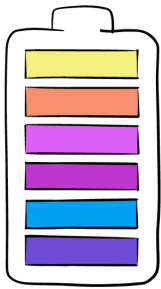




10 Key Differences in ADHD Emotion Processing

Reduced Executive Functioning Capacity



This is one of the primary differences of ADHD brains, and because executive functioning impacts almost every step of emotional processing, it is one of the biggest contributors to the intensification of ADHD emotions.

Example: self-monitoring is one of the basic EFs- and in order to recognize that we are starting to get overwhelmed and emotional and take a break ahead of our emotions getting so intense they take over, we need to monitor how we are feeling and what's going on in our body, minds, and hearts. It's hard to do that when our executive functioning capacity is low (eg: at the end of the day)

Temporal Discounting



ADHD brains are more likely to perceive a desired result in the future as less valuable than one in the present. This tendency can create particularly intense emotions because the process of regulating your emotions often involves denying a small immediate reward in favor of a larger future reward.

Example: To avoid the frantic feeling that often predicates a morning meltdown, it's often helpful to do some morning prep the night before (e.g., pack lunches, lay out clothes, check schedules, etc.). But doing that prep work often means cutting our relaxing time (short-term benefit) short in order to get that long-term reward.

Decreased Early Sensory Encoding



The electrophysiological markers of ADHD brains show decreased early sensory encoding for positive stimuli, which is a special neurological process that creates a deeper processing of emotional stimuli. However, negative stimuli continue to receive early sensory encoding, which leads to an increased perception of negative information.

Example: When given a typical feedback “sandwich” (ie: critical feedback sandwiched between 2 pieces of positive feedback), ADHD brains are likely to perceive and process the negative information in a way that gives it prominence and salience but the positive info isn't processed as deeply and importantly, this leads to feeling like all of the feedback is bad and can result in intense rejection and failure feelings.

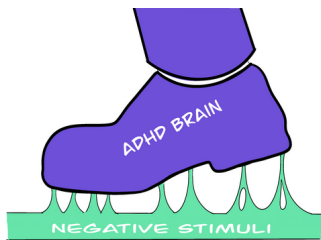
Filterless Sensory Processing



ADHD brains show altered information processing and sensory modulation, which means that they don't filter out extraneous information and stimulation. This leads to some of the great strengths of ADHD brains (creativity, novel problem solving, etc), but it also means that it is vulnerable to any (and all) stimulation and can easily get overwhelmed and overstimulated.

Example: Your children bickering over a toy is much more likely to result in intense frustration and anger if you have just come in from work after a stressful day topped off by a long, traffic-filled commute in the middle of July with your car's AC on the fritz than it would if you had just come in from a lovely massage and quiet afternoon to yourself.

The "Sticky" Negative



Research shows that ADHD brains struggle to direct attention away from negative emotional stimulation. An ADHD brain takes much more time and requires much more effort in order to switch from thinking and processing something negative to something positive or neutral. This means that it's more likely to steep in negative information and have all of the intense feelings that come as a result.

Example: You find out your friend is having a small party, and you weren't invited. It's all you can think about and all you can talk about. Even when your kids come up to you to show you their newest art masterpiece or as your sister talks about your upcoming beach trip, the rejection lingers, and the rumination continues.

Difficulty with Emotional Identification



Research shows that adults with ADHD struggle to accurately perceive others' emotions through facial expressions, context, and tone of voice. This means that the ADHD brain is less likely to pick up on subtle cues that can indicate that someone is getting upset, leading to more conflict, negative attention, and exclusion, which can then lead to strong emotional reactions.

Example: You're playing with your kids, joking around, and don't see the subtle changes in body language that indicate that your youngest is starting to take the joking personally. You continue to joke, and suddenly, your child begins sobbing and runs from the room, saying, "You're so mean to me." This leaves you feeling blindsided and full of regret and shame for causing their upset.

Bottom Up Processing Differences



Neuroimaging shows that the emotion centers of an ADHD brain become hyperactive in response to negative stimulation, causing increased negative intensity.

Example: as you walk into a staff meeting 5 minutes late, your boss gives you a look. You are immediately flooded with a sense of failure and shame. The experience is so intense that you can barely hear anything anyone says throughout the meeting.

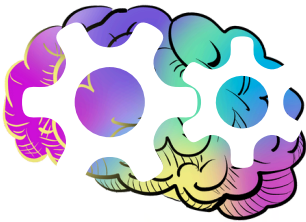
Top Down Processing Differences



In contrast to neurotypical brains, which utilize the autonomic nervous system to control the intensity of negative emotion, ADHD brains' autonomic nervous system responds to both positive and negative stimuli in the same way.

Example: When the flood of shame starts up after your boss gives you a look, the autonomic nervous system doesn't kick in to reduce the flood levels, causing them to continue rising.

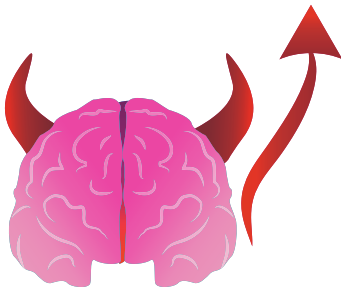
Cognitive Control Differences



The various differences in ADHD cognition, including executive functioning differences, the sticky negative, working memory and processing speed differences, and differences in inhibition, all work together to make it hard for an ADHD brain to work on an emotion to make it smaller and less intense once it has already flooded.

Example: After a fight with your partner, you talk with your friend about it. She is kind and empathic but also reframes the issue, trying to make it seem like less of a big deal and gently pointing out where you could have done things differently. You know she's right but the anger that you feel won't budge.

Default Mode Network Differences



The Default Mode Network (DMN) is the areas of the brain that are engaged when not engaged in "goal-directed activity." I like to think of it as brain recess. Two of the primary regions involved in DMN are our emotion centers and memory centers, which makes the DMN the hotspot for rumination and every other form of "stewing."

Neurotypical brains tend to turn off their DMN when they are solving a problem or doing something "goal-directed." ADHD brains, however, have been found to rarely shut this network down, meaning this type of rumination can chatter in the background even when you are actively working on something else.

Example: You have a big presentation coming up next week. You know you should work on it, but you can't bring yourself to open the file. You feel an intense mixture of dread, shame, and anxiety, and you keep thinking about all the terrible things everyone will think when they see how unprepared you are. You try to distract yourself by working on another project, playing with your kid, heck- you even throw yourself into cleaning out a closet. But nothing mutes the knot in your chest or the fear in your head.

Got some Questions?

Want More Information?

We'd love to hear from you!
Check us out on ADDept.org or The Center for ADHD
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