

Matt (host): Welcome back to the Nimble Youth Podcast, where we explore the mental health and behavioral issues facing parents and young people. I'm your host, Matt Buttermann. Today, we're starting a two part series on dyslexia, a topic that comes up a lot for families, but is often misunderstood. I'm joined by my partner and frequent collaborator, pediatrician Doctor. Gretchen Hoyle, who has over twenty five years of experience helping young people and their families with behavioral health issues.

Doctor. Hoyle, welcome back.

Dr. Gretchen Hoyle: Thanks, Matt. I'm really glad we're doing this as two episodes. Dyslexia is common, it's complex, and it's emotional for families and parents need both understanding and practical guidance.

Matt (host): Yes. So let's start out with the basics. And I guess I should preface our discussion by pointing out that dyslexia is not a mental health issue per se, but a learning disability. But, but please give us a broader definition of dyslexia.

Dr. Gretchen Hoyle: Sure. So dyslexia, the way that I explain it in clinic is that it is an unexpected difficulty with reading or with learning to read. The word unexpected is important. These are kids who are the right age to read. They're bright.

They're curious. They're exposed to books. They're taught letters and sounds. They're encouraged at home. They've had formal instruction, but reading just isn't clicking for them.

And the specific problem that they're having is actually decoding words. And so breaking down written words into sounds and then blending those sounds together, That's the specific task that the brain has to do in order to translate, you know, written word into meaning. And so, it's not about intelligence or effort or motivation. It's really just about a difference in the way that the brain processes written language. And, and reading, you know, I'd also point out that reading isn't really something that humans evolved to do.

Brain has had to, like in, in the English language, are 44 different phonemes. And so these are sounds within the English language. And so what has to happen is we have to be able to recognize those phonemes when we're learning even to talk and then be able to map those phonemes into written language or symbols on a page. And that is a process that our brain has to be able to learn how to do. And so for most readers, you know, for people who aren't typical readers, that process is fairly automatic.

But for people with dyslexia, it's not. And there's actually even research in this area, brain imaging studies, functional MRI that shows that there are actually different neural pathways that are being activated in the brains of people who are typical readers versus folks who meet the criteria for a diagnosis of dyslexia.

Matt (host): Yeah. And so what does dyslexia look like for parents at, at different ages of their, their child's life?

Dr. Gretchen Hoyle: Right. And so this is often where, you know, parents will feel something is a little bit off with their child as far as reading goes before they can really name it. So as early as preschool, or even early elementary school, a lot of times what's happening is, kids are having trouble learning the sounds that go with letters. And so, you know, early education, a lot of it is learning the sounds that go with letters. And for these kids, that's just hard.

And sometimes that means that that's also sort of correlated with these are kids who sometimes talk late. And so they just had sort of a difference in their speech development to begin with. But when they're getting into school or even preschool, then as we're starting to say things like, you know, A is for apple and trying to hear that phoneme and connect it to that symbol. They're having a lot of trouble doing that. And so they also will have difficulty with rhyming words.

So this is an exercise that a lot of times in early education, they'll work with teaching kids to like, you'll say a word and ask them to say another word that rhymes with it. And this is kind of, this is really hard for kids who often will end up with a diagnosis of dyslexia. And then what starts happening is you get started into some behavioral things. So when you feel like there's a task that everyone else seems to be able to do and you can't do it, then you really start to avoid it. And so this is where you get into situations where you have young children who are not interested in reading.

They really don't want to engage in that. It becomes this sort of self fulfilling thing where they sort of think in their heads, I'm not good at that. I don't want to spend time doing it. When in reality, you know, it's helpful to have as much exposure as possible, but they tend to avoid those interactions. And then, and so for those reasons, their reading really progresses a lot slower than their peers.

And so then as you're getting into, you know, like middle of elementary school, what you find is that these kids are kind of trying to read aloud to parents, because that's a common thing that, that elementary age kids are asked to do every night. You read out loud every night, in twenty minutes. You're a parent. And so what you wind up with is with a kid who's just kind of guessing. They're guessing what the word is instead of being able to sound it out because they're having a hard time mapping the symbols that are the letters into the phonemes and to make those sounds into words.

And so they also, you know, really, you know, they get really tired doing that because it's just so much more work for them than it is for other kids and it's pretty exhausting. And then you wind up having a lot of friction and fights with, you know, parents and kids about, you know, getting homework done and why can't you just get this done? Let's just get it done. Let's do it. But for the kid, it's really just, it's not clicking.

And so there often is a lot of emotional, you know, response to that. And then as we get up into middle and high school, a lot of times what winds up happening is you can see that these kids can have, will have really strong verbal skills. They'll be able to articulate their ideas verbally a lot, but their reading is not on the same level at all. And so they often have really slow like reading speed. And so it just takes them a whole lot longer to read a chapter or to do an assignment.

They have a lot of trouble with spelling. Spelling is a core issue for folks with dyslexia. And they often have a lot of trouble with writing just in general. Not just the process of creating ideas in your head and then trying to put them down on paper. There's also the mechanics of it as well.

And so those things tend to go along together. And so that's when you have kiddos who have diagnoses of like dyslexia and dysgraphia, which is actually writing. And so they're also, the other thing you'll see with these kids is that when they are read aloud to, then they are really capable of doing grade level work. And so those are the kinds of things that we strategies that we use to try to help them achieve their highest level of success. And then they also will get really tired and fatigued and come home from school, just, you know, pretty rundown and exhausted and just not, it's just not a pleasant experience for them because we're, we're asking them pretty much all day to do something that they don't really have a competency for.

And so, it can be really hard and frustrating. And so that's when you start to sort of see some of the behavioral stuff kind of popping up as well.

Matt (host): Yeah. And parents often hear, you know, they're smart, but they're just not paying attention and there's a big reason for that. Right. Yeah.

Dr. Gretchen Hoyle: I mean, it's because it doesn't make sense to them. It's really hard to pay for stuff. Doesn't make sense.

Matt (host): So,

Dr. Gretchen Hoyle: yeah, I mean, that's I think the core issue and that's a lot of times why it looks, you know, a lot like ADHD, which I guess we'll get to as well.

Matt (host): Right. Right. You found that creating a checklist can really be helpful for both children and their parents.

Dr. Gretchen Hoyle: Right. Right? Right. So I, when I, talk to parents about, you know, struggle for a kiddo in school, you know, I'll often ask them, okay, so does your kid like avoid doing reading? And of course, most kids are going to kind of try to avoid doing homework in general.

And they're often pretty, you know, done by the time they get home from school. But this is sort of a different level of resistance, I guess, to getting this done. And so they really avoid it. And then when they do sit down to try to read, they have a lot of difficulty decoding unfamiliar words,

and then they just kind of get, you know, sort of spaced out and exhausted. And so their attention really drifts and it's just really hard for them to finish what they're supposed to be doing.

But then when you read to them, they can remember all the details of the story or whatever was happening. And so it's really more the decoding that is, you know, And so if those things are resonating with parents when I'm talking with them about a child who's having troubles in school, then that definitely makes me suspicious.

Matt (host): And so you've mentioned that dyslexia often runs in families, right?

Dr. Gretchen Hoyle: Yeah, it really does. I mean, often will realize, you know, and this is true for ADHD and a lot of the things that I take care of is that we'll be talking about kind of getting down to the core symptoms that a child is having. And the parent will go, Oh yeah, I was just like that. Or I realized that this is what I was like, or this was me when I was that age. Or they'll think about like a grandparent or a different, you know, family member could really struggle with reading and writing.

But that person's really smart and do lots of other things, but the language part of their schooling was really super challenging for them. And additionally, it statistically more common in boys. Certainly happens in girls too. I think girls are often a little bit better able to compensate for that. They may not get quite as outwardly frustrated, but like it is, you know, it's kind of an equal opportunity issue.

But oftentimes, more often than not, when we kind of land on a diagnosis and we kind of figure out what's happening, then usually there's somebody else in the family who had that happen. That was certainly true for my family. So, my son was diagnosed with dyslexia in like fourth grade, and we had him in a school that specialized in that. And I remember taking my dad to parents' night at that school and showing him the techniques that they were using to help kids who struggled with reading. And he immediately connected that, you know, it's like, oh, I would have been well served with this back in the forties when I was in elementary school, but of course that was not available at the time.

And so, I think there are a lot of correlation there. So it is, it is, you know, it's good to know that we have come a really long way with helping kids who have this problem.

Matt (host): So one thing you do, and I kind of, love this actually, because it sounds kind of fun. One thing you do sometimes in clinic is ask the kids to read nonsense words, right? Made up, made up words that follow English rules.

Dr. Gretchen Hoyle: Right. Yeah. So, so sometimes, and I will say like, you know, we'll get into the, like the actual formalized testing for this and it is important to recognize, you know, pediatricians can make a diagnosis of ADHD based on clinical, like the clinical picture and questionnaire, behavioral rating scales from teachers and parents, and then talk interviews with the child and reviewing their history and all the things that goes into an ADHD diagnosis. But a

dyslexia diagnosis really does require the input psychologist who can do very specific testing for that. But one of the tests that they do is one that I've sort of co opted a little bit in my clinic, which is nonsense words.

And so these are words that you can, you can get a list of these off of the internet. And there's different nonsense word lists based on your grade level. But basically these are words that make sense in the English language structurally, but they do not exist in the English language. They don't have any meaning. So I think like one of them is like *doit*.

So *D I O T* or like a word *gob*, *G U B*. So as a reader who understands, who can decode words and understands the phonemes in the English language and recognizes what those symbols of those letters mean, they're able to pronounce that word and *eat in like*, they're able to pronounce that word, even though it's not an English language word. Right. And so, so you know, for sure that they're not just reading on-site. So there are a lot of kids with dyslexia, especially with very short words where they can memorize the word as a whole unit.

Right? So they memorize like a short word, like let's say *bent* where they're like, okay, I can recognize these letters together, but it's because my brain has recognized it as a, as a full word, a sight word. But you can't do that if you present them with novel words that are nonsense words that do have structural integrity for the English language, but don't have a meaning. So they couldn't have seen that word somewhere else. They're not memorizing it from somewhere else.

They are having to decode it. And a lot of times we can, you know, do that sort of quickly, even in the clinic visit and say, okay, here's, you know, some third grade nonsense words. Can you read these to me? And it can be really helpful to see, you know, whether or not they can decode those. And a lot of times what happens is that they do maybe a couple of them, but then there's a lot of them that they just can't do.

And so they're like, well, you probably need to dig more into this. That, and no means is a diagnosis to do that one little thing in like the clinic setting, but it can, it can definitely indicate where we need to get additional diagnostic evaluation from a psychologist.

Matt (host): Yeah. So let's talk a little bit about the overlap between dyslexia and ADHD, and certainly you've seen this a lot in clinic where dyslexia can look exactly like ADHD, right?

Dr. Gretchen Hoyle: It can. I mean, like it's, it's really the, like the inattention piece, especially. So like we had talked about before, it is really hard to attend to things that don't make sense. Right. So if you, yeah, if you were in a classroom in another country and you were listening to being taught in another language and you didn't know any of the words, you would definitely be looking out the window.

Right? Like there's just, Yeah. And that's, it's just not going to connect with your brain. There's really no way for your brain to attend to it, with any stamina. And so that can happen, for kids

who have dyslexia because they're, if they're doing reading tasks in school, which of course early elementary is a lot of that, and they're sort of lost, then it's just, it's very hard.

You know, some of them will have some anxiety about it, so they will really, really try to try to stay on task. But you know, over time it just, because it's not connecting in their brains, they're not building pathways to be able to recognize and decode these words. Then they end up like the fatigue of that makes it so that they look like they have an attention. And then they can also sort of look like they've got other like impulsive and hyperactive behaviors because they're either kind of bored or kind of anxious because it's not working for them. And they sort of have behaviorally outthirsty kinds of things too.

Because it's really frustrating, of course, to be in a situation where they're asking you to do a skill that you can't do. And it's for hours all day long, or it feels like that, of course, for young And so there's a lot of overlap and a lot of kids have both of those and they meet criteria for both of those conditions. But it's always a bit of a challenge to sort of tease out, you know, what component of what's happening for them in school is related to their focus ability and what of it is like this challenge with being able to decode words.

Matt (host): So you've, touched on this a little bit earlier in the episode, but, let's talk a little bit about how dyslexia is actually diagnosed formally.

Dr. Gretchen Hoyle: Right. So, so the, like after we have like a suspicion for that, for, dyslexia, and, and I will say the way that this usually plays out in clinic is that the, at least for me is that the presenting complaint is just school underperformance. And some of those behavioral things that we talked about, about like either being inattentive or hyperactive or impulsive rule. Okay. So, so what we wind up doing a lot of the time is we say to ourselves, okay, we are going to do our formal, like clinical evaluation for ADHD.

And so we'll get the Vanderbilt forms, like we talked about before from the parent and the child, I mean, the parent and the teacher. And a lot of times I will get additional paper like questionnaires from the parent and the child on anxiety because there's so much overlap with that as well. And then we will like get a sense as to what those behaviors look like on the first part of the Vanderbilt questionnaire. But keep in mind that the second part is about classroom performance. And so it asks specifically about basically whether or not that child's, you know, English, like language arts, writing, and math are on above or below grade level.

And so what will often happen is that when we have treated their ADHD, then a child who was having underperformance in those academic areas, that their performance will improve. And we can see that over the course of several weeks or months as we're doing medicine and we'll do several different Vanderbilt questionnaires and we'll watch their grades come up and all of that. It's a really super exciting and awesome, but for kids who have like a learning disability underneath it, they typically start with that those performance metrics for often it's all three, which is language arts, writing, and math, or reading, writing, and math. And those are all five. So that means that it is, you know, they're a problem.

It's problematic as far as where they are on those skills in their, in their classroom setting. And if there is a predominant, like, learning disability underneath it, then even after we've treated their ADHD, their, their academic performance does not necessarily improve all that much, right? Cause it's not just their focus. Are we going to help them focus more? But until we like address the underlying learning difference, then they may not really be able to get onto grade level with reading and writing.

Right.

Matt (host): Yeah. Yeah. And that makes that make sense.

Dr. Gretchen Hoyle: Well then in order to get that diagnosis, we can say, okay, well, so the way this usually plays out for me is that I will often start with, okay, well, let me see can treat your ADHD, which usually make, they make criteria for. Do I think that there are kids out there who have just a, just disability, like a learning disability and no ADHD probably, but the way that this usually plays out again is that they recognize their limitations as far as how well they can pay attention to what is being presented to them in class, which to them, if they do have a concomitant like learning disability is difficult. What winds up happening is we manage their ADHD. And if we're still having trouble with academic performance in a child who is bright and we know like it's not a developmental issue as far as like their cognitive. Right.

So then we typically will then turn our attention towards what we call either psychoeducational testing or neurocognitive testing. Those are different tests the psychologists do. Typically there's words are used interchangeably. There's a little bit of difference between the two of them, but typically what that includes is that the psychologist is going to see them, meet with them and do like testing that often takes several hours to complete. And so they're meeting with them one on one, usually in the morning for a couple of hours.

It takes a couple of days to do this because you want to, you know, do it for a couple of hours in the morning, then take a break and come back the next day and finish. But what they're looking at is typically IQ, so what their cognitive potential is, and then their achievement, especially in reading. So they're looking at where they are as far as their grade level of achievement in reading. So we can get numbers on both of those things. Then they're looking at specific language skills that can determine whether they meet the criteria for a diagnosis of dyslexia.

And there's lots of different, like, sort of standards, psychological tests that they use to try determine that, and those are often based on percentiles. So they'll say, This child has this skill at this percentile level, for like if you take 100 kids and they're at the third percentile, well then that tells you that they're kind of off of the belt. A lot of times what I will get back from the psychologist is multiple page reports. And so parents who have seen these, there are lots of test scores in there. And then there'll be a narrative that will say, you know, that total of these test scores is consistent with a diagnosis of dyslexia and sometimes other learning disabilities as well.

So, talked about dysgraphia and dyscalculia. All of those can be in the mix of things that can be seen on these neurocognitive or psych, psychoeducational tests. And so that is a separate thing. Now, the way that this works a lot of times is that you can imagine that there's lots and lots of kids in school systems who need this kind of evaluation and the resources available are not adequate, really. I mean, that's, you know, that's true for most places.

And so, and so it takes a long time for that to happen. And in the meantime, a lot of times they're getting some, you know, additional help, but it's not in a formalized way. And so eventually we're able to get the school psychologist to do the testing and we can get this information and then that can turn into, you know, more specific support for them and in their classroom setting. Also, lot of times I'll have parents who will hire a psychologist to do this testing for them. Typically it's not covered by insurance.

It's an out of pocket expense. But it is often worth it to get a sense as to like what the gaps are for that child and what we need to specifically focus on as we're working our way through their education.

Matt (host): And that's something we're going to get into in our next episode. We're going to talk about what to do when, once dyslexia is, is formally diagnosed. We're going to talk about structured literacy, important Gillingham instruction, what parents can realistically expect in the schools, which you just touched on, and then how you approach management in your clinic. And until next time, please visit our website, www.nimbleyouthpodcast.com. Find and review us on all major podcast platforms.

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