

Let's Talk Learning Disabilities

EPISODE 13

Welcome to Let's Talk Learning Disabilities with Laurie Peterson and Abbey Weinstein. Laurie & Abbey spend their days talking about dyslexia, dysgraphia, dyscalculia, and ADHD. They talk to parents of struggling students and adults who have had a lifetime of academic challenges. They want to share those stories, along with their own insights with you. So, *let's talk learning disabilities*.

Laurie: Hey everybody, welcome to let's talk, learning disabilities. This is Laurie. And I just wanted to let you know that today's episode is part one of a two-part interview that Abby and I did with Amy and Michael Gehan from Achieve Speech and Hearing, there was so much information to share about auditory processing that we decided we should probably make it a two-parter. So the second half of the interview will be released next week, which is a week earlier than we usually do. So there were also four of us working with three microphones. So we apologize in advance for any sound quality issues, but I really think you're going to enjoy this episode. There's so much great information. So let's talk learning disabilities.

Laurie: Welcome to episode 13 of let's talk learning disabilities, today is going to be very, very interesting. We are talking all about. Speech language, hearing auditory processing, you name it. I have Amy and Michael Gehan from Achieved Speech and Hearing here in Plano, Texas, and they are going to tell us all about what they do and how they help kids and adults that struggle with any kind of speech or hearing issues. So welcome guys.

Amy: Hi, thank you for having us.

Laurie: We're so excited to have you guys today, so really quick. Tell us a little bit about you guys and kind of how you ended up where you are today. Cause I know we were just talking about that a second ago, but share with everybody a little bit about what brought you to what you're doing today.

Amy: Um, gee, that's a long story. Um, we, I mean, we're like anybody else going to school, figuring out what we wanted to do. Um, I actually took a class in college that was on, um, Figuring out what you wanted to do. And every course that every test that I took came up, speech pathology, and the other thing I was majoring in. And so part of that course is I had to actually go into a hospital or someplace and follow a speech therapist and I loved it. And it reminded me of years ago, like when I was babysitting, when I leave and the kids would talk like crazy. And the parents would always say, when I left our kids talk more, when you leave, I don't know what you do, but they talk more and I'm like, okay, there's something to this. And I absolutely loved, loved what I was seeing when I was following the person in the hospital. And then I took the courses and I fell in love with it and went to grad school. And one of my dreams was always to open up a practice and Michael and I have known each other, since college, we met in college and, um, we both kind of in the same different programs and ended up in, he ended up in audiology. I ended up in speech therapy and our goal was just to always open up a clinic. So we worked for several years, um, established ourself and grew. And then we slowly started the practice. We started with the audiology side first, and then I came on with the speech therapy side a couple of years later. And we've been in practice for 16 years.

Michael: Yeah. And we always knew, you know, children were going to be our focus. That was something that, you know, we had discussed when we were in college that we just, you know, um, wanted to do something, to help people out.

Laurie: Tell me a little bit about. What you guys do specifically?

Amy: Um, there's a lot that we do. Um, title is I'm a speech language pathologist, and I would say most of the people that come to our clinic come thinking they have central auditory processing disorders.

Laurie: And so let's stop there. What is central auditory processing disorder?

Amy: I'm not the audiologist. Start with that once it starts with hearing.

Michael: Well, it's a, it's a disorder in children, typically with normal hearing who have difficulty processing words and attaching meaning to the

sounds that they're hearing. So a lot of times children will come in. Um, they're hearing normal, everything's fine with their auditory system, but yet they're have language delays or maybe they seem like they're inattentive or daydreamers. Um, and so what we do is we look at their language and their auditory abilities and we evaluate their, uh, auditory processing, um, and essentially try to, um

Amy: So the audiology side of it is going to look at how a person hears the sounds within, without background noise. I'm going to look at it from the language side of how they hear impacts their language and their learning. So a lot of times what happens when children in the classroom, when they have central auditory processing, the same disorders, it shows up at different ages. And a lot of times when they're younger, it looks like they're inattentive. Because when you have an auditory processing disorder, it's like every fifth word is another language. So that child was having to fill in the holes for what somebody is saying. So they start out maybe understanding what they're saying, but after a while, there's too much that they've missed. So a younger child is going to start to draw. They're going to start to look around the room. They're going to look like they're not paying attention or they don't care. And it's not that. And one of the reasons I love working with children with auditory processing so much is these are the children that really care. They go home and their parents. I spend so much extra time with them with their homework and they're reteaching them that information. And when that information is restated in a different way, they're able to understand it when it's quiet. There's two big sides to auditory processing. You have words like every fifth words in a different language because they're hearing the sounds differently. And then you also have another side of it where they have challenges blocking out background noise. So they hear extra noise. So it impacts our ability to comprehend what's being said.

Laurie: Because they hear everything.

Amy: They hear everything. The easiest way. I explain it to parents and teachers is, it's kind of like you, and you've got that two year old and you bring them to a restaurant and they've got a 30 minute window and after 30 minutes they go absolutely bonkers. You take them outside and all of a sudden they're really happy and they're, they're good. You bring them back in the restaurant. You've got another 30 minutes. And it's that way that you have,

and it's because their auditory system hasn't fully developed. So we're in the restaurant and we block out all the background noise. We block out the. The, um, the waiters walking around walk, we block out the silverware hanging, um, the plates and all the different conversations. A child can't do that because their auditory system hasn't developed because they become overwhelmed. So when they get outside, it's a freedom. The same thing happens in the classroom. When people are moving around a lot, it bothers him like with tests where I see test anxiety bill with children with central auditory processing. Is, they have this innate ability to protect themselves. So if a teacher gives like a 30 minute window for a test, they start to learn that, Hey, after about 20 minutes, the classroom is going to get noisy. People are going to move around. People are going to grab pencils. So then all of a sudden they start to rush through tests, but they don't have the cognitive ability to understand why they're rushing through that test. They just rushed through it and they start to make more mistakes. And we start to get anxious about taking tests. So that's why if somebody has, you know, a language deficit that looks like this way of central auditory processing, one of my recommendations is a quiet environment because then that way they don't have that stress of that, and they could finish the test. And when they're little, also what happens is. They don't back up. So if somebody bothers them and they look up to see what happened and what that is, they don't have the cognitive ability to back up and say, okay, let's relook it. Let's, let's refigure that math problem to see where I am, they start where they left off. So that's why when they come home with those tests and they're like, I don't know why I missed that. That's sometimes one of the reasons why that's happening. Yeah. So. There's two aspects to that auditory processing. And that's one thing when we're in therapy, we work to help them overcome both of those.

Abbey: So you've, you've talked about a lot of, you've just in explaining this. You've mentioned a lot of symptoms or signs of an auditory processing disorder. So are these the most common concerns you hear when a parent calls? I mean, what makes them. A parent or a client suspect it is an auditory processing disorder. Do they usually think that they can't hear well or that they're hearing too much or that they're having language problems? What are the most common concerns you hear when people call in?

Amy: It's different with everybody, because it impacts people at different ages because we have anywhere from five years old to 75 years old that are

calling us thinking they have auditory processing disorders. But I would say the common areas that we hear are. You know, they miss here information, you know, they, they come out with, you know, they tell me their teacher said something and it just, there's no way that teacher said it, but they're adamant, the teacher said it this way. Um, they have trouble following multiple step directions. I can't follow directions. When I give them directions, um, fast, they have ADHD and that's one reason why, why, when we do an evaluation, um, we always do a screener for ADHD. Michael always does that. And if they show up positive is, or if they show that they could have ADHD, we always refer out for an evaluation on that. So we work closely with Laurie and all different kinds of other people that look for ADHD for that reason. And that's something that we always want to rule out.

Laurie: One of the things we see with dyslexic kids that I, and this is how I always understood auditory processing. So I'm very glad we're having this conversation. And it may still be part of it is, is how they're hearing the sounds. Right? Because we can teach somebody that A, Apple, Ahh...but if what they're hearing is something else. I can stand on my head. It's not going to matter.

Amy: Exactly. I always say so dyslexia. I always say that, you know, auditory processing, like dyslexia of the ears, but yeah, they do, they hear it differently. So that's one reason why it also can impact their articulation. So like when I have those 10, 15 year olds that come in the office and the parents are like, they can say their R sounds, they can say their S sounds whenever, but whenever I ask them to it, but when there's talking, they don't say it. Well, then we do an evaluation about 85% of the time, those are children that actually have auditory processes. So I ended up referring to Michael for an evaluation.

Laurie: So it's about the way they hear.

Michael: And a lot of times it's they mishear it. So, you know, when they hear desert, maybe it's, it sounds like dessert. Or so for instance, if there's background noise and someone says something, they might hear something completely different, just like someone with a hearing loss does, or maybe they don't even hear. The words that they're trying to listen to because the background noise drowns it out for them, which is unusual with someone with

normal hearing. Because if you have normal hearing, you would think your ability to tolerate noise and filter out noise would be normal. But with children that skills not developed. So essentially they look like an adult who has hearing loss. Um, and so they basically don't process the information correctly.

Laurie: So are these the kids that have the TV turned up really loud and stand close to it so that they. They can hear the TV and not all the other stuff going on?

Amy: Everyone is a little bit different. I hear that sometimes, but what I do here see with more actually adults is they will put the closed caption on to be able to read and to be able to hear it. Like I had somebody who came to me and, Oh gosh, she was, I think 36 years old and she'd always studied harder in school got really good grades. She just thought this is the way she was. And that's what happened. The older you get, you learn to adapt with it and you just think it's the way you are. And she's like, I got to work and she got it, got to a point at my job. Where I was having to have more conference calls. I was talking to people overseas and it just became harder to really process those sounds. And she's like when, and she's like, I've always had trouble going to plays and getting that and that, and the close caption and. Michael. She came in front of evaluation. She had auditory processing and we worked to reprogram that brain. So she could really hear and process. Those sounds eliminate that background noise. And she came in one day, like all excited because she's like, Oh my gosh, Amy. She's like, I couldn't believe it. I was playing some game. They play with their friends and she's like, it's really noisy. And she's like, usually I just stand there and I don't talk very much. I don't interact with them because it's too overwhelming with me with all the noise and she's like, I could do it. She's like I actually stood in there. I was talking to him, I was comprehending what they were saying. And it was understanding my words were coming out really fast and I was able to do it. She didn't have the closed caption on, and it's the same thing. When we talked earlier about the, the noise and how it impacts them when children first start to work with me sometimes. They I've got them up in a room away from everybody, with headphones on with doing their homework. And I had, you know, so that way they can process the information, but our goals for them to be able to process those sounds and hear with the background noise. And I had a child that. He was sitting in front of the TV with his brothers and mom was

going absolutely ballistic thinking there's what is he doing? And he's supposed to be doing his homework. And she said, she walked over about ready to just go into them. And she's like, she stood over his shoulder and was looking and she's like he was doing his work and he was getting it all right. And I can't believe that he's sitting there with all that distraction and he's able to process and comprehend and he's doing it in a good time. So, I mean, not everyone gets to that level, but that's our goal with where we are.

Abbey: So do you guys both start with ruling out any type of hearing impairment? You make sure that hearing is adequate. It has nothing to do with hearing, right?

Maichael: That's pretty much my role as an audiologist is to rule out any type of, you know, physical, underlying problem. If there is hearing loss, then we treat the hearing loss. Um, if it's something medically that can be treated, then we'll refer out to, uh, you know, an ear nose and throat doctor. Um, Most of our children, like we said, who have auditory processing have normal hearings, but we have to, you know, do we want a series of tests that verify that their hearing is normal? Um, and then we test them to see how they do hearing in the worst conditions. So how do they hear when there's background noise or. Two people talking at once or even wearing masks today, you know, that filters out the sound and make clear, and that can affect your processing. And then Amy looks more at the higher level of language skills and how, you know, listening and remembering what you're hearing and all that impacts, uh, auditory processing also.

Amy: And we take with the evaluations that we do, we take away a lot of the visuals. So. I really want to look at how, what they hear impacts that language and learning, because if the testing has visuals with it, with everything that we do, I've given a visual cue that they're not going to get at home or in the school. So we really want to look at that because, you know, we talked about earlier how that hearing can impact the speech. Well, then the next level, it can impact the language. Cause if you're not hearing. Every sound that somebody says, like, if, if you don't have auditory processing, it's taken you one to two seconds to process what somebody says. If you have auditory processing is taking you like three to five seconds, cause you're having to fill in those holes. So then what happens is, is taking you longer. To fill in that information. So you can process information and be able to

communicate. So if you're in a group with your friends or even your family, everybody else is talking faster than you, everybody else processes faster than you. So your receptive language grows stronger, which is what you understand, but your expressive, what you communicate, doesn't grow as fast because you're not using it. So you've got this gap. So you get this gap in there with what, you know, what you can communicate, which can then transfer to their writing skills also. And being able to get that down where you see frustration in the classroom, because they can't communicate fast and get those thoughts down. So then the next level is because it's taking you longer to find, process the sounds, find the words. Now, all of a sudden you're problem solving that higher level cognitive goes into because all of a sudden, everybody else is problem solving faster than you. And so you don't, you tend to have what's right in front of you and you can be more black and white in that respect because you're not using it. A lot of these children. You know, can it be seen as shy or when they're not children get really upset because you know, they feel like they can never get their thoughts out. Everybody else is talking for them. They've got the best ideas, but they're not able to communicate them. And it's just so yeah, I mean, it builds on each other. So like once your auditory processing side is within normal range, your language, doesn't always. Fall in line. So that's why it's so important that we look at both sides because on Michael's side they can pass. And my side, I can look at them and say, okay, this is just typical language or looking. I'm like, you look like you had auditory processing. So we're still going to treat it as if you had a target processing because the language hasn't caught up. And the way I explain it to a lot of parents, it's kind of like breaking your arm. You put a cast on it, that bone heals, but once the cast comes off your arm still weak, you've got to go to physical therapy to strengthen it up. So the arm doesn't just catch up because the bone is healed. So that's where it's so important. We look at both sides. To it. So we really understand what's going on with that child so we can help them.

Abbey: And then they've already also lost some of their learning skills cause it's impacted all areas of learning. So they're behind in reading and writing skills, maybe even math too. Do you see that?

Amy: What we typically see is math, like the straightforward multiplication division. They love that. They're good at that. They're visual. They tend to be visual learners, Math and science tend to be their favorite subjects if

somebody has auditory processing. Um, but once they get to the word problems, yes, it becomes challenging. Once you get to test it or they have to start to study more, it becomes more challenging. Like I'll take a child who is in middle school, high school or college, and I'll say highlight everything. That's important. And they'll highlight everything except like two words. And that's because when somebody is talking, every word is important. If they don't pay attention to every single word, then they've missed something. Someone has said. So then they study that exact same way for their tests and they oversight. They study more than most people, and then they go to take the tests and. It doesn't, it's a transfer. The older you get in school, the more they change the wording on it and the application. Exactly. So it becomes harder for them to transfer that information to one the next and those problem solving skills can be decreased also a little bit, which problem solving how it changes is harder for them. So we work with. The people that are older, we work with them with how to take notes, how to analyze what they're reading and all that. Um, so it goes into so many different areas because it just, as you get older, it just impacts you in so many different ways.

Laurie: It snowballs too. Exactly.

Amy: Because most people don't realize your language continues to develop until your early twenties. So you're always getting those higher level language skills. I'm most people think when they think of language it's when they're little and they just first start to talk. And it's not that it just, it keeps on growing to a higher level.

Laurie: Two questions, Is it harder for these kids to learn a foreign language?

Amy: Yes, it is. But I always tell parents if your child wants to learn, if they say they want to speak Russian, Japanese, whatever, they pick, let them do it. Just let them know. It's just going to take them a little bit longer. They're going to have to spend more time. I'm a true believer. If a child wants to do something, you let them do it. If it's not going to harm them or somebody else. And they will succeed and they will find a way to do it better than you ever thought they would.

Michael: Doesn't research show that the more languages you learn, the more that proves your language abilities, it might be tougher and tougher to learn right at the beginning.

Amy: The younger you are. So the younger, the better, but eventually it's going to improve their linguistics. Squeals by having multiple, even just being exposed to multiple lines. Yes, it does. What I typically see is children that have, um, auditory processing challenges. If they do a re when they're taking their tests and they're written, they do really well because they're reading it, they're seeing it. But once they have. To listen to somebody and transcribe it. It becomes challenging in that when it's a live person, they typically do much better, but once it goes on a tape and that's the way most of it is today is they're listening to tapes. They score up two years below what their knowledge is. And the easiest way to explain that I have parents explaining to the school this way is when you're talking to a five-year-old, you get everything that five-year-old says, you put the same, five-year-old on the phone, you get 50% of what they say through the five-year-old didn't change. It's just something with how that transfers, but our ears, as they develop in our cognition and our ability to learn, we're able to figure out what those younger kids are saying at times and other people and being able to deal with the phone, but somebody who has central auditory processing has challenges with it. So I always recommend if the parents don't care about the child, doesn't really care what language they take, sign language or Latin. And I know in today's world, not every school has that. So I know some of the parents that I work with. They've partnered with our school and gotten permission to pay for a course outside and be able to use credit for that. And then the child actually then ends up having like an extra study hall or coming to school an hour later or leaving an hour earlier.

Laurie: Why Latin?

Amy: It's straightforward.

Laurie: It's black & white. That's important.

Abbey: So I'm curious, how young can you be diagnosed with an auditory processing disorder? I mean, because you are still developing, like you said,

a lot of those. Auditory processing skills, cognitive skills, hearing skills. When you're young, how young can you be diagnosed with?

Michael: You can be, you know, we can look at auditory processing, um, even in children who are just beginning to learn to speak, but you really can't diagnose it until they're at least five or seven, simply because of the testing, uh, is mostly normed on children that are about in that range and attention has such a big effect, so right. Uh, you have to rule that out. You know, how many five-year-olds are just not paying attention during the test or have something else on their, on their mind. But we feel that the sooner you look at it, the better, um, and a lot of the language tests won't necessarily diagnose it, but they can show signs that

Amy: yeah, we can't diagnose it as a speech language pathologist, right. Only an audiologist can, well, we can look at them. Signs and symptoms of it, but we have to refer to an audiologist to make that time.

Michael: Well, he used to say seven years old was the minimum age, but now we're, we're seeing that the sooner you identify it, the better prognosis. Yeah. Five years old is the earliest rule.

Amy: Well, yeah, that's the earliest. And even for the difference between five and seven, there's a lot more tests. Once they hit seven on the audiology side that you're able to look at a lot more in depth.

Laurie: I think that's why. Schools don't test for it because they don't have an audiologists on staff. They only have a speech therapist and that. Um, like you just said. So I think that, cause we get that question a lot is why can't the school test for this? Well, because they're not equipped, they don't have the right staff.

Amy: It's also seen as medical. So what happens is the schools, historically the schools are gonna on from the speech therapy side will handle the aspects that are more developmental. What's going to impact their life, education or educational, but they do not tackle, um, Medical. So like, that's why, if somebody has a swollen problem, historically, they're not seeing in the schools, if they have tongue thrust, historically it's not seen as school because that's medical central auditory processing is seen as medical. So

that's also why it's not recognized by a lot of States. And a lot of schools do not treat it for that reason because the N. Main causes for auditory processing. You've got ear infections. Um, you've got concussions, autism, all different things that are considered medical. So that's where it gets kicked to.

Laurie: It's interesting. I wouldn't, I wasn't to such an impact on their academics. And it's a processing, right? That's interesting.

Amy: It does. There are aspects of what we treat that the speech therapist, the school will work on also in the schools are very understanding of that.

Michael: A lot of times the schools will recognize it. The therapist will see it, but maybe they don't have the testing capabilities, like you said.

Amy: They're not able. But I think the schools, the ones that we have dealt with are very understanding about it. And we will give recommendations that they put in the 504, three able to do and help with. Um, and then also if they have, if a FM system or hearing aid is recommended because of it, they accommodate for that in the classroom.

Laurie: And then system does helps to explain what that is real fast.

Michael: Well that that's a device or the teacher wears a microphone and then the student has an earpiece kind of like a one-way walkie talkie. Um, and what it does is it reduces the well actually, yeah, it increases the level of the teacher's voice over the background noise. Um, it also is something that's going to help with their attention because when the teacher turns it on now, all of a sudden the child is cued that, you know, the teacher's going to be speaking. Um, and the research is actually showing that even children who have, um, We don't have auditory processing, but maybe attention disorders, um, that, that there is a benefit that, you know, technically I think every child could benefit from, but definitely if there's auditory processing and you know, other types of attentional things

Abbey: And any FM system is considered an assistive technology device. So can you, do you have to have an evaluation that determines that you can't make progress without that FM system?

Michael: Exactly. That, and that's where the testing comes in, um, that I do with the background noise. So, you know, up to four or five different tests to see exactly how are they functioning. Well with background noise, even if it's a mild amount or, you know, a significant amount of background noise. And then once, you know, once they meet that criteria, then, then they meet the criteria for FM.

Amy: I also think anytime you have a system that you're putting in your ears where it's FM system or hearing aid, anything like that, that amplifies, I think it's an audiologist, somebody who's licensed and certified. That needs to look at that, to make that decision because you can over amplify. I know there's some people that you can buy them online, stuff like that. But if you're, if you put that in your child or even an adult trying to do an FM system or something like that, and it's not adjusted correctly, you can cause damage to your hearing. So it's something that you've got to be. That's gotta be set by an audiologist.

Abbey: That's interesting. Closely monitored. Yeah.

Laurie: So it could be, so that could go as a 504 accommodation.

Michael: Yes. So easy enough. Okay. Yeah. And there's ways we can set them so that they're automatic. And then they're, you don't have to worry about the teacher or the child accidentally turning the volume up. Um, and now we're even seeing, um, research showing that hearing aidea are beneficial, um, for older children, um, especially middle school, uh, that do similar, but maybe the child doesn't want to take that microphone from classroom to classroom. Um, and there's, you know, the stigma of wearing a device, right? So hearing aides are now actually showing a little gain hearing aides that are set specifically for children with normal hearing. Uh, do a really good job of increasing the speech processing because the computers and computers are the computer processing in, uh, a hearing aid has come so far in just the last 10 years.

Laurie: Hi everyone. This is Laurie again. I really hope you enjoyed the first half of our interview with Amy and Michael. Don't forget to come back for the second half of episode 13, when we continue the conversation about auditory processing, as well as discuss other aspects of speech and hearing issues. Come back next week and let's talk learning disabilities.

Thank you so much for joining us today. In our show notes you can find information about today's talk, as well as links to the resources and other episodes. If you have questions about today's talk, have ideas for future episodes or just want to stay connected, you can contact us through Diagnostic Learning Services on Facebook, Twitter, LinkedIn and Instagram. So, Let's Keep Talking Learning Disabilities. This podcast is sponsored by E Diagnostic Learning. You can find more information at www.ediagnosticlearning.com.

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