

## Web-Based Radio Show

### A COMPREHENSIVE APPROACH TO ADHD

#### The Importance of Helping Children to Achieve a Higher Level of Thinking


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Thank you for joining us this morning. I appreciate your being part of our Web Radio Broadcast Series. Today's topic is: Why thinking and helping children get to advanced levels of thinking is so vitally important. So, it's why thinking is so important. In a sense, we could make it short and say, "Thoughts about Thinking" or "Thinking about Thoughts."

As you know, in the past we've emphasized the different functional developmental levels. At each level, the child achieves a higher level of thinking. We've covered these before, and we'll just briefly cover them again for those, but not in any detail because most of you are familiar with them. But, we will go into more depth on why getting to higher and higher levels is so important for all types of both positive development, to have positive mental health, positive intellectual abilities and positive coping capacities, but also why it is essential for overcoming challenges, including what we call sensory or regulatory-sensory processing challenges, children who are over or under reactive to touch or sound or have motor planning problems. And, why it's also important for dealing with emotions. We know that some children when they get angry or when they get sad or when they have strong feelings, they get dysregulated quickly. They either bang their head or yell and scream or hit or throw a tantrum and why thinking is so helpful for all these different types of both challenges as well as for positive mental health and intellectual growth.

First, let's start with just a quick review of the levels of thinking that we've covered before. They follow our sequence of developmental or functional developmental stages where the child first learns to take an interest in the world – the first level of



thinking; the awareness of what's around you. The second level is engaging with the human world because much of thinking has to do with interactions with others. The third is being purposeful or being intentional, even without words, which we see certainly by the end of the first year of life, typically, and sometimes more slowly with children with special needs or other challenges. The fourth is problem solving; putting together many gestures and behaviors, like taking mommy by the hand to the refrigerator, or daddy to the toy area to find a toy and pointing and showing, putting many gestures together to solve problems as the pre-verbal, or pre-symbolic is a better way to put it, level of thinking.


Then, we get to using ideas. But, before we get to the early stages of using ideas, thinking is very much in the 'action' mode. You think it and do it at the same time. So, you're frustrated and you throw a tantrum, or you're angry and you hit, and you may say "Hit!" as you're hitting. So in these first or early symbolic at the tail end, just before we get into symbolic stage, we use the action mode.

Then, you begin using ideas in their own right, like in pretend play, how the dolly's hitting, or say "Want hit" but not actually hit. Then we come to the stage where we combine ideas together logically where a parent can say, "Why mad?" and the child can say, "Because you took toy" or "Because want to go out." So, now we have causal thinking, but it tends to be at this stage very polarized, initially, all-or-nothing, my-way-or-the-highway type thinking.

Then, the child goes to the multi-causal thinking, giving you many reasons for things. Then, the child gets to the level by age seven or eight, hopefully, or a little later, if there are challenges, where they can compare two things, compare A and B, compare whether they want to go outside on the swing or go outside on the slide, and tell you why one is better than the other. Then they get to the level of telling you the degrees of things, what we call gray area thinking; shades of gray; how much they want to do one thing over another thing and the reasons for it.

Then, they get to the level where they can actually be reflective by hopefully ages ten to fourteen, where they can say, "Gee, I'm angrier than I should be" or "Gee, I agree with this author and not that author because this author reminds me more of myself for the following reasons." We want to help all children get to that reflective level. So that is just a quick review of the levels of thinking that we were talking about before.


Now, the question is why this is so important for overcoming all types of challenges as well as for positive intellectual and emotional growth. Clearly, this is the cornerstone of intellectual growth. The ability to think is what intelligence is all about.



Various intelligence tests try to measure the ability to think, but do so with looking at memory; the ability to remember things like your vocabulary rather than your ability to connect ideas together or compare things or look at degrees of the way one thing influences another thing or be reflective. So, many of them actually are testing skills that are close to thinking but not actually thinking. Memory certainly contributes to thinking, but is not the same as thinking. Thinking is actually best assessed in conversations and real life situations under the pressures of the real world, so to speak.

Thinking is almost synonymous with intelligence, and in our definition it is what intelligence is all about. Why is it important for positive mental health and positive growth? Well, if you think about thinking, it parallels our stages of emotional and social development. A child who can connect ideas together can understand why little Johnny wants to play with him one day and why Susie would be a better playmate on another day. Because Susie's mother is letting her play today and Johnny's parents want to take him shopping today for new shoes. So, we can understand our social world. It also helps us understand our emotions; why we're happy, why we're sad. It helps us at the beginning when we use ideas to label our emotions – just describe how we're feeling – happy, sad, gleeful, excited, curious. It gives us the symbols or the words; the vocabulary, so to speak, whether it's in picture images or verbal symbols to describe our inner lives. It also enables us, as we described earlier, to be engaged with others, to be attentive to the world, to be interactive with the world, to sequence and problem solve socially and emotionally. If we want a hug, we can, by 16 months of life, gesture to be picked up and hugged and communicate that even without words. Once we have words, we can say “Hug mommy” or “Hug daddy.”


When we're giving many reasons for something, we can tell mommy or daddy six reasons why we want to play with them more and be close to them and why we love them. We can tell them the degree to which we have a feeling, we're angry, we're sad, how angry, how sad. We can tell them how excited we are or how frustrated we feel and we don't have to act it out. So, for coping and positive mental health and positive growth, we can see why that's important. When we get to the reflective level, we can think about our own feelings a little more effectively; why we're so sad, why we're so happy. “Gee, I wonder why I'm more angry today than I usually get” or “...why I'm sadder today more than I usually am” instead of just entering the world of sadness or entering the world of anger and acting it out. So, that's why it's so vitally important for positive emotional growth as well as positive intelligence. Also thinking is critical for overcoming learning disabilities and regulatory sensory processing challenges, like being



sensory over reactive or under reactive and for many emotional and mental health problems and we'll explain that in just a minute.

So how does improving thinking ability also improve abilities to overcome challenges? Let's first look at the, what we call, regulatory sensory processing challenges or disorders. Let's take an example of a child who's hyper sensitive or over reactive to touch or sound. When the child is simply in the action mode; the very earliest level of thinking, he doesn't advance, they may panic, just get anxious or overwhelmed and then throw a tantrum, become disregulated, or they may even lash out and hit. When a child can label it, the child can say, "Mommy, too hard" or "Mommy, me scared." When they become a causal thinker, they can say "It's too much noise here, I need to go out." When they become a multi causal thinker, they can think of people that are talking too much, they're moving too much, I don't like busy places, I better find a corner of the room or I better go outside for a walk. When they become a gray area thinker, and they can actually talk about degrees of things, they can think for themselves as well as to others how overwhelmed they feel and also therefore, since they're now a causal thinker, think of solutions. "Gee, I feel very nervous here" or, "I feel a little bit nervous here" or "I feel a tiny bit overwhelmed here. I better find a solution." When they become reflective, they can even wonder about why it is that they are so sensitive to touch or sound, how this goes back to the time they were a baby, how it's part of their personality, they can look at the goods and bads of it, how it helps them tune into people more effectively and be more sensitive to other people's needs. At the same time, they're "a sensitive person" so they have to be careful about who they relate to and what the environments are like. And it can help them plan strategies to, perhaps, be less sensitive, to slowly, gradually, expose themselves to more and more sound or touch or environments that have more commotion in it.

Now, the same set of reasons can be applied to children, and children can use it in the same way if they're sensory seeking. Let's say they're very active, banging into things, liking loud noises, liking lots of touch, liking lots of movement, they can apply the same reason and they can learn to regulate and modulate through being a good thinker. So, being a good thinker allows you to plan, allows you to understand how you feel inside, allows you to be aware of the effect it has on your behavior, and it allows you to change that behavior and change the settings which tend to ignite the negative behavior. A child who's very under reactive to touch or sound or sequence or movement, they can realize they need to be around people who are highly energized and need to be in environments that pull them in, that don't allow them to just kind of withdraw into their own worlds all because of achieving advanced levels of thinking.




If children have problems with their posture or their balance or their motor planning and sequencing – they can't take many actions in a row, again, thinking allows them to use their minds to plan their actions more effectively and they can find solutions. For example, a multi causal and/or gray area thinker can write out the steps to solving a problem, to writing their essays, or to fixing their computer and they can make it very visually appealing. They can use diagrams as well as pictures as well as words on what they write down, then they can keep referring back to it so they don't have to hold a long sequence in mind, they have created their own little aide, their own little helper. They've done this because they're a thinker.

Also, advanced thinkers who are reflective can become more creative. They can say, "Gee, I'm not good at doing these things quickly because I don't take five or six actions in a row very quickly, it's not something I do automatically, I can't do my long division problems like 'boom boom boom boom boom,' I'm slow and methodical because each one requires writing and writing numbers and I do it in a slow way, so therefore, I better leave myself more time and maybe I need to have my parents request untimed tests or I need to plan more time for my homework." Give oneself the time one needs and then, again, creating little aids or little helpers for oneself to carry out the actions that are needed whether it is for long division or multiplication or learning to do a sport. One may say, "Gee it's going to take me a while to learn to play tennis or learn to dance and I'm going to have to practice it a little harder or longer than someone else."

At the same time, one can do basic exercises to help improve planning and sequencing. Let's say one has low muscle tone, when a little girl decided on her own, "Mommy, I want to take ballet so I can become stronger." Or a little boy says, "I want to go to the gym and become stronger." There's an endless variety of solutions one can generate once one is a good thinker to overcome what we call regulatory sensory processing challenges, and there are other regulatory sensory processing challenges, too, that we haven't covered, but I think you get the idea of how thinking can help with all of these, including even language problems. A good thinker who thinks in pictures can draw a picture to communicate and then that'll help them find the words to describe what they're thinking. The solutions offered by being a thinker, therefore, are endless in nature.


Being a good thinker is more than just what help us with our sensory regulatory problems. It helps us with learning problems and also with emotional challenges, and we'll talk about that in just a second. In looking at how facilitating thinking will help with learning challenges or learning disabilities, let's look at a child with reading comprehension problems. He or she has a hard time fully understanding what they are



reading. Well, this may have to do with basic memory and sequencing difficulties. They don't remember all the facts. At the very beginning level of thinking of "What color was the tree in the story?" or "What did Johnny do with his bicycle after his friend gave it back to him?" they may not be at the head of the class. But if they get to advanced levels of thinking, there are two solutions to that. One, they can begin thinking about what's really important in what I'm reading, what do I want to remember? They can underline it in the passage, and then create a picture in their minds of Johnny riding his bicycle after he gets it back because they decided that's important. That's a part of gray area thinking, more important than other facts and the teacher is likely to ask about it or they want to remember it and the picture helps them remember better. So that's just at the rote memory level.

But, as they advance in school, and comprehension has to do more than just remembering sequences or facts, but it has to do with things like "Gee, why was Johnny so happy to have his bicycle?" It never says in the story why he's so happy except that it says he has a smile on his face. The child makes an inference, but that requires some reflective thinking. "Gee, why would I be happy after I had a bicycle returned to me? I would be happy because, now, I can ride my bike and have fun and I wouldn't be worried that someone else was going to keep it." So, now the child can make inferences and actually be very good at comprehending the story because the child can put himself in the shoes of the characters in the story even though they originally had some "reading comprehension problems" because it's harder to remember the facts in the story.

When it gets to an even more advanced level, you read a story by Mark Twain and a story by Ernest Hemmingway, and you're asked to compare the two. Well, the advanced thinker can be reflective. "Gee, what in Hemmingway do I really, really like? What in the story really got to me? Are there any lessons for me in this or for other people? Are there any lessons in the Twain story? The Twain story had a lot to do with humor and funny things and the lesson is to look at the light side of life. Gee, the Hemmingway story had a lot of conflict in it and showed people dealing poorly with conflict and having trouble with it. Gee, I think I like the Twain story better because I like to look at the light side of things and I don't like to deal with conflicts any more than Hemmingway's character. So, gee, I know the connection! People can look at the light side of things to avoid conflict or they can look at the light side of things to sometimes help them overcome conflict because they can see the humor and not take the conflicts as seriously so they can actually find solutions. So, if two men like the same woman they can resolve the conflict by the following means; by doing A, B, C, or D. Both of them giving up her and maintaining their relationship, that would be funny, from feeling so




important, she would also feel unimportant. Maybe she is getting them to feel competitive with one another. That would be an example of looking at the light side of things to resolve a conflict.” One can be creative in one’s thoughts because one is reflective and one can make inferences and one can extend one’s thoughts beyond the here and now into the future. What are the different possible solutions to this problem?

The more creative and reflective one is, the better one does in latter parts of high school and college and graduate school and in life. Those are some examples of reading comprehension. How about writing an essay? Here, too, one has to make a good argument like a lawyer. Have a basic idea and then be able to prove that idea. Again, the higher the level of thinking if one is a multi-causal thinker, one can give you many reasons for something, one is a good gray area thinker, one can discuss issues in terms of subtlety or degree – the causes of the civil war, the revolutionary war, what was the most important, the second most important, the third more important – one can write a coherent logical essay. If one is reflective, one can, in one’s essay, come up with new ideas, ones maybe that the teacher hadn’t even anticipated. So, here, essay writing, reading comprehension, clearly, thinking can be a big help.

Mathematical type of reasoning is a big problem area for many children. Well, thinking and math kind of go hand in hand. If you learn just the formulas for solving a problem, but don’t really understand and can’t, as we say, “see it,” it can be harder to do advanced math. But, one that understands what geometry and algebra are all about or even what calculus is all about, one can picture what one is doing. It starts off very basically with being able to picture quantities. You aren’t just counting one to five, you’re picturing five cookies rather than one cookie, or five blocks rather than one block. That picture in your mind is thinking and that allows you to be a better counter because you’re relating to the image in your mind. If you’re doing division or multiplication, one could picture, “I’m giving pizzas to five people. I have four pizzas. How do I divide this up among five people?” and you picture those five people and picture the four pizzas. You can say, “Well, there are four pieces in each pizza, how many pieces do I have total? How do I give each one an equal amount?” And you picture how you are solving a problem that you understand, not just learning a formula. If you’re doing calculus and you want to know what it really means, and you can picture the area under a line that’s curved, you can understand why you’re applying the formulas that you have memorized and what it means. So there is no end to why thinking is so critical, and again, it goes hand in hand with advanced academic abilities.


Let’s now talk about how thinking can help with developing positive coping skills and also overcoming emotional challenges. One of the most common challenges we see



in all sorts of mental health problems and emotional difficulties, is the tendency for children or adults to regress in their thinking when there are certain strong emotions. Really, this is almost a definition of the mental health problem. So somebody who comes into a situation that makes them very anxious and they get panicky, and they, all of a sudden, feel overwhelmed and get preoccupied with a few thoughts of feeling scared, they may feel they're shaky or feel their tummy's not right, they may have a variety of physiologic sensations, their heart beats fast – they are regressing to not using ideas, even, let alone logical thinking or gray area thinking or reflective thinking, to figure out what in this situation makes them feel worried? They're experiencing it somatically, which goes along with the action mode of thinking, they're experiencing it physically. If they get impulsive when they get extremely angry, or when they're feeling sad and they get into a depression and they do, not necessarily suicidal things, but self-destructive behaviors, they're regressing to, again, the action mode, which is just the very beginning stages of thinking or the transition between learning to gesture and problem solve and think.

If they just become very, very depressed or very, very angry, don't act out, but they're very extreme in their feelings, or they're at the polarized level, which is the first level of logical thinking, but not the multi-causal level or the gray area or comparative level or the reflective level, so they regress to that level. You may have an advanced thinker who's a philosophy professor or physicist or an English professor, who can be advanced in one area when it comes to their profession or comes to interpreting literature, or comes to figuring out the differences between Plato and Socrates. But, gets very polarized and extreme in their thoughts, so a lesser level when they feel strong anger or strong sadness or strong sexual excitement. So, that's why they appear sophisticated in the one hand and very, very naïve on the other hand. In a sense, all mental health problems and challenges have to do with regressive forms of thinking. Freud talked about this in terms of regressing to fixations emotionally, but here, we're showing that this pulls down thinking, as well.

So, depression, anxiety, and other common mental health problems have to do with not being able to apply even the most advanced thinking levels to the emotional area or a certain emotional area, which, “pushes one's buttons.” We all have these; none of us are perfectly broad based in the breadth and range of our thinking abilities. Children or adults who have ADHD, again, for many people, that's a little bit situational. In certain situations, you tend to be more on the move, on the go, more distractible. If you're reflective, you can take corrective action. But, if you go into the polarized level, or the action mode, you get lost in the distractibility. So, you take a step back and say, “Gee,



I'm having a hard time concentrating. I wonder what I can do, how I can help myself concentrate a little better?" But, if you can't do that because the situation makes you anxious or nervous, you go into the "ADD mode" of distractibility. There are some children are in that mode all the time, which means they haven't advanced in their thinking level to be truly reflective thinkers. And, that becomes a way of helping them out of the distractibility, so they can reflect on it, and say, "Gee, I feel like looking out at the tree, but I do have to finish this reading, but my body's telling me I need to get out of here. Maybe I need to take a little break and do it in bits and pieces." So, whether it is attention and executive functioning, where one is problem solving and figuring out how to solve a problem, or whether it's depression or anxiety, or whether it is controlling impulses and regression, so let's say one is prone to go into the action mode of hitting or biting or kicking or as an adult getting into fights. Again, if you're reflective, you can figure out why you're doing it and experience the feelings of aggression and anger without acting out. But, if you regress to the action mode, you don't have that ability. So, you may need work on applying your advanced thinking levels if you have them in some areas to the area where your emotions are strong and where you tend to have emotional challenges. That makes for good coping, that makes for positive mental health, and it helps you overcome impulse control problems or conduct problems, anxiety, depression, and other common mental health problems. Sounds simple, but it's very, very hard to do because we all have our buttons and we know what happens when people push our buttons, we fly into rage, we have tantrums, we get depressed, and it's all because we are regressing to early levels of thinking under that emotional pressure. For some individuals, it's just the extreme emotional reaction of any kind, so it is intensity that leads to the regression. So, when this is happening, we tend to say someone has achieved that high level of thinking, but with constrictions – constrictions around this emotion or that emotion, and these constrictions have to do with the stability of the thinking around that emotion. That is very important to characterize to oneself and to others if one is a therapist or a clinician trying to assess where somebody is.

So, therefore, in conclusion, we can take our model of thinking, the different levels of thinking, always, from attending to the outside world to reflective thinking, and look at how it applies and how we are able to apply it to our different endeavors in life: learning, schoolwork, our emotions, and our social interactions. By having this profile of ourselves or others if we are clinicians, we have a very good picture of where we need to do our work. So, I hope we've given some idea that thinking is important and getting to advanced levels of thinking, that are stable, that embrace a very wide range of activities and emotions and social interactions can be very, very helpful and it's a cornerstone of our intellectual and emotional growth. Thank you very much.