ADDITUDE

How the ADHD Brain Works

The neuroscience behind ADHD symptoms and behaviors such as rejection sensitivity, hyperfocus, emotionality & more



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Introduction

ADHD is not what you think it is.

The symptoms delineated in the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*) — inattention, hyperactivity, and impulsivity — are not the most powerful or life-altering characteristics of ADHD, according to ADDitude readers.

Though hyperactivity is hardly ubiquitous with ADHD, almost universal among people with ADHD is an internal feeling of hyperarousal:

- "I'm always tense. I can never relax."
- "I can't just sit still and watch TV with the rest of the family."
- "I can't turn off my brain and body to go to sleep at night."

The passionate thoughts and emotions of people with ADHD are remarkably intense. Their highs are higher. Their lows are lower. A person with ADHD may experience both happiness and criticism more powerfully than others.

Even perceived criticism cuts more deeply. Rejection sensitive dysphoria (RSD) is extreme emotional sensitivity and pain triggered by the perception that a person has been rejected or criticized by important people in their life. It may also be triggered by a sense of falling short — failing to meet their own high standards or others' expectations.

Dysphoria is Greek for "difficult to bear." It's not that people with attention deficit disorder are wimps, or weak; it's that the emotional response hurts them much more than it does people without the condition. No one likes to be rejected, criticized or fail. For people with RSD, these universal life experiences are much more severe than for neurotypical individuals. They are unbearable, restricting, and highly impairing.

"People who think ADHD means having a short attention span misunderstand what ADHD is," says Kathleen Nadeau, Ph.D., a psychologist in Silver Spring, Maryland, and the author of *ADD-Friendly Ways to Organize Your Life*. "A better way to look at it is that people with ADHD have a dysregulated attention system."

Like distractibility, hyperfocus is thought to result from abnormally low levels of dopa-

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mine, a neurotransmitter that is particularly active in the brain's frontal lobes. This dopamine deficiency makes it hard to "shift gears" to take up boring-but-necessary tasks¹.

Hyperfocus is not inherently bad. But it is a surprising symptom to many who know only the stereotypes of ADHD. And that is why we've compiled this resource — a collection of information based largely on the research and reflections of William Dodson, M.D., a preeminent ADHD expert who boils down ADHD's three defining features to the following:

- Rejection sensitive dysphoria
- Emotional hyperarousal
- Hyperfocus

Read on to better understand these emotional attributes of ADHD — seldom discussed but almost universally felt — as well as the related challenges of lagging motivation and shame.

The Neuroscience of ADHD

Part One: The Neuroscience of ADHD

By Larry Silver, M.D., Joel Nigg, Ph.D., and Alison Kravit, Psy.D.

ADHD is not a breakdown of the brain in one spot. It's a breakdown in the connectivity, the communication networks, and an immaturity in these networks. These brain networks are interrelated around emotion, attention, behavior, and arousal. People with ADHD have trouble with global self-regulation, not just regulation of attention, which is why there are attentional and emotional issues².

Our brain networks are numerous and complicated. At a cellular level, neurons transmit messages and make connections between and within different brain regions — the frontal lobe, the temporal lobe, the parietal lobe, and the occipital lobe — as well as subcortical structures. Each region is responsible for a particular function. Some regions interact with our outside world, interpreting vision, hearing, and other sensory inputs to help us figure out what to do and say. Other regions interact with our internal world — our body — in order to regulate the function of our organs.

For the various regions to do their jobs, they must be linked to one another with extensive "wiring." Of course, there aren't really wires in the brain. Rather, there are myriad "pathways," or neural circuits, that carry information from one brain region to another.

Information is transmitted along these pathways via the action of neurotransmitters (scientists have identified 50 different ones, and there may be as many as 200). Each neuron produces tiny quantities of a specific neurotransmitter, which is released into the microscopic space that exists between neurons (called a synapse), stimulating the next cell in the pathway — and no others.

How does a specific neurotransmitter know precisely which neuron to attach to, when there are so many other neurons nearby? Each neurotransmitter has a unique molecular structure — a "key," if you will — that is able to attach only to a neuron with the corresponding receptor site, or "lock." When the key finds the neuron bearing the right lock, the neurotransmitter binds to and stimulates that neuron.

Neurotransmitter Deficiencies in ADHD Brains

Brain scientists have found that deficiencies in specific neurotransmitters underlie many common disorders³, including anxiety, mood disorders, anger-control problems, and obsessive-compulsive disorder.

ADHD was the first disorder found to be the result of a deficiency of a specific neurotransmitter — in this case, norepinephrine — and the first disorder found to respond to medications to correct this underlying deficiency. Like all neurotransmitters, norepinephrine is synthesized within the brain. The basic building block of each norepinephrine molecule is dopa; this tiny molecule is converted into dopamine, which, in turn, is converted into norepinephrine.

A Four-Way Partnership

ADHD seems to involve impaired neurotransmitter activity in four functional regions of the brain 45:

- **Prefrontal cortex.** This region orchestrates high-level functioning: maintaining attention, organization, and executive function. A deficiency of norepinephrine within this brain region might cause inattention, problems with organization, and/or impaired executive functioning.
- **Limbic system.** This region, located deeper in the brain, regulates our emotions. A deficiency in this region might result in restlessness, inattention, or emotional volatility.
- **Basal ganglia.** These neural circuits regulate communication within the brain. Information from all regions of the brain enters the basal ganglia, and is then relayed to the correct sites in the brain. A deficiency in the basal ganglia can cause information to "short-circuit," resulting in inattention or impulsivity.
- **Reticular activating system.** This is the major relay system among the many pathways that enter and leave the brain. A deficiency in the RAS can cause inattention, impulsivity, or hyperactivity.

These four regions interact with one another, so a deficiency in one region may cause a problem in one or more of the other regions. ADHD may be the result of problems in one or more of these regions.

ADHD and the Prefrontal Cortex

The prefrontal cortex (PFC) is responsible for thinking, thought analysis, and regulating behavior. This includes mediating conflicting thoughts, making choices between right and wrong, and predicting the probable outcomes of actions or events. This vital region of the brain regulates short-term and long-term decision-making. In addition, the PFC helps to focus thoughts, enabling people to pay attention, learn, and concentrate on goals.

Imagine that the PFC is a busy intersection through which attention, behavior, judgment, and emotional responses zoom. For people with ADHD, the PFC is unregulated; there are no traffic lights or stop signs controlling which message gets through first. This unregulated intersection may explain why attention wanders in ADHD brains. People with ADHD get distracted because whatever is in their focus in the moment cuts off other, weaker messages. (Out of sight, out of mind.) This can happen in mid-conversation, when a word triggers a thought that leads a person to another subject entirely.

ADHD and Time Management

Judgment runs through the PFC as well. When you say, "That'll take me five minutes to finish," that's a judgment call. The ADHD brain often can't see time or feel it. Understanding and conceptualizing time isn't as strong a message in the ADHD brain as the emotion behind a looming deadline or an unfinished task.

A person with ADHD might freak out about a deadline, saying, "Don't talk to me, I have all these things to do and no time to do them!" Or the person says to himself, "This task is going to take forever," and then uses that as a reason to procrastinate. If the person would just get started, the task would take maybe 10 minutes. In this case, the fastest car in the intersection is the emotion behind the judgment of how long it will take to meet the deadline.

ADHD and Emotional Regulation

Emotions run through the intersection of the PFC, bringing quick mood changes. Impulsive anger (or sadness, or excitement, or worry) seems to come from nowhere, when actually the emotion is a quick reaction to an event that just occurred. That is what is dominating the person's focus at that moment.

In the ADHD brain, whichever emotion is in focus at the moment becomes the faster car. This is why those with ADHD express emotions more intensely than may be justified for

a given situation. In females with ADHD, this emotionality is often misdiagnosed as a mood disorder⁶.

ADHD and Behavior/Impulsivity

The faster car metaphor plays into being chronically late. If you are on your way out the door to go to work, and say, "I have 15 minutes left, I can just do this one thing," you make yourself late to work. If you didn't have ADHD, you would stop and think, "Oh, I have 15 minutes, but that's not enough time to do this thing, or I'll be late to work like last time." If you have ADHD, the stronger message isn't that you were late for work last time, but the desire to play a video game for a couple of minutes or phone a friend about going out on the weekend right now. And you are late for work — again. You keep doing the same things over and over because past experiences are being cut off by what is in your focus at the moment.

How the Prefrontal Cortex Connects to the Rest of the ADHD Brain

The thalamus area of the brain controls response inhibition. It works like a gate — sending signals to allow or stop behaviors.

When the brain detects a red flag, its limbic-hippocampal connections relay a warning from the thalamus to the frontal cortex. That's the control center of the brain that handles emotional expression and problem solving.

In ADHD brains, the thalamus gate is broken. That means a person with ADHD may struggle to:

- Hold back a comment that may hurt someone's feeling
- Rein in short-term desires like eating candy or spending money

When a person with ADHD blurts out or acts impulsively, it is not simply rudeness or lack of self-discipline. It is a function of the interior signaling system of the brain.

Signaling Between Brain Regions

The fronto-cerebellar network links the frontal cortex to the cerebellum. The executive function network links the frontal cortex, the parietal cortex, and the subcortical areas (basal ganglia). The attentional network links the frontal cortex to the supplementary motor cortex and the parietal cortex. Each network could be a locus of dysfunction for people with ADHD.

Two fundamental kinds of brain signaling must be considered to understand ADHD.

Bottom-Up Signaling: The signaling from the back of the brain to the front of the brain, and from the interior of the brain to the outer part of the brain is bottom-up signaling. Those signals respond to sensory input — what you see and hear — and immediately trigger attentional capture or emotional reaction.

Top-Down Signaling: In response to these bottom-up signals, top-down signals come from neurons projecting either from the prefrontal cortex backward towards the back of the cortex or downward into the interior of the brain to modulate the spontaneous bottom-up signals. The top-down modulatory signals are based on your goals, your learning, or what you want to be doing. They respond to internal signals instead of external signals.

In a neurotypical brain there is a good balance of bottom-up and top-down signaling. Bottom-up systems appropriately interrupt attention when something important happens (e.g., someone physically draws near, a loud sound, or, if you are a child, the teacher frowns). These are occurrences that your brain recognizes as something unexpected, not-supposed-to-happen in the moment, and makes you notice so you can modify your top-down response.

In ADHD brains, however, these top-down signals are relatively weak⁷. One hypothesis is that they are overpowered by the much more powerful bottom-up signals. And that imbalance manifests in several different ways, depending on the area of the brain impacted. Three common manifestations of this imbalance are inattention, impulsivity, and emotional regulation.

Inattention in the ADHD Brain

The problem: A child with ADHD becomes so hyperfocused on a video game that it is not easy for him to stop playing. Or he can't focus on his homework when siblings are watching TV or playing nearby.

The explanation: The "automatic attention capture system" in the brain is activated by the stimulation of the video game or the enticing distractions nearby. It sends a bottom-up signal to the parietal lobe, which should reply with a top-down signal reminding the brain of its long-term goals and obligations. In ADHD brains, the axonal fibers in this top-down reply are underdeveloped, so the message to ignore the environment and refocus on the goals is lost. There is not enough top-down control.

Studies that observe the brain using an fMRI scanner while children work on a task that requires attention, like a math problem, show that the frontal-parietal attention network functions poorly⁸. Additionally, in research that examines the axon fibers connecting the attention circuits of the brain, it's found that certain fibers are underdeveloped, which could explain the under-functioning of the front and back areas of the attention network⁹. It's as if they are not well-connected, so they are not talking to each other. Because the front of the brain can't capture attention, the behavior is not suppressed.

Impulsivity in the ADHD Brain

The problem: A child with ADHD blurts out answers in class, says something hurtful to a friend without stopping to consider the consequences, or literally leaps without looking and ends up injured.

The explanation: The thalamus is the interior area of the brain that helps to signal the need for response inhibition; in other words, it helps stop you from performing a behavior that is not in your best interest. It operates like a gate, sending signals to allow and stop behaviors as is appropriate. In ADHD brains, the limbic-hippocampal connections relaying these warning signals from the thalamus to the frontal cortex are impaired 10. It's as if the gate is broken, and behavior doesn't get suppressed when it should.

People without ADHD have the ability to stop, mid-stream, if they recognize a person is not smiling or responding well to something they are saying. The average adult needs only 200 milliseconds of warning to interrupt something they are about to do, even if they started doing it. The average child needs about 280 milliseconds. The child with ADHD

needs 20 to 30 milliseconds longer warning, which is an eternity when it comes to behavior control because behavior is so fluid¹¹.

Emotional Control in the ADHD Brain

The problem: A child with ADHD responds in overblown, extremely emotional ways to small setbacks or challenges that most children would shrug off. Perhaps she suffers from anxiety or worry due to school frustrations, or she throws temper tantrums that last hours because she can't regulate her anger. Long-term rewards are meaningless; immediate gratification is everything.

The explanation: The amygdala are two internal brain regions that are involved in emotional reactions and decision making. When flooded with anger or worry, these regions deploy bottom-up signals to the cerebral cortex. The insula, a region of the cerebral cortex, should then respond with top-down strategies and goals designed to inhibit an individual's emotional response in line with the goal. This is what helps you take a deep breath and think before acting on a sudden emotion. In ADHD brains, this insula-amygdala connection is weak, which can lead to a breakdown in regulating negative emotions¹². Emotional regulation is a big part of ADHD that has been traditionally ignored.

At the same time, people with ADHD over-respond to rewards when they are immediate, and don't remember or value future rewards, which indicates a potential breakdown in the regulatory system. When comparing ADHD brains to those of people without the condition, we see that the connection between the prefrontal cortex and the reward system (which is partly in the nucleus accumbens) has reduced activation¹³, especially in the dorsal part of the prefrontal cortex. This could explain overexcitement, frustration and anger, and inability to respond to delayed rewards.

PART TWO Secrets of the ADHD Brain

Part Two: Secrets of the ADHD Brain

By William Dodson, M.D.

Attention deficit hyperactivity disorder (ADHD) is a confusing, contradictory, inconsistent, and frustrating condition. It is overwhelming to people who live with it every day. The diagnostic criteria that have been used for the last 40 years leave many people wondering whether they have the condition or not. Diagnosticians have long lists of symptoms to sort through and check off. The *Diagnostic and Statistical Manual of Mental Disorders* has 18 criteria, and other symptom lists cite as many as 100 traits.

Practitioners, including myself, have been trying to establish a simpler, clearer way to understand the impairments of ADHD. We have been looking for the "bright and shining line" that defines the condition, explains the source of impairments, and gives direction as to what to do about it.

My work for the last decade suggests that we have been missing something important about the fundamental nature of the ADHD brain. I went back to the experts on the condition — the hundreds of people and their families I worked with who were diagnosed with it — to confirm my hypothesis. My goal was to look for the feature that everyone with ADHD has, and that neurotypical people don't have.

I found it. It is the ADHD nervous system, a unique and special creation that regulates attention and emotions in different ways than the nervous system in those without the condition.

Almost every one of my patients and their families want to drop the term "attention deficit hyperactivity disorder," because it describes the opposite of what they experience every moment of their lives. It is hard to call something a disorder when it imparts many positives. ADHD is not a damaged or defective nervous system. It is a nervous system that works well using its own set of rules.

Despite ADHD's association with learning disabilities, most people with an ADHD nervous system are remarkably intelligent. They also use their intelligence in different ways.

By the time most people with the condition reach high school, they are able to tackle problems that stump everyone else and can jump to solutions that no one else saw.

The vast majority of adults with an ADHD nervous system are not overtly, physically hyperactive. They are hyperactive internally.

The ADHD Zone

Those with the condition don't have a shortage of attention. They pay too much attention to everything. Most people with unmedicated ADHD have four or five things going on in their minds at once. The hallmark of the ADHD nervous system is not attention deficit, but inconsistent attention.

Everyone with ADHD knows that they can "get in the zone" at least four or five times a day. When they are in the zone, they have no impairments, and the executive function deficits they may have had before entering the zone disappear. People with ADHD know that they are bright and clever, but they are never sure whether their abilities will show up when they need them. The fact that symptoms and impairments come and go throughout the day is the defining trait of ADHD. It makes the condition mystifying and frustrating.

People with ADHD primarily get in the zone by being interested in, or intrigued by, what they are doing. I call it an interest-based nervous system. Judgmental friends and family see this as being unreliable or self-serving. When friends say, "You can do the things you like," they are describing the essence of the ADHD nervous system.

ADHD individuals also get in the zone when they are challenged or thrown into a competitive environment. Sometimes a new or novel task attracts their attention. Novelty is short-lived, though, and everything gets old after a while.

Most people with an ADHD nervous system can engage in tasks and access their abilities when the task is urgent — a do-or-die deadline, for instance. This is why procrastination is an almost universal impairment in people with ADHD. They want to get their work done, but they can't get started until the task becomes interesting, challenging, or urgent.

How the Rest of the World Functions

The 90 percent of non-ADHD people in the world are referred to as "neurotypical." It is not that they are "normal" or better. Their neurology is accepted and endorsed by the world. For people with a neurotypical nervous system, being interested in the task, or challenged, or finding the task novel or urgent is helpful, but it is not a prerequisite for doing it.

Neurotypical people use three different factors to decide what to do, how to get started on it, and to stick with it until it is completed:

- 1. the concept of importance (they think they should get it done)
- 2. the concept of secondary importance they are motivated by the fact that their parents, teacher, boss, or someone they respect thinks the task is important to tackle and to complete
- 3. the concept of rewards for doing a task and consequences/punishments for not doing it

A person with an ADHD nervous system has never been able to use the idea of importance or rewards to start and do a task. They know what's important, they like rewards, and they don't like punishment. But for them, the things that motivate the rest of the world are merely nags.

The inability to use importance and rewards to get motivated has a lifelong impact on the lives of individuals with ADHD.

How can those with an ADHD diagnosis choose between multiple options if they can't use the concepts of importance and rewards to motivate them?

How can they make major decisions if the concepts of importance and rewards are neither helpful in making a decision nor a motivation to do what they choose?

Researchers view ADHD as stemming from a defective or deficit-based nervous system. I see ADHD stemming from a nervous system that works perfectly well by its own set of rules. Unfortunately, it does not work by any of the rules or techniques taught and encouraged in a neurotypical world. That's why:

 People with ADHD do not fit in the standard school system, which is built on repeating what someone else thinks is important and relevant.

- People with ADHD do not flourish in the standard job that pays people to work on what someone else (namely, the boss) thinks is important.
- People with ADHD are disorganized, because just about every organizational system out there is built on two things prioritization and time management that individuals with ADHD do not do well.
- People with ADHD have a hard time choosing between alternatives, because everything has the same lack of importance. To them, all of the alternatives look the same.
- People with an ADHD nervous system know that, if they get engaged with a task, they can do it. Far from being damaged goods, people with an ADHD nervous system are bright and clever. The main problem is that they were given a neurotypical owner's manual at birth. It works for everyone else, not for them.

Don't Turn Individuals with ADHD into Neurotypicals

The implications of this new understanding are vast. The first thing to do is for coaches, doctors, and professionals to stop trying to turn people with ADHD into neurotypical people. The goal should be to intervene as early as possible, before the individual has been frustrated and demoralized by struggling in a neurotypical world, where the deck is stacked against him. The therapeutic approach that has a chance of working, when nothing else has, has two pieces:

Level the neurologic playing field with medication, so that the individual with ADHD has the attention span, impulse control, and ability to be calm on the inside. For most people, this requires two different medications. Stimulants improve day-to-day performance for a person with ADHD, helping him get things done. They are not effective at calming the internal hyperarousal that many with ADHD have. For those symptoms, the majority of people will benefit by adding one of the alpha agonist medications (clonidine/Kapvay or guanfacine/Intuniv) to the stimulant.

ADHD medication, though, is not enough. A person can take the right medication at the right dose, but nothing will change if he still approaches tasks with neurotypical strategies.

The second piece of ADHD symptom management is to have an individual create his own ADHD owner's manual. The generic owner's manuals that have been written have been disappointing for people with the condition. Like everyone else, those with ADHD grow

and mature over time. What interests and challenges someone at seven years old will not interest and challenge them at 27.

Write Your Own Rules

The ADHD owner's manual has to be based on current successes. How do you get in the zone now? Under what circumstances do you succeed and thrive in your current life? Rather than focus on where you fall short, you need to identify how you get into the zone and function at remarkable levels.

I usually suggest that my patients carry around a notepad or a tape recorder for a month to write down or explain how they get in the zone.

Is it because they are intrigued? If so, what, specifically, in the task or situation intrigues them?

Is it because they feel competitive? If so, what in the "opponent" or situation brings up the competitive juices?

At the end of the month, most people have compiled 50 or 60 different techniques that they know work for them. When called on to perform and become engaged, they now understand how their nervous system works and which techniques are helpful.

I have seen these strategies work for many individuals with ADHD, because they stepped back and figured out the triggers they need to pull. This approach does not try to change people with an ADHD nervous system into neurotypical people (as if that were possible), but gives lifelong help because it builds on their strengths.

8 Big ADHD Challenges— Unpacked

Part Three: 8 Big ADHD Challenges — Unpacked

By William Dodson, M.D.

Here is a truth that people with attention deficit hyperactivity disorder (ADHD) know from an early age: If you have an ADHD nervous system, you might as well have been born on a different planet.

Most adults with ADHD have always known that they think differently. They were told by parents, teachers, employers, spouses, and friends that they did not fit the common mold and that they had better shape up in a hurry if they wanted to make something of themselves.

They were told to assimilate into the dominant culture and become like everyone else. Unfortunately, no one told them how to do this. No one revealed the bigger secret: It couldn't be done, no matter how hard they tried. The only outcome would be failure, made worse by the accusation that they will never succeed because ADHD in adulthood means they didn't try hard enough or long enough.

It seems odd to call a condition a disorder when the condition comes with so many positive features. People with an ADHD-style nervous system tend to be great problem-solvers. They wade into problems that have stumped everyone else and jump to the answer. They are affable, likable people with a sense of humor. They have what Paul Wender called "relentless determination." When they get hooked on a challenge, they tackle it with one approach after another until they master the problem — and they may lose interest entirely when it is no longer a challenge.

If I could name the qualities that would assure a person's success in life, I would say being bright, being creative with that intelligence, and being well-liked. I would also choose hardworking and diligent. I would want many of the traits that people with ADHD possess.

The main obstacle to understanding and managing ADHD has been the unstated and incorrect assumption that individuals with ADHD could and should be like the rest of us.

For neurotypicals and adults with ADHD alike, here is a detailed portrait of why people with ADHD do what they do.

1. Why People with ADHD Don't Function Well in a Linear World

The ADHD world is curvilinear. Past, present, and future are never separate and distinct. Everything is now. People with ADHD live in a permanent present and have a hard time learning from the past or looking into the future to see the inescapable consequences of their actions. "Acting without thinking" is the definition of impulsivity, and one of the reasons why individuals with ADHD have trouble learning from experience.

It also means that people with ADHD aren't good at ordination — planning and doing parts of a task in order. Tasks in the neurotypical world have a beginning, a middle, and an end. Individuals with ADHD don't know where and how to start, since they can't find the beginning. They jump into the middle of a task and work in all directions at once. Organization becomes an unsustainable task because organizational systems work on linearity, importance, and time.

2. Why People with ADHD Are Overwhelmed

People in the ADHD world experience life more intensely, more passionately than neuro-typicals. They have a low threshold for outside sensory experience because the day-to-day experience of their five senses and their thoughts is always on high volume. The ADHD nervous system is overwhelmed by life experiences because its intensity is so high.

The ADHD nervous system is rarely at rest. It always wants to be engaged in something interesting and challenging. Attention is never "deficit." It is always excessive, constantly occupied with internal reveries and engagements. When people with ADHD are not in The Zone, in hyperfocus, they have four or five things rattling around in their minds, all at once and for no obvious reason, like five people talking to you simultaneously. Nothing gets sustained, undivided attention. Nothing gets done well.

Many people with ADHD can't screen out sensory input. Sometimes this is related to only one sensory realm, such as hearing. In fact, the phenomenon is called hyperacusis (amplified hearing), even when the disruption comes from another of the five senses. Here are some examples:

- The slightest sound in the house prevents falling asleep and overwhelms the ability to disregard it.
- Any movement, no matter how small, is distracting.
- Certain smells, which others barely notice, cause people with ADHD to leave the room.

Individuals with ADHD have their worlds constantly disrupted by experiences of which the neurotypical is unaware. This disruption enforces the perception of the ADHD person as being odd, prickly, demanding, and high-maintenance. But this is all that people with ADHD have ever known. It is their normal. The notion of being different, and that difference being perceived as unacceptable by others, becomes a part of how they are regarded. It is a part of their identity.

Sometimes, a person with ADHD can hit the do-or-die deadline and produce lots of high-quality work in a short time. A whole semester of study is crammed into a single night of hyperfocused perfection. Some people with ADHD create crises to generate the adrenaline to get them engaged and functional. The "masters of disasters" handle high-intensity crises with ease, only to fall apart when things become routine again.

Lurching from crisis to crisis, however, is a tough way to live life. Occasionally, I run across people who use anger to get the adrenaline rush they need to get engaged and be productive. They resurrect resentments or slights, from years before, to motivate themselves. The price they pay for their productivity is so high that they may be seen as having personality disorders.

3. Why People with ADHD Don't Always Get Things Done

People with ADHD are both mystified and frustrated by these secrets of the ADHD brain, namely the intermittent ability to be super-focused when interested, and challenged and unable to start and sustain projects that are personally boring. It is not that they don't want to accomplish things or are unable to do the task. They know they are bright and capable because they've proved it many times. The lifelong frustration is never to be certain that they will be able to engage when needed, when they are expected to, when others depend on them to. When people with ADHD see themselves as undependable, they begin to doubt their talents and feel the shame of being unreliable.

Mood and energy level also swing with variations of interest and challenge. When bored, unengaged, or trapped by a task, the person with ADHD is lethargic, quarrelsome, and filled with dissatisfaction.

4. Why Our ADHD Motors Always Run

By the time most people with ADHD are adolescents, their physical hyperactivity has been pushed inward and hidden. But it is there and it still impairs the ability to engage in the moment, listen to other people, to relax enough to fall asleep at night, and to have periods of peace.

So when the distractibility and impulsivity are brought back to normal levels by stimulant medication, a person with ADHD may not be able to make use of his becalmed state. He is still driven forward as if by a motor on the inside, hidden from the rest of the world. By adolescence, most people with ADHD-style nervous systems have acquired the social skills necessary to cover up that they are not present.

But they rarely get away with it entirely. When they tune back into what has gone on while they were lost in their thoughts, the world has moved on without them. Uh-oh. They are lost and do not know what is going on, what they missed, and what is now expected of them. Their reentry into the neurotypical world is unpleasant and disorienting. To individuals with ADHD, the external world is not as bright as the fantastic ideas they had while lost in their own thoughts.

5. Why Organization Eludes People with ADHD

The ADHD mind is a vast and unorganized library. It contains masses of information in snippets, but not whole books. The information exists in many forms — as articles, videos, audio clips, Internet pages — and also in forms and thoughts that no one has ever had before. But there is no card catalog, and the "books" are not organized by subject or even alphabetized.

Each person with ADHD has his or her own brain library and own way of storing that huge amount of material. No wonder the average person with ADHD cannot access the right piece of information at the moment it is needed — there is no reliable mechanism for locating it. Important items (God help us, important to someone else) have no fixed place, and might as well be invisible or missing entirely. For example:

The child with ADHD comes home and tells Mom that he has no homework to do. He watches TV or plays video games until his bedtime. Then he recalls that he has a major report due in the morning. Was the child consciously lying to the parent, or was he truly unaware of the important task?

For a person with ADHD, information and memories that are out of sight are out of mind. Their mind is a computer in RAM, with no reliable access to information on the hard drive.

Working memory is the ability to have data available in one's mind, and to be able to manipulate that data to come up with an answer or a plan of action. The mind of a person with ADHD is full of the minutiae of life ("Where are my keys?" "Where did I park the car?"), so there is little room left for new thoughts and memories. Something has to be discarded or forgotten to make room for new information. Often the information individuals with ADHD need is in their memory...somewhere. It is just not available on demand.

6. Why We Don't See Ourselves Clearly

People from the ADHD world have little self-awareness. While they can often read other people well, it is hard for the average person with ADHD to know, from moment to moment, how they themselves are doing, the effect they are having on others, and how they feel about it all. Neurotypicals misinterpret this as being callous, narcissistic, uncaring, or socially inept. Taken together, the vulnerability of a person with ADHD to the negative feedback of others, and the lack of ability to observe oneself in the moment, make a witch's brew.

If a person cannot see what is going on in the moment, the feedback loop by which he learns is broken. If a person does not know what is wrong or in what particular way it is wrong, she doesn't know how to fix it. If people with ADHD don't know what they're doing right, they don't do more of it. They don't learn from experience.

The inability of the ADHD mind to discern how things are going has many implications:

Many people with ADHD find that the feedback they get from other people is
different from what they perceive. They find out, many times (and often too late),
that the other people were right all along. It isn't until something goes wrong that
they are able to see and understand what was obvious to everybody else. Then, they
come to believe that they can't trust their own perceptions of what is going on. They

lose self-confidence. Even if they argue it, many people with ADHD are never sure that they are right about anything.

- People with ADHD may not be able to recognize the benefits of medication, even when those benefits are obvious. If a patient sees neither the problems of ADHD nor the benefits of treatment, he finds no reason to continue treatment.
- Individuals with ADHD often see themselves as misunderstood, unappreciated, and attacked for no reason. Alienation is a common theme. Many think that only another person with ADHD could possibly "get" them.

7. Why People with ADHD Are Time Challenged

Because people with ADHD don't have a reliable sense of time, everything happens right now or not at all. Along with the concept of ordination (what must be done first; what must come second) there must also be the concept of time. The thing at the top of the list must be done first, and there must be time left to do the entire task.

I made the observation that 85 percent of my ADHD patients do not wear or own a watch. More than half of those who wore a watch did not use it, but wore it as jewelry or to not hurt the feelings of the person who gave it to them. For individuals with ADHD, time is a meaningless abstraction. It seems important to other people, but people with ADHD have never gotten the hang of it.

8. Why People with ADHD Are So Sensitive

Rejection sensitive dysphoria (RSD) is extreme emotional sensitivity and pain triggered by the perception — not necessarily the reality — that a person with ADHD has been rejected or criticized by people in their life. RSD is not a formal diagnosis, but rather one of the most common and disruptive manifestations of emotional dysregulation — a common but under-researched and oft-misunderstood symptom of ADHD, particularly in adults. RSD is different than mood disorders, which are characterized by an unexplained, gradual shift in mood over weeks.

Dysphoria is the Greek word meaning unbearable; its use emphasizes the severe physical and emotional pain suffered by people with RSD when they encounter real or perceived rejection, criticism, or teasing. When the emotional response associated with RSD is internalized, it can imitate full, major depression complete with suicidal ideation that comes on so fast it is often misdiagnosed as rapid cycling bipolar disorder. When this

emotional response is externalized, it looks like an impressive, instantaneous rage at the person or situation responsible for causing the pain.

Rejection sensitive dysphoria is not included in the *DSM-5* for ADHD, but emotional dysregulation is one of the six fundamental features used to diagnose ADHD in the European Union. The *DSM-5* diagnostic criteria for ADHD avoids symptoms associated with emotion, thinking styles, relationships, sleeping, etc., because these features are hard to quantify. For clinicians who work with older adolescents and adults, the *DSM-5* criteria are not helpful because they ignore so much that is vital to understanding how people with an ADHD nervous system experience their lives — including rejection sensitive dysphoria.

One-third of my adult patients report that RSD was the most impairing aspect of their personal experience of ADHD, in part because they never found any effective ways to manage or cope with the pain. People with RSD tend to respond to feelings of rejection or failure in two ways:

- **1. They become people pleasers.** This goal can become so dominant that the person loses sight of his or her own ambitions and goals in life.
- **2. They stop trying.** Some very bright, capable people with ADHD and RSD stop exerting effort because doing so is so anxiety-provoking.

PART FOUR

3 Defining Features of ADHD That Everyone Overlooks

Part Four: 3 Defining Features of ADHD That Everyone Overlooks

The textbook signs of ADHD — inattention, hyperactivity, and impulsivity — fail to reflect several of its most powerful characteristics; the ones that shape your perceptions, emotions, and motivation. Here, understand how to recognize and manage ADHD's true defining features of rejection sensitivity, emotional hyperarousal, and hyperfocus.

By William Dodson, M.D.

The *DSM-5* — the bible of psychiatric diagnosis — lists 18 diagnostic criteria for ADHD. Clinicians use these to identify symptoms, insurance companies use it to determine coverage, and researchers use it to determine areas of worthwhile study.

The problem: These criteria still mainly capture how ADHD manifests in children. The signs of ADHD in teens, adults, and the elderly, on the other hand, are not as well known. This has led to misdiagnosis, misunderstanding, and failed treatment for these groups.

Most people, clinicians included, have only a vague understanding of what ADHD means. They assume it equates to hyperactivity and poor focus, mostly in children. They are wrong.

When we step back and ask, "What does everyone with ADHD have in common, that people without ADHD don't experience?" a different set of symptoms takes shape.

From this perspective, three defining features of ADHD emerge that explain every aspect of the condition:

- 1. Rejection sensitivity
- 2. Emotional hyperarousal
- 3. An interest-based nervous system prone to hyperfocus

1. Rejection Sensitivity

What is rejection sensitivity?

Rejection sensitive dysphoria (RSD) is an intense vulnerability to the perception — not necessarily the reality — of being rejected, teased, or criticized by important people in your life. RSD causes extreme emotional pain that may also be triggered by a sense of failure, or falling short — failing to meet either your own high standards or others' expectations.

It is a primitive reaction that people with ADHD often struggle to describe. They say, "I can't find the words to tell you what it feels like, but I can hardly stand it." Often, people experience RSD as physical pain, like they've been stabbed or struck right in the center of their chest.

Often, this intense emotional reaction is hidden from other people. People experiencing it don't want to talk about it because of the shame they feel over their lack of control, or because they don't want people to know about this intense vulnerability.

How do I recognize rejection sensitivity?

The question that can help identify RSD is, "For your entire life, have you always been much more sensitive than other people you know to rejection, teasing, criticism, or your own perception that you have failed?"

When a person internalizes the emotional response of RSD, it can look like sudden development of a mood disorder. He or she may be saddled with a reputation as a "head case" who needs to be "talked off the ledge." When the emotional response of RSD is externalized, it can look like a flash of rage.

Some people avoid rejection by becoming people pleasers. Others just opt out altogether, and choose not to try because making any effort is so anxiety-provoking.

What can I do to manage rejection sensitivity?

Many adolescents and adults with ADHD acknowledge experiencing RSD. For 30% of my patients, RSD is the most impairing aspect of their ADHD, in part because it does not respond to therapy.

Alpha-agonist medications, like guanfacine and clonidine, can help treat it. Only about one in three of my patients report experiencing relief from either medication, but 60% experience robust benefits when both are tried. When successfully treated, people with RSD report feeling "at peace," or like they have "emotional armor." They still see the same things happening that would have previously wounded them, but now they bounce off without injury. They also report that, rather than three or four simultaneous thoughts, they now have just one thought at a time.

2. ADHD Emotional Hyperarousal

What is emotional hyperarousal?

Not everyone with ADHD experiences visible hyperactivity. But almost all of my patients report an internal feeling of hyperarousal. When I ask people with ADHD to elaborate on it, they say:

- "I'm always tense. I can never relax."
- "I can't just sit there and watch a TV program with the rest of the family."
- "I can't turn my brain and body off to go to sleep at night."

People with ADHD have passionate thoughts and emotions that are more intense than those of the average person. Their highs are higher and their lows are lower. This means you may experience both happiness and criticism more powerfully than your peers and loved ones do.

Children with ADHD know they are "different," which is rarely experienced as a good thing. They may develop low self-esteem because they realize they fail to get engaged and finish what they start, and because children make no distinction between what you do and who you are. Shame can become a dominant emotion into adulthood as harsh internal dialogues, or criticism from others, becomes ingrained.

How do I recognize emotional hyperarousal?

Clinicians are trained to recognize mood disorders, not the increased intensity of moods that comes with ADHD. Many people with ADHD are first misdiagnosed with a mood disorder. This explains why many adults with ADHD receive treatment for comorbid mood disorders, but not for ADHD – and why ADHD is thought to be underdiagnosed in adults¹⁴.

Mood disorders are characterized by moods that have taken on a life of their own, separate from the events of the person's life, and which often last for more than two weeks. Moods created by ADHD are almost always triggered by events and perceptions, and resolve very quickly. They are normal moods in every way except for their intensity.

Clinicians should ask, "When you are upset, do you often 'get over it' quickly?" "Do you feel like you can't rid your brain of a certain thought or idea when you want to?"

What can I do to manage emotional hyperarousal?

To counteract feelings of shame and low self-esteem, a person with ADHD needs support from other individuals who believe they are a good or worthwhile person. This can be a parent, older sibling, teacher, coach, or even a kind neighbor. Anyone, as long as they think you are good, likeable, and capable — especially when things go wrong. This "cheerleader" must be sincere because people with ADHD are great lie detectors.

A cheerleader's main message is, "I know you, you're a good person. If anybody could have overcome these problems by hard work and just sheer ability, it would have been you. So what that tells me is that there's something we don't see that's getting in your way, and I want you to know I will be there with you all the way until we figure out what it is and we master that problem."

The true key to fighting low self-esteem and shame is helping a person with ADHD figure out how to succeed with their unique nervous system. Then, the person with ADHD is not left alone with feelings of shame or blamed for falling short.

3. Interest-Based ADHD Nervous System

What is an interest-based nervous system?

Despite its name, ADHD doesn't actually cause a deficit of attention. It actually causes *inconsistent* attention that is only activated under certain circumstances.

People with ADHD often say they "get in the zone" or "hit a groove." These are all ways of describing a state of hyperfocus — intense concentration on a particular task, during which the individual feels she can accomplish anything. In fact, she may become so intently focused that she may lose all sense of how much time has passed.

This state is not activated by a teacher's assignment, or a boss's request. It is only created by a momentary sense of interest, competition, novelty, or urgency created by a do-or-die deadline.

The ADHD nervous system is interest-based, rather than importance- or priority-based.

How do I recognize an interest-based ADHD nervous system?

Clinicians often ask, "Can you pay attention?" And the answer is typically, "Sometimes."

This is the wrong question. Parents, loved ones, and teachers answering it often express frustration because they have seen you home in on something you enjoy — like video games — for hours, so your inability to conjure that same focus for other tasks and projects is interpreted as defiance or selfishness.

Instead, practitioners should ask, "Have you ever been able to get engaged and stay engaged?" Then, "Once you're engaged, have you ever found something you couldn't do?"

Anyone with ADHD will answer along these lines: "I have always been able to do anything I wanted so long as I could get engaged through interest, challenge, novelty, urgency, or passion."

"I have never been able to make use of the three things that organize and motivate everyone else: importance, rewards, and consequences."

What can I do to manage an interest-based nervous system?

An effective ADHD management plan needs two parts:

- medication, to level the neurological playing field
- a new set of rules that teach you how to get engaged on demand

Stimulant medications are very good at keeping the ADHD brain from getting distracted once they are engaged, but they do not help you get engaged in the first place.

Most systems for planning and organization are built for neurotypical brains that use importance and time to spark motivation. Instead, you must create your own "owner's manual" for sparking interest by focusing on how and when you do well and creating those circumstances at the outset.

This work is highly personal, and it will change over time. It can involve strategies like "body-doubling," or asking another person to sit with you while you do work. Or "injecting interest" by transforming an otherwise boring task through imagination. For example, an anatomy student who is bored with studying can imagine she is learning the anatomy to save her idol's life.

PART FIVE

Rejection Sensitive Dysphoria with ADHD

Part Five: Rejection Sensitive Dysphoria with ADHD

Rejection sensitive dysphoria is one manifestation of emotional dysregulation, a common but misunderstood and under-researched byproduct of ADHD in adults. Individuals with RSD feel "unbearable" pain as a result of perceived or actual rejection, teasing, or criticism that is not alleviated with cognitive or dialectical behavior therapy.

By William Dodson, M.D.

What Is Rejection Sensitive Dysphoria?

Rejection sensitive dysphoria is not a formal diagnosis, but rather one of the most common and disruptive manifestations of emotional dysregulation — a common but under-researched and oft-misunderstood symptom of ADHD, particularly in adults. Rejection sensitive dysphoria is a brain-based symptom that is likely an innate feature of ADHD. Though the experience of rejection sensitive dysphoria can be painful and even traumatic, RSD is not thought to be caused by trauma.

Dysphoria is the Greek word meaning unbearable; its use emphasizes the severe physical and emotional pain suffered by people with RSD when they encounter real or perceived rejection, criticism, or teasing. The emotional intensity of RSD is described by my patients as a wound. The response is well beyond all proportion to the nature of the event that triggered it.

One-third of my adult patients report that RSD was the most impairing aspect of their personal experience of ADHD, in part because they never found any effective ways to manage or cope with the pain.

What Triggers Rejection Sensitive Dysphoria?

Sometimes called hysteroid dysphoria in Europe, rejection sensitive dysphoria is characterized by intense mood shifts triggered by a distinct episode, typically one of the following:

• rejection (the real or perceived withdrawal of love, approval, or respect)

PART FIVE: REJECTION SENSITIVE DYSPHORIA WITH ADHD

- teasing
- criticism, no matter how constructive
- persistent self-criticism or negative self-talk prompted by a real or perceived failure

The new mood sweeps in immediately and it matches the individual's perception of the trigger. If these triggered emotions are internalized, the person can instantaneously appear as if they have a full Major Depressive syndrome complete with suicidal thinking. If the feelings are externalized, they are commonly expressed as a rage at the person or situation that wounded them so severely. The moods return to normal very quickly, so a person with ADHD can have multiple episodes of mood dysregulation in a single day.

Many people with RSD say it's always been a part of their lives, however some report growing significantly more sensitive in adolescence.

What Are the Outward Signs of Rejection Sensitive Dysphoria?

Individuals suffering from rejection sensitive dysphoria may exhibit the following behaviors:

- Sudden emotional outbursts following real or perceived criticism or rejection
- Withdrawal from social situations
- Negative self-talk and thoughts of self-harm
- Avoidance of social settings in which they might fail or be criticized (for this reason, RSD is often hard to distinguish from Social Anxiety Disorder)
- Low self-esteem and poor self-perception
- Constant harsh and negative self-talk that leads them to become "their own worst enemy"
- Rumination and perseveration
- Relationship problems, especially feeling constantly attacked and responding defensively

What Does Rejection Sensitive Dysphoria Feel Like?

The excruciating pain of RSD is often beyond description. Patients describe the intensity of RSD as "awful," "terrible," "catastrophic," or "devastating," but they cannot verbalize the quality of the emotional experience.

No one likes to be rejected, criticized, or seen as a failure. It is unpleasant, so people avoid those situations if they can. RSD is distinguished by its extreme, unbearable intensity, which sets it apart from normal emotional responses familiar to people who are neurotypical.

This intense pain is often experienced as a physical "wound"; the patient feels as if they were stabbed or punched in the chest. They may even hunch over, grimace, or clutch at their chests.

How Is Rejection Sensitive Dysphoria Different from a Mood Disorder?

RSD is characterized by intense but short-lived emotional pain triggered by a distinct event of real or perceived rejection, criticism, or teasing. Mood disorders, on the other hand, are characterized by the following:

Mood Disorder	RSD and ADHD
Mood changes are untriggered; out of the blue	Mood changes always have a clear trigger
Moods are independent of what is going on in the person's life	Moods match the perception of the trigger
Mood shift is gradual over weeks	Mood shift is instantaneous
Offset of mood episode is gradual over a period of weeks to months	Episodes end quickly in a matter of hours
Duration of episode must be > 2 weeks	Episodes rarely last more than a couple of hours

In other words, the moods of ADHD and RSD are normal in every way except their intensity.

Is Rejection Sensitive Dysphoria a Symptom of ADHD?

Rejection sensitive dysphoria is not included in the *DSM-5* for attention deficit hyperactivity disorder (ADHD); it is not a formal symptom of ADHD in the United States.

However, emotional dysregulation is one of the six fundamental features used to diagnose ADHD in the European Union.

It's widely understood that the diagnostic criteria for ADHD in the *DSM-5* only fit well with elementary school age children (6-12) and have never been validated in a group of people over the age of 16.¹⁵ They are based on only observational or behavioral criteria that can be seen and counted. The traditional diagnostic criteria intentionally avoid symptoms associated with emotion, thinking styles, relationships, sleeping, etc., because these features are hard to quantify. For clinicians who work with later adolescents and adults, the *DSM-5* criteria are almost useless because they ignore so much that is vital to understanding how people with an ADHD nervous system experience their lives.

When people FIRST started writing and researching about the concepts of RSD and emotional dysregulation, this new awareness of the emotional component of ADHD was enthusiastically accepted by patients and their families because they matched their life experiences so exactly. The reception from clinicians and many researchers, however, was decidedly cool. Many professionals did not fully grasp that the emotional component of ADHD had always been there but intentionally not pursued. It appeared to them that the concept had no real or historical basis. Most studies came from the European Union, which used the term emotional dysregulation (ED), not RSD. 16

These obstacles to recognizing RSD/ED as a major and defining characteristic of adult ADHD and to using medications to offer some relief from the disruptions and pain of this feature of ADHD are being rapidly addressed. There has been a rapid increase in available research in a very short period of time. The redefinition of adult ADHD in the EU — adding emotional self-regulation as a fundamental part of the criteria for the diagnosis of ADHD — has further assured that RSD/ED is really "a thing" that cannot be ignored any longer.

Still, there are at least three reasons why emotional dysregulation or RSD may never be included in the diagnostic criteria for ADHD, no matter how prevalent:

- 1. RSD/ED are not always present. It comes in triggered episodes.
- People with RSD/ED are usually ashamed of their over-reactions and hide them so that they will not be further embarrassed and thought of as mentally or emotionally unstable.

3. Even when RSD/ED is present, it can't be measured, and, therefore, can't get published in research.

As a consequence, emotional dysregulation was consciously excluded from the diagnostic criteria for ADHD and effectively forgotten for many years. Over the last decade, researchers have developed several new ways of looking at ADHD through the life cycle. By the end of 2019, this re-evaluation of the very fundamental aspects of ADHD led the European Union to issue its 10-year update of the Consensus Guidelines on Adult ADHD¹⁸, which redefined adolescent and adult ADHD to include difficulty with emotional regulation as one of only six fundamental features in the ADHD syndrome:

- 1. inattention and hyperfocus
- 2. impulsivity
- 3. hyperactivity
- 4. emotional dysregulation
- 5. excessive mind wandering
- 6. behavioral self-regulation (which they equated with executive function deficits)

Although the EU has chosen the more inclusive term of emotional dysregulation (ED) instead of RSD, the concepts are fundamentally the same. Emotional dysregulation is described as:

"The type of emotional dysregulation seen in ADHD has been characterized as deficient self-regulation of emotional symptoms such as irritability, frustration and anger and low frustration tolerance, temper outbursts, emotional impulsivity, and mood lability. Emotional dysregulation in ADHD is different from episodic symptoms such as marked sustained irritability occurring within the context of altered mood states, such as an episode of depression or mania. In ADHD, emotional symptoms tend to reflect short-lived exaggerated changes, often in response to daily events, with rapid return to baseline within a few hours." 20

Is Rejection Sensitive Dysphoria a New Concept?

Rejection sensitive dysphoria and emotional dysregulation are old concepts associated with ADHD that are gaining new exposure in research and clinical settings. Paul Wender, M.D., who spent four decades conducting the pioneering studies on ADHD beginning

in the 1960s, was the first to recognize emotional dysregulation as a persistent, prevalent, and highly impairing component of what we now call ADHD.

The most recent contribution to this new thinking about the mood regulation component of ADHD comes from Fred Reimherr, M.D., one of the founding fathers of ADHD who established the current childhood criteria for ADHD along with Wender more than 50 years ago (the original criteria for what we now call ADHD were originally called the Wender-Reimherr Criteria). His recent replication²¹ of his study of the validity of each diagnostic criterion has led him to now conceptualize ADHD as being divided into only two subtypes: the well-known inattentive type and an emotional dysregulation type.

This is a huge change in thinking. A feature of ADHD that was ignored for 50 years now is rapidly becoming one of the defining features of the syndrome in both the European Union and North America.

In 2019, Stephen Faraone, Ph.D., published "Emotional dysregulation in attention deficit hyperactivity disorder — implications for clinical recognition and interventions" in the *Journal of Child Psychology and Psychiatry*.²² It states that there is "solid theoretical rationale" for emotional impulsivity and deficient emotional self-regulation "as core symptoms of ADHD."

How Is Rejection Sensitive Dysphoria Treated?

Although the alpha agonist medications, guanfacine and clonidine, have been FDA-approved for the treatment of ADHD for decades, they were not directly associated with the terms of rejection sensitivity and emotional dysregulation for all of the reasons noted above. Nonetheless, it has been my clinical experience and the experience of others that the symptoms of RSD/ED can be significantly relieved with clonidine and guanfacine in about 60% of adolescents and adults. To me, this observation strongly indicates that RSD is neurological and not something that is due to a lack of skills. Skills do not come in pill form.

There currently exists no formal research on using alpha agonist medications to treat symptoms of RSD or ED in patients with ADHD.

If a patient benefits from an alpha agonist medication, they describe the new experience as one of "putting on emotional armor." They still see the same things happening that would have emotionally devastated them last week, but now on medication they just watch these triggers fly past them "without being wounded." Often people report that,

with time, they come to realize that this armor is not needed after all "because I came to see that the arrows I was protected from were not arrows to begin with." They are very clear, however, that they would never have developed this emotional control unless they had had some initial protection from the pain of RSD.

If a patient does not benefit from medication, they have little control over an episode of RSD once it begins. The incidents have to run their course. Some people with ADHD, however, report that getting interested in something new and fascinating can help to end an RSD episode more quickly than it would otherwise. In my clinical experience, neither coaching nor traditional psychological or behavioral therapies — like CBT or DBT — offer any prevention or relief from impairments. Nonetheless, many people report that it is very helpful for them to know that this highly disruptive experience is real, common, and shared by other people with ADHD. "It helps me to know what is happening to me and that it is ultimately going to end."

Emotional Hyperarousal with ADHD

Part Six: Emotional Hyperarousal with ADHD

Nearly a third of adolescents and adults with ADHD list emotional instability as one of the most impairing aspects of the condition, yet its diagnostic criteria don't even mention emotions. Here, learn about the most common emotional impairments associated with ADHD.

By William Dodson, M.D.

The physical hyperactivity so often associated with attention deficit hyperactivity disorder (ADHD) — jumping on the couch, barreling across the playground, or talking without a pause for 10 minutes straight — is far from universal. In fact, this external symptom occurs in only one quarter of children and 5 percent of adults with the condition. In fact, this external symptom is experienced far less frequently than an internal feeling of *hyperarousal* — they can't turn off their whirring, overactive brains. This symptom often manifests as extreme emotions, a condition known as emotional hyperarousal.

People with emotional hyperarousal have passionate thoughts, reactions, and feelings that are more intense than those of the average person. In other words, their highs are higher and their lows are lower — which means people with ADHD often experience both happiness and criticism more powerfully than everyone else. This can make them appear overly sensitive and be off-putting to those around them — which, in turn, can do deep, long-term damage to their self-esteem.

There are 18 diagnostic criteria for ADHD, and not a single one mentions emotions. Instead, they list outwardly visible symptoms that can be observed, counted, and easily cited in research statistics — like difficulty listening, distractibility, and forgetfulness. The out-of-control feelings that (very often) come with ADHD are ignored.

But any clinician knows it's the emotional impact of ADHD that most commonly brings people into the office. That's what is really causing problems. Roughly 30% of my adolescent and adult patients with ADHD list their emotional instability as the most impairing aspect of the condition. This emotionality is nearly universal, yet in manifests in many distinct ways.

PART SIX: EMOTIONAL HYPERAROUSAL WITH ADHD

1. Flash Emotions

Many people with ADHD are blindsided by their own emotions, especially when they change at lightning speed — without any time to reflect, think, or feel. In these cases, they act on or express emotions without a chance to filter them.

The sudden emotion that gets people with ADHD in trouble the most is the flash temper. As one patient told me, "You go from zero to F-U in an instant." Medications can treat this symptom, and give people with ADHD the same two seconds that everybody else has to feel an emotion coming on and decide, "I really shouldn't express that."

2. Alexithymia/Dyslexithymia

More often than not, people with ADHD will use a description like "anxious" to explain how they are feeling, but they mean something entirely different. People with ADHD commonly have either alexithymia (no words for feelings) or dyslexithymia (the wrong words for feelings). From the beginning, physicians have to learn how that unique individual is using the words, and what they really mean by them.

3. Low Frustration Tolerance

Most people with ADHD have a very low frustration tolerance. They're easily overwhelmed by their emotions and the stresses they experience. They don't have a barrier that allows them to set aside uncomfortable emotions, and they often become completely flooded by a feeling, making it unbearable.

4. Unaware of Others' Emotions

People with ADHD can be hypersensitive and overwhelmed by everything that's going in a room. Or, they can seem very cold, very insensitive, or blissfully unaware of the feelings of others. When they disengage — whether due to lack of focus or because they're overwhelmed — they can seem callous or narcissistic.

5. Sensitivity to Rejection

People with ADHD are exquisitely sensitive to rejection and criticism. They can experience hopelessness and demoralization because they try to succeed by imitating the paths to success of people without ADHD, and then fail over and over again because the same paths don't work for them.

PART SIX: EMOTIONAL HYPERAROUSAL WITH ADHD

6. Overreaction/Easily Overwhelmed

One of the biggest problems with ADHD is overreaction, where the emotional reaction doesn't match the nature or the seriousness of the trigger. People with ADHD can have a great deal of difficulty distinguishing between dangerous threats and minor problems. They frequently overreact and, as one of my patients says, "Need to be talked in off the ledge." The hyperarousal of ADHD means that most people with ADHD never experience peace. Their minds are always going 100 mph until they are exhausted.

7. Shame and Guilt

It's estimated that by age 10, a child with ADHD will hear 20,000 critical or corrective comments – likely far more than a kid who doesn't have ADHD. That criticism can have a significant impact on the self-image and self-worth of a person with ADHD.

People with ADHD have a hard time being aware of social appropriateness and interactions, so they end up being socially ostracized and, as the saying goes, they are the last picked but the first picked on. Consequently, most people with ADHD grow into adulthood with a profound feeling that they are less than everybody else in some way. They feel uncool and unwanted, and sometimes even profoundly defective. The term you'll hear very commonly is "damaged goods," and that the person with ADHD feels generally incompetent in the world.

The resulting shame and guilt often produce a situation in which positive feedback just slings right past them. They never even notice it. They're much more in tune to the negative feedback they get. Consequently, the shame almost always dominates all the other emotions. As Freud said, "Shame is the master emotion." It's the only emotion that doesn't seek expression and it can determine whether other emotions get expressed or even acknowledged and dealt with.

Shame causes many people with ADHD to try to be perfect. A person thinks: "If I look and do everything perfectly, I can avoid shame." A person with ADHD who holds this belief is constantly evaluating everyone in their lives — friends, family, children — to see what they approve of and value, and gives it back to them. The person with ADHD forgets what he genuinely wants from his own life.

PART SEVEN Hyperfocus with ADHD

Part Seven: Hyperfocus with ADHD

Powerful, erratic, and somewhat mysterious, hyperfocus is a state familiar to any individual with ADHD who has ever zeroed in so totally on a project or task that the outside world has ceased to exist. Here, ADDitude readers describe their love/hate relationship with hyperfocus, and experts share strategies for managing it more effectively.

By ADDitude Editors

"You can't have ADHD; you focus so intently on your fantasy football league."

Or favorite video game.

Or Facebook and Pinterest.

Or knitting.

Or daily crossword puzzle.

You can fill in the blanks better than we can; you know the feeling of falling into a deep well of focus and swimming around the bottom of it for hours before realizing you've run out of daylight. You also know the frustration of explaining to people that your ability to focus in certain arenas and not others is not a matter of choice.

To the layperson, ADHD is defined by distractibility — and anyone who's able to focus with laser-like intensity couldn't possibly be diagnosed with ADHD. Right?

Wrong. As it turns out, this ability to direct intense focus at one area of interest for an extended period of time isn't antithetical to ADHD at all. It's what's known as hyperfocus, and it's a critical (and complicated) manifestation of ADHD. That's because the ADHD nervous system is interest-based, rather than importance- or priority-based.

PART SEVEN: HYPERFOCUS WITH ADHD

People with ADHD often say:

- "When I get in the zone, I can accomplish anything."
- "I'll blast through it once I hit a groove."

What they are describing is ADHD hyperfocus — intense concentration on a particular task, usually one of great personal interest.

Hyperfocus is not like a faucet you turn on at will. This state of undivided attention is activated only by a fleeting sense of:

- interest
- competition
- novelty
- urgency

When these conditions are met, people with ADHD can focus — sometimes. Parents and loved ones may interpret spotty, inconsistent focus as a sign of defiance or selfishness. It is not.

On the flipside, hyperfocus is often painted as one of ADHD's "superpowers" — and it's true that it can be used for extreme productivity. But it has its drawbacks, too — particularly when the task being hyperfocused on is frivolous. Here, we explore the positives and negatives of hyperfocus, and offer strategies for making it work for you.

The Good Side of ADHD Hyperfocus

Hyperfocus can be — and often is — an extraordinary gift. Not only does it allow people with ADHD to get a lot done in a short amount of time, it allows them to fully devote their attention to something that interests them — improving their skills through hours and hours of focused, dedicated effort.

"His hyperfocus means he usually excels at the things he chooses to do," said one 38-yearold woman whose husband tends to hyperfocus on sports. While she admits that it can "monopolize" his attention, she believes that the skills it gives him outweigh any lost time.

PART SEVEN: HYPERFOCUS WITH ADHD

Another, less welcome ADHD tendency — procrastination — can occasionally be canceled out by some well-timed hyperfocus. Author and entrepreneur Peter Shankman, who has ADHD, says that he once wrote an entire book on a round-trip flight to Tokyo. "I landed with a bestselling book," he said. "You can't do that if... your brain doesn't work the way ours does."

Hyperfocus may be trained on people, too — often resulting in whirlwind romances or deep, lasting friendships.

"[My husband] very often hyperfocuses on doing kind things for me," said Elizabeth, 49. Alison, 34, agrees: "When he's hyperfocused on how much he loves me, he shows it," she said. "That's always nice!"

The Bad Side of ADHD Focus

But hyperfocus is not a get-out-of-jail-free card. To outsiders — particularly the friends and family members who depend on someone with ADHD — it can be frustrating to try to break someone out from under its spell.

"I have to remind him constantly that it's time to go, time to eat, time to sleep," said Emily, a 39-year-old woman whose husband has ADHD. Keisha, also 39, said, "When I gave birth to my son, my husband spent so much time and detail on cleaning our car that it upset me. He had not seen our child yet — but he just had to complete the car first."

And hyperfocus isn't always directed at "positive" tasks. Lisa, a 49-year-old woman whose husband has ADHD, says her husband tends to hyperfocus on "computer games and movies on the Internet."

"He spends hours on end on his computer," she complained. "Then, he doesn't help out with the chores unless I nag him — which I shouldn't have to do."

The dark side of hyperfocus is not lost on individuals with ADHD either.

"When I hyperfocus, it consumes me to the point [where] I lose the big picture and don't complete the task because it overwhelmed me," said Terra, 46. Her husband is often frustrated by her bouts of hyperfocus, she added, because she drops balls and shirks responsibilities in the process.

PART SEVEN: HYPERFOCUS WITH ADHD

Others with ADHD say it gets in the way of physical needs, like eating and sleeping.

Because she can't pull herself away from something interesting, Chris, a 36-year-old woman who has ADHD, said, "It can [result in] me staying up too late... Then I need help getting through the next day!"

How Can I Manage My ADHD Hyperfocus?

If these stories ring true — if you feel that your hyperfocus spins out of control or frustrates those around you — try these four strategies (devised by Edward Hallowell, M.D.) for managing this ADHD symptom, without sacrificing the benefits it brings to your life:

- **1. Set up external cues to knock yourself out of hyperfocus.** Timers, alarms, or phone reminders can alert you to appointments or responsibilities that fade away during a period of hyperfocus.
- **2. Discuss how family members, coworkers, or friends can help you "snap out of it" if necessary.** For many, physical touch is a great way to break the spell of hyperfocus. If your husband calls you a few times without an answer, ask him to gently touch your shoulder, instead more often than not, he'll be able to break through.
- **3. Set reasonable limits.** Spending three straight days working on an art project might make sense to you, but for the people who love and depend on you, it can be frustrating when you "disappear." Decide beforehand how much time you can fairly dedicate to a project, without ignoring your relationships or shirking your responsibilities and set alarms to ensure you stick to your plans.
- **4. Be honest about hyperfocus.** Talk to your friends and family about typical ADHD behaviors and how they manifest for you. Explain that, while you're taking steps to harness hyperfocus, you may still be unreachable from time to time. Listen to any concerns they may have, and do your best to mitigate them but remember that you shouldn't have to apologize for how your brain works.

The Epidemic of Shame and ADHD

Part Eight: The Epidemic of Shame and ADHD

By William Dodson, M.D., Edward Hallowell, M.D., and Linda Roggli, PCC

Living with ADHD can feel like a constant stream of apologies: we're sorry we're late, sorry we lost our keys, sorry we can't keep the house neat — no matter how hard we try. If you have ADHD — especially if you were diagnosed late in your life — these endless apologies and self-blame may have added up to a crippling sense of shame. If you won't even look in your purse anymore because you're tortured by how disorganized it is, you may have a problem controlling your shame.

Shame is characterized by a constant sense of inadequacy and agonizing feelings of embarrassment and humiliation. You may even feel like you're developing a secret life — you're so ashamed of who you are or what you've done that you're certain you'll never pass for "normal." Shame is arguably the most painful of all the symptoms associated with ADHD. We carry it like a heavy anvil around our neck, telling ourselves, "I'm bad. I'm stupid. I'm just a loser."

One of the oldest known English words, shame originally meant to "hide or cover up." As such, shame is the hardest thing to deal with since it tends to be hidden and never addressed. Feeling shame is different than feeling guilt. Guilt focuses on what one has done. Shame focuses on who one is.

Why Shame Is an ADHD Epidemic

For people with ADHD, shame arises from the repeated failure to meet expectations from parents, teachers, friends, bosses, and the world. After a lifetime of negative messages and corrections, they view themselves as fundamentally different and flawed. They are not like other people.

It is especially painful when well-meaning people in an individual's life point out that they have failed or fallen short. People with ADHD are accused, directly or through implication, of being lazy or willfully disobedient — as if they set out to fail. It's hard not to feel bad about yourself.

Consequences of ADHD Shame

1. Shame May Cause Withdrawal

People with ADHD who feel shame tend to withdraw into themselves — or hide behind a rage at the perceived source of the negativity. This may explain why people with ADHD fear letting others get to know them intimately or to see how they live. Individuals with ADHD harbor two horrible secrets: Their future is uncontrolled and uncontrollable and life can inflict wounding shame just as easily as it engenders success.

For many people with ADHD, telling a doctor about their failures and asking to receive medication to help them succeed is unthinkable. They have tried everything, and it hasn't worked. Many children would rather flunk than ask the teacher for help. This is why many parents feel blindsided when they discover how badly their child is doing in school. Their child didn't tell them because it was so shameful to admit it.

2. Shame May Trigger Anxiety

Shame can lead to mood disorders, crippling anxiety, and in some cases, self-medication with drugs or alcohol — all of which can make it more difficult to solve problems and get out of the negative cycle. Shame can make you defensive, which can come across as anger — if you lash out at the people closest to you, you may push them away just when you need them most.

3. Shame May Lead to Perfectionism

Shame causes many people with ADHD to try to be perfect. A person thinks: "If I look and do everything perfectly, I can avoid shame." A person with ADHD who holds this belief is constantly evaluating everyone in their lives — friends, family, children — to see what they approve of and value, and gives it back to them. The person with ADHD forgets what he genuinely wants from his own life.

4. Shame May Cause Defeatism

Many people who feel shame stop trying to do things — at work and at home — unless they are assured in advance of quick, complete, and easy success. They do not have the ability to sustain effort for long if they are not succeeding completely. This is often mis-

interpreted as laziness, leading the person to feel more shame and more misunderstood. This is one reason video games are so popular. If you fail, only you know. You reboot and move on, as if nothing happened.

5. Shame May Shatter Relationships

Many equate blaming someone else for their failures with fixing the problem that caused them to feel shame. Once they have found someone to blame, they wash their hands of responsibility and accountability for correcting the mistake. The goal of breaking the cycle of shame is to adopt financier George Soros's view: "There is no shame in being wrong, only in failing to correct our mistakes."

How to Confront ADHD Shame

In order to fully conquer shame, you simply can't view it through this moral framework. Instead, start looking at your ADHD from a neurological perspective. ADHD is supported by real science — like MRIs and genetic studies — so don't view it as a personal fault. Acknowledge that yes, the condition exists, but it doesn't have to be a weakness; it's simply a matter of brain chemistry. It's your challenge to overcome, and it's up to you to decide how to face it.

1. Adopt a Strengths-Based Approach

Embrace the positives that go with your ADHD, not just the negatives. Whenever you feel shame raise its ugly head, take a second to take stock of your talents and strengths. ADHD is characterized by creativity, initiative, persistence, originality, and more. Learn to recognize these traits in yourself, even at moments when it seems impossible. If you do the work to draw them out and strengthen them, you'll better defend yourself against feelings of shame.

2. Expect Respect

People who are buried by shame sometimes let others walk all over them. You may be afraid to disagree with your boss, for example, out of fear that you'll blurt out something stupid. But this is a self-fulfilling prophecy — if you don't expect respect, people are unlikely to give it. When you learn to recognize your own strengths, instead of being held back by shame, you can set healthy limits to how people can treat you.

3. Never Worry Alone

Don't be afraid to enlist help, whether it's from a therapist, a friend, or your spouse. Having people on your team who "get it" and are looking out for you can work wonders. To find a coach or a therapist, begin by looking in the ADDitude directory (directory.additudemag. com). Don't let your location hold you back! Many therapists conduct conduct sessions on the phone or through video chat platforms, like Zoom or Skype, and online support groups can give you a sense of community wherever you go.

4. Devise Anti-Shame Systems

Tackle your shame head on, directly targeting the issues that cause it. For example, if you feel ashamed because you're always losing your car keys, come up with a specific system to keep track of them. Try taking a small basket and putting it on a table by the front door, and train yourself to put your car keys in the basket every day when you come in. As your track record slowly improves, your shame will turn into pride and higher self-esteem.

8 Common Sources of Shame — and Solutions for Each

1. Stigma of ADHD

Problem: ADHD is a neurobiological disorder well documented by the scientific community. Still, too many people harbor the misperception that there is something dark and insidious — almost evil — about an issue with your brain. Society's relentless stigma, bigotry, and ignorance leads many to believe that there's something inherently wrong with them. There is not.

Solution: Educate yourself about the neuroscience of ADHD. ADHD is a complex brain disorder that impacts approximately 10% of children²³ and almost 5% of adults²⁴ in the U.S. What you don't know can hurt you — and it probably already has.

2. Doubting the Legitimacy of ADHD

Problem: Skepticism about the validity of ADHD (especially in adults) originates from strangers but also friends and family. Some people hear it so often that they begin to doubt their own diagnosis; individuals with ADHD are harder on themselves than is anyone else. Almost all adults with ADHD feel a constant pressure to "get your act together" so their symptoms remain hidden.

Solution: Familiarize yourself with the most common ADHD myths and the facts to dispel them. Confronting hostility toward and ignorance of ADHD with wit and authenticity can educate naysayers and change minds.

3. The Decision to Medicate

Problem: It feels as if you are damned if you do take ADHD medication — "You'll turn into a drug addict!" – and shamed if you don't — "Oh, you think you can just deal with your ADHD on your own? Look how that's worked out so far." The benefits of ADHD medication are enough to supersede the shame for many people, but not everyone.

Solution: Listen to your doctor. A trusted healthcare professional is the only opinion, aside from your own, that should matter when it comes to medication. You know your body best, and an ongoing conversation with an ADHD specialist (such as a psychiatrist, developmental pediatrician, or neurologist) will help determine the best ADHD treatment for you.

4. Impulsive Spending and Money Problems

Problem: Adults with ADHD can go overboard on spending. The shame of ADHD crops up in monthly credit card statements (which you hide from partners or spouses). This problem is compounded by the fact that you often don't make as much money as you "should" or "could." Hiding these money woes feels like the only option, but it ends up perpetuating secret shame.

Solution: Take advantage of money-management tools. There are plenty of free apps and sites that can help you pay bills on time, stick to a budget, and shop smarter.

5. Lying

Problem: The conversation around ADHD and lying typically focuses on children, but adults with ADHD also have a tendency to lie — and hate themselves for it: "I lie about situations that are too difficult to face. I lie about mistakes and then people don't trust me."

Solution: Let in the light. Shame grows in isolation and secrecy – the first step is to step into the light and share your secret with someone else. This does require vulnerability, but it's better to come forth with your lie sooner rather than later, especially in the context of work. If you can, choose to tell someone who you feel won't judge you.

6. Being "Too Much"

Problems: Adults with ADHD live in fear of being "too much" — of overacting and being too emotional or talking too much and embarrassing themselves.

Solution: Reframe your negative self-talk. ADHD makes you a criticism magnet — if there is any floating around, you grab it because you think you deserve it! Instead of taking on that free-floating criticism, reframe the moment and notice when the words from the other person are not critical, but instructive.

7. Self-Hate

Problem: Living with ADHD means embracing that you will screw up, and that sometimes it will feel like you screw up a lot more than other people. Self-loathing inevitably arises from repeating the same mistakes over and over again, losing things over and over again, and feeling hopelessly incapable of succeeding at even the simplest of tasks.

Solution: Know your triggers: Is it someone raising their eyebrows because you are late? Is it someone laughing (and you're sure they are laughing at you)? Is it having your ADHD dismissed and discounted by someone you like or love? Above all else, forgive yourself for missteps made with good intentions — you did the best you could given the information and ability you had at the time!

PART NINE Motivation and ADHD

Part Nine: Motivation and ADHD

By Jerome Schultz, Ph.D.

Traditional motivational techniques — namely, rewards and consequences — don't work for people with ADHD. This truth we hold to be self-evident. But why is it so? ADHD brains differ from neurotypical ones in a few important ways that impact motivation:

- The parts of the brain that manage executive functions and emotions have different levels of activity.
- Electrical activity differences make it harder for ADHD brains to filter out irrelevant stimuli and focus on the task at hand.
- ADHD is linked to low dopamine activity, which impacts desire and reactions to rewards, success, and failure.

These differences mean that people with ADHD have to work harder to acquire information and pay attention. That can mean they experience more frustration and failure than they do success, which negatively affects self-perception and increases stress — only further paralyzing the brain. That can look like:

- Lack of Desire: "I don't want to do this."
- **Irrelevance:** "There is no value in doing this!"
- **Shame Avoidance:** "If I do this I will look/feel stupid (again)."
- Success Avoidance: "If I do this boring task correctly, I'll just get more of it."
- **Desire to Retain Control:** "You can't MAKE me do this."

An individual's negative perceptions about his or her ability to complete a task may become a barrier to getting started — and result in less efficient processing because all that stress makes the brain shut down.

Therefore, individuals with ADHD require a different approach to process stimulation, jump-start motivation, and manage the emotional effects of their challenges. Not because of an attitude problem — but because of their neurobiology.

PART NINE: MOTIVATION AND ADHD

How to Identify Motivational Problems

Fixing motivation is a long process that begins by understanding ADHD brain chemistry and the challenges it creates. From there, you must learn to position tasks in a way that makes them relevant for your child's unique neurochemistry.

The three-step process for adults, parents, teachers, and mental health specialists is as follows:

- Name it: Make sure your child knows she has a condition that can make certain situations more difficult or challenging. Help her understand that ADHD is real, but her fate is not sealed.
- **Explain it:** Teach your child that certain challenges are related to his condition, for example: getting organized, starting a task (initiating), keeping a flow of competing thoughts in the background, or completing a task.
- Frame it: Your child's motivational difficulties are not related to intelligence. ADHD is a neurological difference. Say, "This doesn't mean you're not smart. It means your brain is working differently." ADHD can present a challenge, but it doesn't have to be a disability. It's a skill deficit that can and must be overcome if students want to achieve greater success and live up to their fullest potential.

Some people with ADHD can independently address and overcome their challenges. But for most children, it takes guidance, education, and practice.

In order for an individual with ADHD to successfully tap into his motivation, he must have or develop self-awareness and self-advocacy. That means a person is able to say the following:

- I have this condition.
- I can explain my condition to other people and that what looks like poor motivation is often related to my ADHD.
- I understand that my cognitive style and my biochemistry are unlike those of others.
- This makes tasks that are manageable for others very difficult for me.
- I may be more motivated by some tasks than others. This has to do with my history of experience with the task, and my mindset.

PART NINE: MOTIVATION AND ADHD

• Yes, I want to strengthen my ability in this area. I don't want to be like this. It's OK that I have ADHD, but I don't want to deal with the consequences. I want to get better at this thing.

How to "Fix" Motivational Problems in Children

- **1. Develop new skills.** Give your child the opportunity to acquire and use metacognitive strategies that can help her override disorganization and distraction and improve executive functioning. She wants to be able to say, "I am working on this, and I am improving because of the effort I put into it." Help her get there.
- **2. Find a mentor or coach** as in sports, or acting, or just about any skill most people don't become proficient on their own. This coach could be a parent, a teacher, a counselor, or any adult the child trusts.
- **3. Teach the value of honest self-appraisal,** and how to accept and use feedback from other people. Compare your child's current performance and use of skills to his previous efforts. Then, help him use the skills he's learned in the past to propel him further in the future. One of the simplest things we can do is ask our kids to rate the difficulty of the task being put before them on a scale of one to five one being really easy, and five being really hard. Second, you should ask, "How capable are you of doing this task?" After helping your student complete the task, ask him to rate it again.
- **4. Find a community of support for students,** a group of others (of different ages) working on the same life goal in person or online. A great resource for this is Eye to Eye, a non-profit that provides mentee/mentor programs to schools across the U.S.
- **5. Log accomplishments.** The brain wants to avoid failure, but it finds success addictive. So keep a record of "wins" for your child (like the ribbons and trophies on the wall of an athlete). That's part of what keeps people going. Our kids don't have a lot of trophies; let's think of how to turn that around.
- **6. Focus on process, not product.** The former will lead to the improvement of the other.
- **7. Cultivate a growth mindset** (a la Carol Dweck). "I can and I will vs. I can't so I won't." Get your child to externalize what her brain is saying to her at the beginning of the task, and see if you can help her change that message at least for that task.

PART NINE: MOTIVATION AND ADHD

8. Build in many opportunities to experience the joy (and the good "brain juice") that comes from success in an area of strength (sports, music, theater, electronics, dance, lyrics, poetry, et al). Let your child do the things that he does well. It will build good brain chemistry, which in turn makes his brain more ready and able to take on challenges.

11 Hidden Truths That Unlock ADHD Treatment Success

Part Ten: 11 Hidden Truths That Unlock ADHD Treatment Success

By William Dodson, M.D.

Life is hard with an ADHD-style nervous system. If you are over-aroused and disorganized most of the time, you may not always enjoy neurotypical people in a neurotypical world. Symptom treatment is hard work that's best started early — before bad habits and low self-esteem set in. The earlier we recognize ADHD symptoms, and respond accordingly, the better for everyone.

Treating ADHD is far from impossible. It is more than a little difficult, though, to undo the years of harsh and unhelpful feedback that too many people with ADHD endure. It is equally hard to undo adjustments and habits that a person has built up over a lifetime to compensate for a nervous system that plays by different rules.

So here is a treatment plan based on how people with ADHD think, feel, and live. One caution: ADHD treatment is at high risk for failure unless a trusted significant other is involved — and stays involved — from the beginning. For at least the first year, the motivation for treatment and the ability to see the benefits will reside primarily in someone other than the patient.

1. ADHD Is Not a Character Flaw

Why is it that some with ADHD and co-existing conditions grow up to become wild successes? They excel professionally and have strong relationships. They raise healthy, resilient children (half of whom also have ADHD-style nervous systems). What is it about them and their upbringing that helped them become happy, loving adults?

The most important factor is hearing and believing that you are a good person. A young child needs someone to tell her that she is hardworking, intelligent, and loving: a parent, brother or sister, a grandparent, neighbor, or a teacher. This cheerleader distinguishes between the child's worth and her achievements — to say, "I know you. I know that if anyone could have been successful through hard work and perseverance, you would have

been. Something we haven't yet identified must be getting in your way. I want you to know that I will stick with you until we figure out what is getting in your way and fix it."

Since most parents and spouses do not understand how the ADHD brain is wired, they try what worked for them as kids, or say what their parents told them when they failed or fell short. The most common response is to admonish the child and insist that he re-try the techniques that just failed him. The implication is that the child did something wrong or did not apply the technique hard enough or long enough. Either way, it is the child who is wrong, not the technique. This approach suggests that the child failed because he has a fundamental flaw. He has bad character ("You're lazy") or is consciously defying you ("You can do it if you really try").

The parent or non-ADHD spouse has to ask, and honestly answer, the question: Do I really want my child or spouse to be neurotypical and do things the way I do them? Or do I want him to be the best person with ADHD he can be?

2. ADHD Treatment Is a Group Effort

ADHD therapy must start with understanding what ADHD is, what is possible for the person to achieve, and what is not. Accountability and responsibility are good things, but only if they lead to success. Such judgment calls are among the most difficult that a parent, spouse, or loved one has to make. Sometimes it is not clear what is possible and what is not. What is not possible now may be possible later.

Do not hold people accountable for things that are impossible for them to accomplish. This has been the basis of many therapeutic methods that have never shown lasting benefits. Their only outcome is serial failure. The more the ADHD person loves the authority figure and wants to please him, the greater the pain and frustration of failure.

The person with ADHD should not be the sole focus of therapeutic intervention. It is important that everyone in the family knows what is going on and how to be part of the solution. It is also important to acknowledge the problems encountered by other children in the family. Most non-ADHD siblings spend their childhoods feeling shortchanged or neglected because they were "good" and didn't require a lot of attention.

3. ADHD Medication Levels the Neurological Playing Field

The successful treatment of ADHD symptoms should include medication that is consistently taken. My advice to ADHD patients and their spouses is:

If you've tried ADHD counseling or coaching without ADHD medication and didn't get the outcome you expected, try it again with medication.

If you tried medication and did not like how you felt on it, find a clinician with more experience treating ADHD and try again. Most patients eventually find the medication and the dose that work well without side effects or changes in personality.

For a child with ADHD who might also have learning disabilities, the American Academy of Child and Adolescent Psychiatry recommends that psycho-educational testing wait until ADHD medication has been optimized. Untreated ADHD may confuse the testing results.

If an individual with ADHD doesn't believe in medication and won't try it long enough to see what it has to offer, he is insisting that things have to happen on his terms. Nothing will change for the better. Not ADHD or anything else. The recovery community embraces the acronym HOW. So should the ADHD community:

- 1. Honesty admit the effect that ADHD has had on your life and on your loved ones
- 2. Openness don't hold anything back out of fear of being humiliated, blamed, or shamed
- 3. Willingness to do what it takes to take control of your life

Medication can return the patient's attention span, impulsivity, and motor movements to higher levels. With medication, most people with ADHD are on a level playing field, often for the first time in their lives.

4. Mainstream Solutions Aren't Helpful

Pills do not give skills. If patients normalize their symptoms with medication but continue to approach the tasks of life with neurotypical techniques that will never work for them, nothing changes. To develop confidence that they can access their abilities on demand is a two-step process.

First, they must finally and irrevocably abandon the notion that the old techniques work. Second, they must replace the failed techniques with new ones. This process takes time, after years of effort and emotion invested in old techniques. Your life will change when you truly understand the workings of your nervous system and why the techniques that work so well for neurotypical friends and family members don't work for you.

5. Personal Motivation Is Essential

If the importance of a task, and the rewards of completing it, don't motivate a person with ADHD to get things done, what can he use to move him to action? As it turns out, figuring out and embracing his deeply held values can help an individual with ADHD get things done and stay focused when other things have failed.

Michael Manos and his colleagues at the Cleveland Clinic have used Acceptance and Commitment Therapy (ACT) — a third-generation cognitive behavioral therapy developed by Steven Hayes, Ph.D., Kelly Wilson, Ph.D., and Kirk Strosahl, Ph.D. in the late '80s for people with anxiety disorders — to help people with ADHD get things done.

The title of one of the ACT manuals is *Get Out Of Your Mind and Into Your Life*. A big impairment reported by people with ADHD nervous systems is that they spend too much time in their heads because they are confused and hurt by the neurotypical world.

Hayes's ACT manual works for people with ADHD because it recognizes that the concept of importance — meeting a deadline or doing something that your boss considers important — is not a motivator for people with ADHD and anxiety. ACT solves the problem by helping people with ADHD use their values — which give their lives meaning and purpose — to motivate them to be productive.

With ACT, patients are asked what matters most to them. What are the important things that give meaning to life? What aspect of their life has made a difference to themself, to their family, and to their community or their profession? Some people value their family the most. For others, it might be setting a record or gaining fame. For other people with ADHD, it may be faith in God.

I ask my ADHD patients whether they are engaged in something meaningful that reflects their values. I ask them to ask themselves several times a day, "Am I doing something that matters to me?" This puts the person in touch with his values.

Generally, after several weeks of doing ACT, a patient has several ways to access his abilities when he needs them. He knows the paths to success.

6. Document ADHD Treatment Strategies That Work

It is important to remind a person with ADHD that there is more that works about her than is broken. Given the problem-solving abilities of people with ADHD, the compensations they make, and their determination to succeed, it isn't surprising that only 10 percent or so of people with ADHD are diagnosed and given treatment.

Once newly diagnosed people are on the right medication, I ask them to make an inventory of things they do right — a list of what has worked and has gotten them this far. I ask them to carry paper and a pen with them everywhere they go. When people with ADHD come out of the "zone," only then do they realize that they were in the zone. I ask them to think about their experience of being engaged, productive, and energized. When did it happen? What took them out of the zone and what got them back in it?

After a month, they will have listed 50 or so techniques that they know work for them. It is their bag of tricks to use when they are procrastinating or being frustrated by their lack of productivity.

7. Learn to Spark Interest in Creative Ways

If work were always exciting and engaging, they wouldn't have to pay us to do it. Individuals with ADHD have to create interest where none exists to access their talents and abilities.

A first-year medical student with ADHD was flunking gross anatomy. He saw the course as an onerous task of memorizing 200,000 meaningless names and facts. He had a teacher who saw that he was bright enough to do the work if he could engage with the subject matter.

They tried many things. Then the teacher asked him whom he admired. The student had idolized John Kennedy in his youth. It was the idealism that Kennedy aroused in him that led him to go to medical school.

The teacher asked him to imagine that he had graduated from medical school and was now an emergency room physician at Parkland Memorial Hospital in Dallas. He asked the student to imagine that they had just wheeled President Kennedy in on a gurney with a bullet wound to the neck, and he had to know the anatomy of the neck perfectly to save Kennedy's life.

With this technique and others like it, the young man was able to access his intellectual abilities when he needed them. He graduated second in his class. He developed dozens of ways to inject urgency into the tasks of life. He thrived in medicine as a diagnostician, because each patient presented him with a new mystery to solve.

8. Change the Format of a Task

People with ADHD find it hard to demonstrate what they know to someone else. Many children who know the material aren't able to show it on a test. They struggle with the ways they are required to demonstrate that knowledge. To tap into their strengths, people with ADHD should look for ways to access their abilities.

A young man with ADHD struggled with writing assignments in his junior year of high school. He had to read books that he would have never chosen himself, and he couldn't get excited about analyzing these boring books. Each assignment was torture. After encouragement from his parents, he talked with the teacher about another way he could demonstrate his knowledge. He could write parodies of the books he read rather than analyze each one.

This student demonstrated a better grasp of the style, language, and structure of the assigned reading than anyone else in the class. At the end of the year, he was awarded the English department's prize for best student.

9. Never Just 'Wait to See What Happens'

Adults and kids with ADHD want someone else to put things right or to make things interesting. Usually, if things are going to be interesting and engaging, we have to take steps to make it so.

Be proactive with course assignments. If there are five English courses from which to choose, find out which instructors are bright, engaging, funny, and creative. Sit in on some classes. Ask people who have taken their courses what they are like. An interesting teacher will increase the chance of finishing the course and getting an A. To ensure that a child gets into a desired course, have an accommodation written into his IEP that allows him to register ahead of his classmates and to choose a teacher who works well with students who have ADHD and/or LD.

10. Create Competition

People with ADHD are able to master new jobs and activities quickly, only to lose interest in the things they just mastered. Challenge and competitiveness can help. Trying to beat a personal best or a rival, or imagining the task as a video game in which you have to get to the next level, can work for many people with ADHD.

A man with ADHD worked in quality control at a local bottling plant. He had the mind-numbing job of picking out bottles with defects as they whizzed by on a conveyor belt. He couldn't focus.

He hit on the idea of imagining that he was going pheasant hunting, one of his favorite sports. He saw the imperfect bottles as birds that might jump up at his feet. His productivity and accuracy improved. When he got tired of pheasant hunting, he imagined hitting a baseball every time he found a defective bottle.

11. Find a Nudge

Body-doubling is a technique used by tutors. It can help in the workplace, as well. Fred is an attorney with ADHD who was exhausted from trying to meet deadlines just before they came due. He arranged with his paralegal to manage his time and docket. He kept his desk clear of distractions, and his paralegal brought him one case at a time. They discussed each case and decided what needed to be done before he started on the task. The paralegal checked back every 15 minutes to see if he was still working. At the appropriate time, the paralegal took away the original file, billed the hours, and body-doubled Fred into the next task.

At first, Fred was embarrassed about having a body double, saying, "I feel like a child." His productivity, billable hours, and improved quality of life soon won him over. "The product is still mine," he said. "I just need a nudge to get me started."

Most of these techniques work well for people with ADHD at work and at home. So start today to move forward with your life.

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10 Books for Your ADHD Library

These 10 definitive books promote understanding, treatment, and good health for adults with ADHD.

1. Driven to Distraction

by Edward Hallowell, M.D. and John Ratey, M.D.

This "ADHD Bible" — first published in 1994 and updated in 2011 — covers diagnosis, treatment, and living well with ADHD. It is the definitive resource for understanding ADHD.

2. Women with Attention Deficit Disorder

by Sari Solden, M.S. LMFT

Now in its second edition, this groundbreaking work unveils the hidden epidemic of depression, anxiety, and low self-esteem among women with ADHD.

3. What Does Everybody Else Know That I Don't?

by Michele Novotni, Ph.D.

This comprehensive social-skills guide for adults with ADHD contains straightforward exercises and engaging tidbits that teach adults to overcome common problems like inattention, impulsive blurting, and more.

4. The Couple's Guide to Thriving with ADHD

by Melissa Orlov and Nancie Kohlenberger, LMFT

Marriages (or long-term relationships) are seldom easy. But when one or both partners has ADHD, this book's tried-and-true techniques become essential to managing ADHD's impact on your relationship.

5. Adult ADD: A Guide for the Newly Diagnosed

by Stephanie moulton Sarkis, Ph.D.

This easy-to-read "first step" manual for adults with ADHD covers diagnosis and treatment, treatment, plus simple solutions for everything from managing ADHD at work to making lifestyle changes.

6. <u>The Smart But Scattered Guide to</u> Success

by Peg Dawson, EdD and Richard Guare, Ph.D.

This read will you understand how ADHD may be holding you back in the workplace, and offer simple strategies for maintaining focus and meeting goals.

7. Taking Charge of Adult ADHD

by Russell Barkley, Ph.D.

Written by one of the foremost ADHD experts in the world, this book clearly outlines how to get the best treatment for your symptoms, what you need to know about medications, and how to fix damaged finances, relationships, and more.

8. <u>The Mindfulness Prescription for</u> Adult ADHD

by Lidia Zylowska, M.D.

This book outlines a simple 8-step plan to improve your attention, increase your awareness, and gain self-acceptance through meditation.

9. Is It You, Me, or Adult ADD?

by Gina Pera

Sadly, loved ones can struggle to separate ADHD symptoms from "selfish" behavior — leaving everyone frustrated and angry. This book shows both sides to help find solutions that work for all.

10. Scattered Minds

by Lenard Adler, M.D.

Moving seamlessly from medical facts to easy-to-follow interventions, this book's brief chapters make it readable — and valuable — for anyone eager to learn about ADHD's symptoms, causes, drug therapies, and alternative treatments.