

Intro ([00:00](#)):

If it's October (which it is) then it must be ADHD Awareness Month (which it is) and it's ADHD Awareness Month, it must be time for TADD talks from ADDA. They're kind of like TED talks but shorter, snappier, ADHD-friendly, if you will. And this year they're all about executive function. You know ...that front part of our ADHD brains that helps us plan and prioritize and remember what we're doing and follow through. Or not. So here's your chance to hear from 31 different experts. It's just another way ADDA supports adults with ADHD. Let's listen in..

Monica ([00:40](#)):

Hello and welcome TADD Talks with ADDA. I'm Monica Hassell. Today ADDA has invited me to share my thoughts about executive function, I am doing so through this perspective, it's about understanding the layers of ADHD, where executive functions, connect brain chemistry and behavior. As a coach who also loves to help educate people around ADHD, I think it is of the utmost importance for people living with ADHD and their significant others to understand the distinct layers of the diagnosis. Knowing someone has a diagnosis of ADHD is not enough. You need to understand the distinct layers between traits and behaviors, the diagnosis what's really underneath these two upper layers, which is the executive function layer and under that is what's happening with the brain chemistry. This is with particular focus on the brain area called the prefrontal cortex. So let's call it the PFC from here.

Monica ([01:34](#)):

The PFC is the area of the brain that is thought to be most impacted by the neurodevelopment and brain chemistry, underlying ADHD. A number of years ago. Now I was endeavoring to explain this layer concept of ADHD to a deputy principal at a local school. It occurred to me that it's a bit like a volcano since then. I've been educating many people around the different layers of ADHD describing it much like a powerful force of a volcano. And when I discuss this ADHD through this LA imagery, people find it incredibly helpful. So I love to share this. If we think of ADHD like a volcano, let's go to the top of the volcano and start there with the behaviors and work our way down to the brain chemistry layer. The traits and behaviors are here at the top. This is the stuff that everyone sees and hears and fields.

Monica ([02:21](#)):

There are many behaviors such as challenges with regulating attention being easily distracted, hyper focusing. They might have great focus on some things, but it's completely the wrong thing. And they might miss details. People with ADHD might also show up as not being able to shift their attention when they need to. It might look like frequent arguments with others, emotions ramping up too quickly with too much intensity fiery. In fact, further to this where emotions are concerned, people are known to be more sensitive with ADHD and feeling rejected more easily. On the flip side, there may seem super excited about lots of other things and enthusiastic. For some people it's procrastination. For some people, they might have challenges with perfectionism. For many, it's not finishing tasks, they get diverted and go off on tangents. They do things that aren't relevant. They end up with a lot of unfinished tasks and memory can be a big factor here as well.

Monica ([03:17](#)):

Many people aren't aware of this, but poor time perception and time management can be highly impactful with ADHD and planning. Many people really dislike or even hate planning. One of my clients even said to me, I don't make plans because I feel judged when my plans don't work out. My plans just judge me, make no mistake. These behaviors definitely happen for people that don't have ADHD. The

challenge with ADHD is it's what we call pervasive. It happens in several different life areas and it's highly impactful. And it happens across the lifespan. Digging a little bit deeper. ADHD can sometimes look like anxiety and it can sometimes look like depression, but I prefer to cause being despondent or anxious. The reality is when these traits or behaviors happen a lot, it can make people feel anxious. If they're running late all the time are feeling judged, more sensitive.

Monica ([04:06](#)):

If people feel despondent because they've got another year to go of college or have been fired from another job where their friends are angry at them for running late and overreacting with ADHD, there may be a tendency also to what I call self-medicate particularly if they haven't been diagnosed and they haven't been treated for their ADHD people. Self-Medicate when they have an understimulated brain. If your brain can't produce the brain chemistry itself, it'll get it from somewhere else. This often looks like people with ADHD, eating too much drinking too much smoking too much or using illicit substances. And I also put too much screen time in here as well. The brain wants stimulation and it'll get it from somewhere when these traits or behaviors get impactful enough, people will see their local healthcare professional and may be sent to a specialist such as a psychiatrist where they may be diagnosed with ADHD.

Monica ([04:56](#)):

This is where the core symptoms come into play. ADHD is diagnosed through demonstrating behaviors in the categories of the core symptoms of intention, impossibility and hyperactivity. Fortunately, we now know there's more to ADHD than these three key areas, which is why knowing executive functions is so important. Now, as we dig deeper under all of this, we are going to look at the of executive function. I particularly love the work of Dr. Russell Barkley and use his language in my volcano model. Barkley talks about seven areas of executive function. And I divide these into four quadrants to help my clients understand and recall these in a more practical way. The first area of executive function that I like to talk about is self-awareness. And attention. Often people with ADHD are struggling with the ability to be self-aware. They may be talking too loud or too fast, losing track of time saying the wrong thing.

Monica ([05:53](#)):

They're not noticing when they're gaming or watching too much Netflix or YouTube or a variety of social media distractions. They may not be very self-aware and self-awareness is the entry point to the other executive functions. It's foundational. The next area of executive function is attention management. As I said before, people with ADHD might be easily distracted. They might also hyper focus or find it difficult to shift their attention when they need to. The next area I like to talk about is inhibition and Barkley talks about three layers of inhibition. First of these is the motor inhibition that we often see in childhood, which can often creep into adulthood as well. This is being fidgety hair pulling, not being able to sit still, but it's not as noticeable as it is with kids. When you're an adult. The second layer is cognitive inhibition and it's not being able to regulate impulses.

Monica ([06:44](#)):

It might look like using too much screen time, too much online, shopping, gambling, speeding, watching TikTok or the 24 hour news cycle. When you're supposed to be doing another task. That's really more important. It's not being able to inhibit saying no to something. Last layer is verbal inhibition. This looks like people with ADHD, taking a lot of words to say something, going off on tangents, and we're talking blurting things out, saying the wrong things, talking over people and this can be very negatively

impactfully socially. In summary, I talk about inhibition as not doing things or saying things that get you into trouble, as you can see, or hear I should say, I've already covered attention impulsivity and hyperactivity and we haven't even got to working memory planning and emotions and motivation yet. So for this reason, we really need to look at ADHD through the lens of executive function.

Monica ([07:36](#)):

Not solely through the core symptoms. Barkley even says, look at ADHD as just being impulsive or hyperactive is to trivialize the impact of ADHD. The next executive function area I like to talk about is working memory planning and problem solving. Our working memory is different to our short term and long-term memory because these are stored memories. Our working memory is better thought of as the memory that we're using while we're working for future success. It's the only memory that's involved for the future. Barkley talks about this is putting memory to work. Planning and problem solving are also in this area. Our brain actually calculates time in the front part of our brain. This may explain why people with ADHD might have some challenges with managing time and being known as time blind. This is no wonder if we have an under fueled prefrontal cortex.

Monica ([08:27](#)):

The last quadrant I like to talk about is emotions and motivation. ADHD is not a mood disorder. ADHD is neurodevelopmental and nature and impacts brain chemistry. Fueling the PFC. I prefer to talk about ADHD and emotions as the emotion is right, but the volume control is wrong. Sometimes people are highly enthusiastic and highly motivated to start things, but they don't finish them. Sometimes it's about being more anxious or more stressed or angry that those emotions are too high. So again, ADHD is often the right emotion, but the wrong volume control. Now with the volcano model in mind, we need to dig it a little bit deeper because what is underlying the stability for a person to manage their executive functions is the brain chemistry, which is why medications can be so successful in treating many people with ADHD. When talking about brain chemistry and ADHD, we're talking about the neurotransmitters, dopamine and neuro adrenaline, and these brain chemicals help link the chemical messaging of the brain cell to the next brain cell.

Monica ([09:31](#)):

The best science to date suggest that ADHD is more likely caused by an underdeveloped or under fueled prefrontal cortex, executive functions do their work in the prefrontal cortex. When the fueling is inadequate, the symptomology of ADHD becomes apparent. So let's look at this from the bottom up. Now, if the brain chemistry isn't consistent, that directly impacts the executive functions. If the executive functions aren't working properly and doing their job, this is going to be the underlying cause of those ADHD traits and behaviors. So I hope you can see by understanding what is going on under the ADHD behaviors and underneath the diagnosis, that level of executive function is really important to help the executive functions work better. We need to understand what's happening underneath this and to ensure optimal brain chemistry were possible. If you would like to get a visual of the volcano model, I was privileged to conduct this in a webinar on February 13th, 2020. So if you are an ADDA member, you will have access to this model. I really hope this helps you understand how brand chemistry and executive functions are connected and is key in thriving with ADHD. I wish you all well, and I would love to thank ADDA for the opportunity to talk about this very important month of October, which is the awareness month. Take care all and buy for now.

Outro ([10:56](#)):

Hey, congrats you did it - listened to the entire TADD talk! And if you think this is great info, there's even more at the 2022 international ADHD conference. It's a hybrid conference that happens November 16th through the 19th live in Dallas, Texas, simulcast on the web as a virtual event. Find out more at ADDA - that's adda.org, where you can catch ADHD webinars, join peer support groups, and get ADHD classes. It's truly priceless, but membership costs less than \$8 a month. Okay. Enough of the chatter... we'll see you tomorrow with more executive function information.