

Information sheet on AD(H)D

What is Attention Deficit (Hyperactivity) Disorder?

True

- ✓ difficulty paying attention and staying focused
- ✓ problems concentrating, distractibility
- ✓ hyperactivity
- ✓ impulsivity

False

- ✗ generally incapable of paying attention
- ✗ seeks (too much) attention
- ✗ laziness, apathy
- ✗ lack of intelligence

A distinction is often made between ADHD and ADD (with and without hyperactivity), although they are two sides of the same phenomenon. The two types are also treated in the same way.

Explanatory approach: Dopamine hypothesis

- People with AD(H)D have a lower availability of dopamine. This sounds paradoxical at first, as one would expect people with a dopamine deficit would be rather apathetic.
- However, the hyperactivity is not a direct consequence of the dopamine deficit, but a compensation strategy.
- No dopamine → difficulty carrying out a task
- Consequence: People with AD(H)D create or prefer – sometimes consciously, sometimes unconsciously – different types of stimulation in order to increase the release of dopamine and achieve neurobiological “balance”: this can be an increase in movement or volume, frequent switching to new activities, consumption of stimulants, etc.

What is dopamine?

Dopamine is a neurotransmitter responsible for providing motivation. It's also called the feel-good hormone, since it can cause positive emotions.

Differences in filtering stimuli for those with AD(H)D

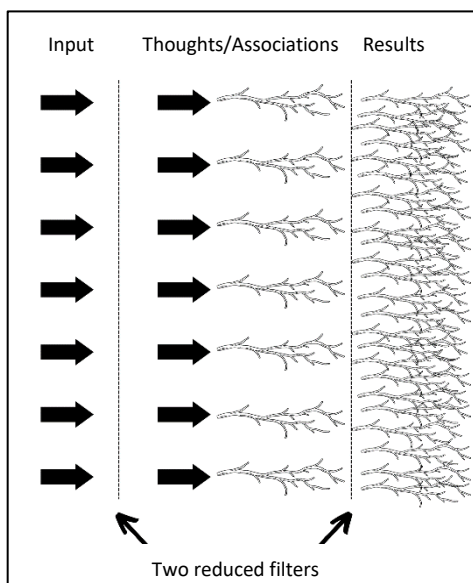


Figure 1: Filter Model. According to Lachenmeier (2021).

- New impressions are filtered less.
- Every piece of information is given the same amount of weight, meaning no decision is made right away regarding whether or not a detail is relevant.
- When thinking, more associations and inner images also appear. This can be visualized like a tree of thoughts: One input creates new offshoots through thoughts and associations, which again are not filtered much or weighted. Every new offshoot creates many new thoughts, resulting to an entire tree (see Fig. 1).
- In conclusion, this allows many more impressions to reach the consciousness and the affected person's attention to spread out, which can lead to sensory overload, distraction, many new ideas, mental leaps, or digressions.

Hyperfocus: A contrary experience

If someone with AD(H)D is really interested in a topic or a stimulus is especially relevant (e.g., pain), they may focus only on this topic/stimulus to the exclusion of everything else (often resulting in high levels of productivity, but also leading to forgetting to eat, drink, use the bathroom). This is not something people with AD(H)D can control!

How can a sensory overload occur if those with AD(H)D are constantly seeking new stimuli?

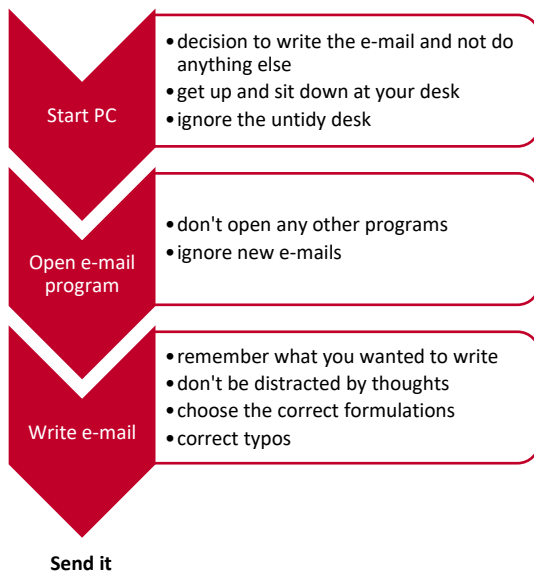
- Too many stimuli (from the outside world, but also from one's own thoughts) can lead to an overload.
- This is also caused by the reduced ability to filter stimuli: for those with AD(H)D, each new piece of information can result in an unchecked succession of thoughts.

Example

A new task is added to the internal to-do list. The more tasks already exist, the more likely it is for an overload to occur, as thinking of a task immediately creates associations with all of the other tasks. Not two or three single tasks, but the whole list is called up every time, which seems insurmountable as a whole.

Procrastinating: Difficulties implementing plans (Executive dysfunction)

Example: Sending your professor an e-mail



- When people with AD(H)D and those without have the same level of motivation to complete a task, those with AD(H)D will be successful far less often.
- This is due to the dopamine deficiency mentioned above, combined with difficulties in reliably directing attention.
- Carrying out a plan requires not only motivation, but also remembering the plan, finding the right moment, knowing how to carry out each step to complete the task, ignoring distractions, staying focused on the plan, and staying motivated. There are more factors involved in a seemingly simple action than you might think.

Possible Strengths and Weaknesses in Those with AD(H)D

Strengths

More new and uncommon ideas = creativity
 Good at improvising
 Quick to orient themselves
 Enthusiasm

Weaknesses

Problems concentrating
 Problems with organization and time management
 Frequent mistakes made inadvertently
 Impatience or restlessness

Outlook

Behavioral therapy

- In-depth diagnosis
- Psychoeducation (learning to understand yourself better)
- Learn individual strategies to cope with weaknesses and foster strengths

Psychiatrist

- In-depth diagnosis
- Psychoeducation (learning to understand yourself better)
- Medication therapy (e.g., to compensate for the dopamine deficit)

Self-help

- Access to a network of those affected by AD(H)D
- Benefit from the experience of others
- Share recommendations and strategies
- Plan activities together

Mental Health Services Offer: Possibility of diagnosis

Literature:

Lachenmeier, H. (2021). *Mit ADHS erfolgreich im Beruf: So wandeln Sie vermeintliche Schwächen in Stärken um*. Springer: Berlin Heidelberg.
 Zhukova, A. (2021). *ADHS verstehen – ein neuropsychologisches Erklärungsmodell*.