTICAL MODELS:

For example, in the case of natural sciences, use didactical models of the human body, in order to better explain its functioning, as well as its components.



Besides didactic models, teachers can use didactic games, such as the game “[Biodiversity – board game](#)”, where, through play, the student can acquire the intended learning. In addition, they can also use [apps](#).



In addition to the educational resources previously mentioned, we can also highlight the following proposals according to the authors Brandes & Phillips, (2006):

INTRODUCTIONS GAME:

The aim of this game is to encourage the children to introduce themselves and to memorise their names.

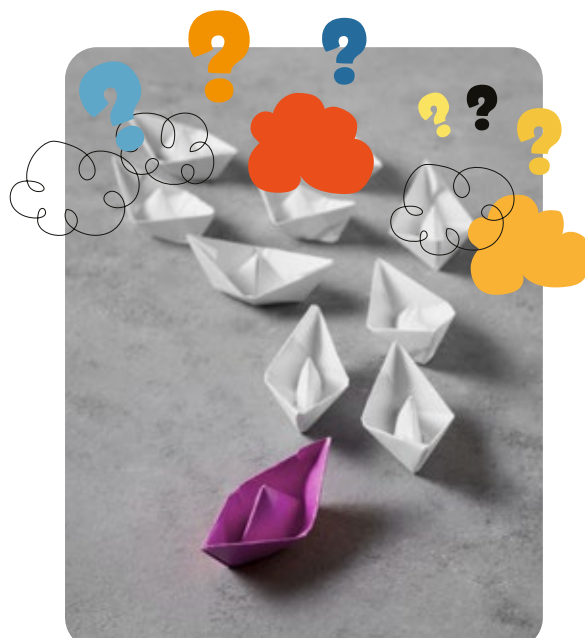
To do this, the teacher asks them to disperse in the classroom, where at the agreed signal they should shake hands with as many classmates as possible. As they shake hands, they should introduce themselves to each other. Each student should memorise as many names as possible.



GAME "THE MAN IN THE BOAT":

This game is intended to promote the development of student concentration.

To do so, the class is asked to form a line in the centre of the room. When the teacher says "Crew, all to starboard", everyone should run to the right. On the other hand, when the teacher says "Crew, all hands to port", everyone moves to the left. Finally, when the teacher says "Crew, all hands to the boat", everyone should return to the initial position (row in the centre of the classroom). It is important to mention that during the game the teacher will mention the orders faster and faster, the last one to arrive is eliminated from the game.



Mention also, some games to consider, not only in the classroom context, but also in the family environment. To be highlighted:

SUPER MIND:

This is a proverb association game where, by associating pieces with fragments of proverbs, it promotes not only memory stimulation but also reasoning. It also stimulates attention and abstraction.



APPENDIX 1

"I HAVE A STUDENT WITH ADHD IN MY CLASSROOM. NOW WHAT?"

SURVIVAL GUIDE



As with other neurodevelopmental disorders, it may take some time before a diagnosis is reached. You have to **be patient and try to get to know the student's difficulties as well as possible**, together with the family.

DON'T EXPECT FOR THE DIAGNOSIS TO TELL YOU EVERYTHING!

- ADHD is not just hyperactivity, it also leads to problems with executive function, working memory and non-verbal operational memory; selective attention, sustained attention, etc.
- Even so, the medical report often contains guidelines that must be conducted and can be implemented.

AS A CLASS LEADER OR CLASS DIRECTOR, I MUST LOOK FOR RELIABLE INFORMATION ABOUT ADHD:

- I must know the symptoms of hyperactivity, impulsivity and attention

deficit and I must seek specific knowledge and adequate training to better adapt the learning strategies.

- I can ask the Inclusive Education teacher for help.
- I must prepare a pamphlet (or look for support of this nature) and make it available at school.
- Training support should be requested from specialized associations.

AS A FULL PROFESSOR/CLASS DIRECTOR, IT IS IMPORTANT TO:

- Talk to the family to find out if the observed behaviors and difficulties are also experienced at home.

- Signal the child for an evaluation by the school psychologist.
- Implement the defined support measures for learning and inclusion.

WORK WITH THE CLASS FOR INCLUSION:

- Show a video and age-appropriate activities for the students in question to raise awareness of the topic.
- Students should be aware of the limitations and potential of this colleague
- Students should know what behaviors to avoid and what behaviors to promote.

WHAT TO AVOID IN A GENERAL WAY WITH A STUDENT WITH ADHD:

- ❌ Do not ask the student to write things down. Even if they do, they may forget to consult.
- ❌ Do not ask the student to prioritize or list tasks. Your brain prioritizes what is interesting to you or what it wants.
- ❌ The motto "If it has to be done, it should be done at the time" will be of no use - one of the characteristics of ADHD is procrastination or indefinitely postponing what must be done. These students know what must be done, they know when it must be done, they know why it must be done, but they cannot do it.
- ❌ Say phrases like:
 - 🗣 "Stop being lazy."
 - 🗣 "Pay attention!"
 - 🗣 "You only remember what interests you!"
 - 🗣 "You are cold, indifferent, you only care about yourself."

ATTENTION:

- It's **not a recipe**. ALL students with ADHD are different.
- We should **never try to change** the student. The school must conform to it.
- We must always **believe that they are capable, because they are**. However, they can only show it if we give them the possibility to do it through a different pedagogical path.



APPENDIX 2

Pamphlet to support class/school community information

IT IS IMPORTANT

to realize that not all people who have symptoms of hyperactivity or inattention have ADHD.

WHAT NOT TO DO

- Do not use punishment.
- Don't improvise or constantly change the rules.
- Do not individualize the problems and do not accuse.
- Don't look for guilt but rather look for solutions with the child.
- Saying "No" without thinking (excessive negative responses can be a stimulant for frustration and opposition).
- Do not underestimate the use of medications, as they can be a great help to control symptoms.

DID YOU KNOW THAT?

Justin Timberlake
Michael Jordan
Jim Carrey
Paris Hilton
Will Smith

have
ADHD?



WE ARE ALL INVOLVED

All children matter and they really matter!

School is for each and every one.

UNESCO

 inc4edu@gmail.com

 <https://edupa.pt/projeto-incedu/>

 [facebook.com/Projeto Educaçã o Inclusiva](https://facebook.com/ProjetoEducaçaoInclusiva)

 [incedu_inclusiveeducation](https://instagram.com/incedu_inclusiveeducation)



Created by the Erasmus Programme of the European Union



ADHD

Hyperactivity Disorder and Attention Deficit




Knowing to understand



Leaflet available to print (front and back).



WHAT IS IT?









is a disorder of brain development characterized by:




Three main symptoms:

1. Inattention
2. Hyperactivity and
3. Impulsivity.

The symptoms are maintained throughout life and already in adulthood manifests itself in the difficulty of day-to-day management, with impacts on personal and professional life.




ATTENTION DEFICIT

-  Not paying attention to details.
-  Difficulties in maintaining attention in the performance of tasks.
-  To seem that he does not hear when he is spoken to directly.
-  Difficulty starting and finishing tasks.
-  Difficulty organizing tasks or activities.
-  Avoid tasks that involve sustained mental effort.










-  Losing objects frequently.
-  Easily distracted by other things.
-  Often forgetting appointments.

CURIOSITIES

It is known that genetic factors are responsible for 70 to 80% of the risk of having ADHD. Parents and siblings of people with ADHD have five to ten times higher risk of developing ADHD than the rest of the population.

-  ADHD is more complex than people think.
-  Like icebergs, many problems that are related to ADHD are not seen.
-  ADHD can be mild, moderate or severe and probably coexists with other conditions and may be a disability for sufferers.

HYPERACTIVITY / IMPULSIVITY

-  Restlessly wiggle feet/hands/fidget in the chair.
-  It gets up in situations where it is supposed to remain seated.
-  Feeling restless.
-  Difficulty in engaging with tranquility in leisure activities.
-  Always walking fast or as if you were "connected to electricity".
-  Talking too much.
-  Answer before the questions end.
-  Difficulty waiting for their turn.
-  Interrupts or interferes with the activities of others.

CHILDREN WITH ADHD ARE ...

- children who suffer and who feel misunderstood.
- unable to win without help.
- "different" and often connoted as ill-mannered, bad-natured, evil.
- often rejected by peers and sometimes by teachers and the environment.
- They are the children of parents who also end up being "victims" of the misunderstanding of the environment.

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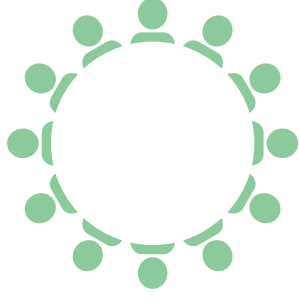
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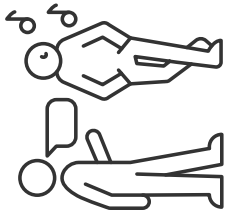
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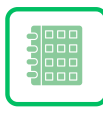
To seem that he does not hear when he is spoken to directly.



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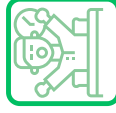
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APPENDIX 3

Pamphlet to support class/school community information

O iceberg da PHDA

A PHDA é com frequência mais complexa do que as pessoas pensam. Como os icebergs, muitos problemas que estão relacionados com a PHDA não são visíveis. A PHDA pode ser ligeira, moderada ou grave, provavelmente coexiste com outras condições e pode ser uma incapacidade para os portadores.

A ponta do iceberg
Os comportamentos óbvios da PHDA

- Deficiência de Atenção
 - Não prestam atenção
 - Esquecidos e distraídos
 - Não pensam quando estão a falar dramaticamente
 - Perdem coisas
 - Cometem erros por descuido
 - Não cumprem tarefas
 - Desorganizados
- Hiperatividade
 - Desacomodados
 - Falam muito
 - Impulsivos
 - Correm ou saltam em excesso
 - Não conseguem ficar sentados
 - Sempre em movimento
- Impulsividade
 - Falta de auto-controlo
 - Dificuldade em esperar pela sua vez
 - Interrupção de outros
 - Incompreensão de
 - Respostas mal
 - Perdem rápido a paciência
 - Falam antes de pensar

Escondidos por baixo da superfície
Os comportamentos não tão óbvios da PHDA (2/3 têm pelo menos outro(s) sintomas) como a fadiga.

Deficiências nos neurotransmissores afetam o comportamento
● Níveis insuficientes de neurotransmissores – dopamina e noradrenalina, resultam na redução da atividade cerebral.

Atraso na maturação cerebral (p. 3 anos)
● Mais impulsivos
● Menos responsáveis
● Aos 15 anos agem como se tivessem 12

Deficiências das funções executivas
● Memória de trabalho
● Atenção contínua
● Auto-regulação das emoções
● Organização e planeamento
● Resolução de problemas complexos

Noção de tempo prejudicada
● Perdem a noção do tempo
● Abusam-se com a fadiga
● Sem estratégias de planeamento
● Enganam-se de prazos com grande frequência
● Impulsivos, não gostam de esperar
● Descuram uma tarefa e realizam as tarefas
● Faltam fazer os TPC's

Problemas de sono
● Não têm um sono reparante
● Dificuldade em adormecer
● Dificuldade a acordar
● Distúrbios de fase de sono
● Adormecem na sala de aulas
● Procura do sono frequente
● Irritáveis
● Distúrbios matinais com os pais

Baixa tolerância à frustração
● Dificuldade no controlo das emoções
● Não "sinto culpa"
● Emoções mais realistas
● Perdem a paciência facilmente
● Decidem facilmente
● Não se mantêm nos objetivos
● Falam no mesmo tempo de pensar
● Dificuldade em ver a perspetiva dos outros

Não aprendem facilmente com estratégias de castigo e recompensas
● Apresentam comportamentos desafiadores
● Podem ser difíceis de disciplinar
● Menos propensos que cumprem os regras
● Dificuldade em pedir o seu próprio comportamento
● Não aguardam com os comportamentos anteriores
● Agem sem noção de retrospetiva
● Programas recompensas no imediato
● Recompensas a longo prazo não funcionam

Comorbilidades
● Dificuldade específica de aprendizagem
● Distúrbios
● Perturbação de oposição e desafio
● Perturbações emocionais
● Depressão bipolar
● Abuso de substâncias
● Perturbação obsessiva compulsiva
● Perturbação do Espectro do Autismo
● Tiques

Graves problemas de aprendizagem
● Não memorizam com facilidade
● Esperam-se dois resultados dos pais e professores
● Cálculo matemático lento
● Rubrá expressiva escrita
● Dificuldade em escrever composições
● Dificuldade na compreensão escrita
● Dificuldade em desenvolver os conhecimentos por palavras próprias
● Dificuldade em juntar palavras regularmente para formar frases
● Desorganizados
● Processamento cognitivo lento
● Ma caligrafia
● Coordenação motora fina pobre

Apenas 1/8 dos icebergs é visível. A maior parte está escondida!

www.spda.pt
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SPDA
Sociedade Portuguesa de Deficiência de Atenção e Hiperatividade



source: Portuguese Society for Attention Deficit
www.spda.pt

ADDITIONAL RESOURCES

RECOMMENDED READING

The Promotion of Parenting Competencies Programme [“Together in the Challenge”](#), arises from the need to present a structured intervention script for the Training of Parenting Skills. This manual of parental behavioural intervention is intended to be both a source of information and a therapeutic manual to be used by parents of children and adolescents diagnosed with ADHD Attention Deficit Hyperactivity Disorder, Behavioural Disorders (e.g. Behavioural Disorder and Oppositional Defiance Disorder), or who simply reveal behavioural changes that constitute a difficulty for those who interact and relate to them.



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