

Lauren Clouser [00:00:06]:

Welcome to the LDA podcast, a series by the Learning Disabilities Association of America. Our podcast is dedicated to exploring topics of interest to educators, individuals with learning disabilities, parents, and professionals to work towards our goal of creating a more equitable world. Hi, everyone. Welcome to the LDA podcast. I'm here today with Dr. Lauren McGrath. Dr. McGrath is an associate professor in the psychology department at the University of Denver and is also the director of the LEaRN Lab, which stands for Learning Exceptionalities and Related Neuropsychology. So Dr. McGrath, thank you so much for being here with us.

Dr. Lauren McGrath [00:00:42]:

It's great to be with you. Thanks so much.

Lauren Clouser [00:00:40]:

We're so excited to have you and to talk more about co-occurring conditions with learning disabilities. But to start off, I'd love for you to talk a little bit more about yourself and the work that you're doing at the LEaRN Lab.

Dr. Lauren McGrath [00:00:55]:

Yeah. Thanks for the opportunity. So my research lab, the LEaRN Lab, studies children with learning disabilities and especially the co-occurrence of learning disabilities with other mental health and neurodevelopmental disorders. And, we're really interested in those co-occurrences that occur, or comorbidities. And right now, we're really focusing on ADHD and anxiety as 2 of the sets of symptoms that commonly co occur with kids with learning disabilities. And what I think is so important about this work that we're doing is it aims to be a connection point between education and child psychology. And I've noticed over the years that those 2 fields, they're so so closely related, and yet they can kind of pull apart in some places where it can be hard to find shared understanding. So I think it's so important when we think about kids with learning disabilities that might have co occurring mental health challenges that there's a really rich intersection between education and child psychology where we're able to serve the needs of those kids.

Dr. Lauren McGrath [00:02:04]:

So I see myself as wearing 3 different hats that kind of facilitate that intersection between education and psychology. The first is that the research we do is right at the intersection of those 2 fields where we're trying to connect and understand why learning disabilities might co occur with mental health symptoms. The second is that I'm a licensed clinical psychologist myself, so I work primarily as a supervisor who works with students in training who are learning clinical skills to work with kids with learning disabilities who have mental health challenges. So

I'm always really excited to support families and to support training that will provide a workforce that has those skills to do the interaction between education and child psychology. And then the last role that I have is as a professor where I have the opportunity to teach graduate and undergraduate students about this relationship through my courses and how important it is that psychology and education are really in this ongoing dialogue, to facilitate this interdisciplinary connection. And so I think those 3 roles are so important, and I am really honored to be able to integrate them all for this larger goal of education in psychology, really supporting kids who have learning disabilities and mental health and other neurodevelopmental challenges.

Lauren Clouser [00:03:26]:

So, just so we have a common language, what is a comorbidity? When we talk about a comorbidity in the field of learning disabilities, what is it we're referring to, and are there some that are more common than others?

Dr. Lauren McGrath [00:03:38]:

Yeah. Thanks for the question. So comorbidity is a medical term meaning the co-occurrence of different disorders. So it's an observation that 2 or more disorders seem to co-occur in the same individual more often than expected by chance. So comorbidity is the very medical oriented term. You can also just think of it as a co-incidence of a set of symptoms that are more common than chance. So when we think about learning disabilities, it's really the observation that children with learning disabilities are more at risk for other sets of symptoms than children without learning disabilities. So some of the most common comorbidities that we think about are, first, learning disabilities tend to co-occur with other learning disabilities, so that's very, very common.

Dr. Lauren McGrath [00:04:33]:

The one that I have studied a lot over the years is the co-occurrence of learning disabilities with ADHD being one of the more common comorbidities. And then the last set is, learning disabilities with other mental health symptoms and disorders, especially anxiety, I would say, and that's something that our lab is working on now. So those tend to be the cluster of both mental health and neurodevelopmental symptoms that you think about when a child has a learning disability, and those occurrences are pretty common.

Lauren Clouser [00:05:08]:

Right. So it's important to look for those and to be aware of them. That's great.

Dr. Lauren McGrath [00:05:12]:

Yeah.

Lauren Clouser [00:05:13]:

So are there some factors that can contribute to the onset of a comorbidity?

Dr. Lauren McGrath [00:05:06]:

Yeah. This is such a hot research topic right now, so I'm going to share what's known so far, and kind of help to walk through maybe 2 explanations. Because the explanations are pretty different for different disorders so far. So, what I'll say is that this is not finished science. This is evolving as we go, so I'm gonna share what's known at this particular point. And it might be helpful to talk about the comorbidity of learning with anxiety symptoms as a first step. So let's start there. When we think about the co-occurrence of learning disabilities and anxiety symptoms, we know that kids with learning disabilities are more at risk for those anxiety symptoms. And there's some evidence that children with learning disabilities, some, but not all, it looks like the learning challenge might be a precipitating factor for some of those later anxiety symptoms.

Dr. Lauren McGrath [00:06:13]:

So why this happens, why the learning challenge might lead to later anxiety symptoms, hasn't really been well studied yet. It's just that in the samples that have been studied, you can see that early learning challenges precedes later anxiety symptoms in some samples. So we don't know exactly why, but if we kind of speculate, for me, it makes sense that having experiences of learning challenges in the classroom could lead to increased worry about academic performance. That just kind of makes sense. And then in the case of anxiety, we know that it tends to grow and expand to different domains as kids go along, so you can imagine that worries about academic performance might expand to worries about peers and what peers think about your academic performance, and then peers in other settings. So it kind of could expand in that way. So that looks like at least an explanation for some children with learning disabilities that the learning challenge could precede and maybe even precipitate later anxiety symptoms. But, again, that's true for some kids, not all kids.

Dr. Lauren McGrath [00:07:28]:

If we take something like learning disabilities and ADHD, the other most common comorbidity, a different model seems to be happening. It seems for those 2 disorders that they co occur and they influence each other a little bit over time in some of our samples, But mostly, they're proceeding pretty separately. And that it's a real distinction. What we know from the research, from what I often hear in practice, which is, well, maybe the reading difficulties are causing the ADHD. Or maybe the ADHD is causing later reading difficulties. And I want to say pretty clearly from the research, that's a little bit true, but it's not the majority of the explanation. And that's actually really, really important for treatment, which we'll talk about a little bit later, about how you approach comorbidity, what kind of treatments, and what sequence of treatments is going to

be most important. So, I wanna make it clear that for individuals with ADHD, they seem to be just kind of co occurring and going along on a pathway, that's pretty separate. And so that really means that treatment is going to have to address both as well.

Lauren Clouser [00:08:45]:

That's really interesting, and really important to know, like you said, for treatment. So thank you for sharing that. So do we know why yet? Why comorbidities are so common for individuals with LD? Is there a neuropsychological reason? Or where is the research kind of pointed to on that?

Dr. Lauren McGrath [00:09:03]:

Yeah. So I'm gonna tell you where the neuropsychology is. I'll share where the neuropsychology is now, and then maybe we can move into what this means for the intervention approach, for what we should do. So I'll just say that for the neuropsychology of comorbidities we know much, much less about this for learning and anxiety. It's something my lab and others are working on now. But let's take the comorbidity of learning disabilities and ADHD as an example to kind of understand the neuropsychology part. So the working model right now for understanding comorbidities is called the multiple factor model. It's previously been referred to as the multiple deficit model.

Dr. Lauren McGrath [00:09:53]:

I prefer the term multiple factor model, actually, because it's a little less deficit focused, and it opens our thinking to thinking about protective and promoter factors that are so, so important. But the idea in the multiple factor model is that each disorder has multiple risk and protective factors for learning disabilities and ADHD at the neuropsychological level. So learning disabilities will have a host of risk and protective factors that are combining, and ADHD will have a host of risk and protective factors that are combining. Some of these are going to overlap between learning disabilities and ADHD. Those overlapping risk factors seem to be contributing to co-occurrence or comorbidity of learning disabilities and ADHD. So that seems to be this idea of shared risk factors is the kind of leading explanation. In our research, we've had two risk factors emerge that I'm sure your audience won't be terribly surprised about from the neuropsychology. So what we see as shared risk factors between LD and ADHD are processing speed and executive functions.

Dr. Lauren McGrath [00:11:04]:

So those are two domains that seem to be correlated with both learning disabilities and ADHD, and they might explain why the 2 things overlap. So that's useful information to know from the neuropsychology, but it's very much at the basic science level here where we're trying to understand why comorbidities might occur, in the neuropsychology, with a neuropsychological explanation. But I wanna be really, really clear that the neuropsychology is a little far from the

intervention approach in what would be best for interventions at this point. So let's pivot, so that's what we know about the neuropsychology, There's some shared risk factors. What's important to know about that model is that some people over the past 10 to 20 years, the idea was maybe we could intervene on cognitive risk factors for many different learning disabilities and ADHD and improve multiple different outcomes at once. So that was a very valid scientific hypothesis to test. What has been found over time is that cognitive interventions, when kids work on cognitive interventions, they get better at the cognitive cognitive skill that they're practicing, but it doesn't seem to generalize to their reading skills or their ADHD symptoms.

Dr. Lauren McGrath [00:12:34]:

So what we call that in the research world is that there's near transfer but not far transfer. And what you're really looking for intervention is far transfer. So it's really important to know that even though the neuropsychology is pointing to shared risk factors, as an explanation for the comorbidity, that's actually not the intervention point that I would recommend and that the science would recommend. So what should we do? What is the best intervention approach then, when a child has a comorbidity? So, again, I want to take anxiety and ADHD separately. So let's start with learning disabilities and ADHD. We talked about this model where they're mostly proceeding on kind of separate tracks, maybe influencing a little bit of each other, but it's not the case that one has caused the other. What we know then is that both the learning disability and the ADHD need interventions independently and ideally simultaneously from each other. Now that's hard from lots of different barrier perspectives.

Dr. Lauren McGrath [00:13:43]:

But what I hear a lot in talking about these topics is an explanation of a kind of wait and see. So maybe we should intervene on the reading and wait to see what happens on the ADHD symptoms, or maybe we should intervene with the ADHD symptoms and wait to see what happens on the reading symptoms. And what we know pretty clearly from the research is that that's not the most effective approach. So we have a really well done study from 2017, it was from Leanne Tamm's group, and it's an intervention study of kids with comorbidity. And in this case, the LD was a reading disability, and they had ADHD as well. And they found so clearly that if you intervene on reading, the reading skills improve, great news, but the ADHD symptoms don't. And if you intervene on ADHD, the ADHD symptoms improve, great news, but the reading symptoms don't.

Dr. Lauren McGrath [00:14:42]:

So the only kids that got improvement on both sets of symptoms were the ones that were getting treatment for both sets of symptoms. So I think that's so, so important, because I think there's ongoing speculation that maybe we should do one first and not the other. Now I understand feasibility wise that sometimes things have to be sequenced, and there are barriers of access to care that are real hindrances. But I don't want the wait and see idea to be the first

line problem solving because it seems to be not the most effective approach. So that's for learning disabilities and ADHD. When we think about learning disabilities and anxiety, the model that I presented to you is that in some cases, kids with learning disabilities, the learning weakness is the precipitating factor. So if that's the case and that's true then it is the case that perhaps if we catch kids early enough with the learning challenge and are able to support that learning challenge, that you might prevent later symptoms.

Dr. Lauren McGrath [00:15:45]:

That's a possibility. That's a wonderful, hopeful, possibility. But once a child is presenting with learning disabilities and anxiety symptoms, we're in the same situation that we are with disabilities and ADHD that actually both sets of symptoms are going to need their own intervention approach. So that's the case because it looks like anxiety without treatment tends to expand, on its own, just as we talked about. So you really have to address both the learning needs and the anxiety symptoms simultaneously. And, again, the wait and see kind of approach seems to be less effective in that case, so the good news is that we have good treatments for all of these things, for learning disabilities, ADHD, and anxiety. It's the sequencing and getting access to care part of the barriers that we often have to problem solve.

Lauren Clouser [00:16:45]:

Definitely. That makes a lot of sense. So how can a comorbid condition, either ADHD, anxiety, how can those further influence academic and functional performance for people who already have a learning disability?

Dr. Lauren McGrath [00:16:57]:

Yeah. So, again, I'm going to use an example. This is a really active, active area of research. I'll say that first, I just want to affirm the part of your question, which is how can a comorbid condition influence academic and functional performance. We know from the research that it does, that kids with comorbidities do have more impact on academic and functional performance. So that's why this topic is so near to our research and why we're focusing on it so much. So I'm going to take the case of anxiety in this example. So one of the consequences of anxiety is that we start avoiding things that we fear or worry about. And that's just a natural course of anxiety.

Dr. Lauren McGrath [00:17:45]:

It's just a natural course of anxiety. It's a really natural reaction. So let's take a child with a learning disability in reading who's worried about their performance. They may be concerned about the read alouds that happen in school. They feel concerned about reading in front of other people. They might start to avoid reading at home and at school because it's anxiety provoking. It's worrisome, and avoidance is that natural consequence. So that same child could be in

ongoing intervention to work on those reading skills, which is wonderful.

Dr. Lauren McGrath [00:18:23]:

But in the outside time of the intervention at school and at home, they might be practicing less because they're feeling that avoidance and turned up feeling about this skill. So what you would see is that they're getting less practice in the reading, and we would really want practice for the reading. So you can see ways in which the mental health symptom is intersecting right in with the intervention in ways that can hinder the progress. Now those skills, the good news is, those skills can absolutely be supported. And learning coping skills and being able to approach, that is absolutely something that's in our child psychology toolbox that we can support. But you can see how it could play out over time, where it would impact academic performance for a child. I think there's a more socioemotional part to just take into account too, that we know kids with learning disabilities are working so, so hard in the classroom. To be putting in so much effort and then not succeeding like you hoped is a really hard thing to show up for every day.

Dr. Lauren McGrath [00:19:36]:

And so I think the kind of empathy and understanding that we can bring to this is also in recognizing the importance of mental health symptoms is how hard it is and how important it is that we could celebrate effort and growth and staying engaged with difficult tasks, because it's enormously difficult. So just knowing that kids might be experiencing anxiety symptoms and those could be underground and maybe even not visible, I think we as professionals that are working with kids, just bringing that awareness to our work can be really, really important as well.

Lauren Clouser [00:20:18]:

Definitely. Well and that leads in perfectly to how can we build resilience in children with LD? Like you just said, a lot of the time they're putting in a lot of effort, sometimes even more effort than their peers, and they're just not seeing the results. How can we help them to be resilient, during a really hard circumstance?

Dr. Lauren McGrath [00:20:37]:

Yeah. I really appreciate this question, and it's so easy to focus on a kind of deficit model, a more medical model. And so I just really appreciate this important point to focus on, where are the strengths here and how can we build resilience, because it's so, so important. So the first thing is really finding and supporting strengths for kids. So I think it's so important that we're not prescribing strengths for kids too. So sometimes there can be the, well, you might have a learning disability in reading. Therefore, you are really good at this other thing. And it has a prescriptive quality to it. And I think the joy of finding individual differences and finding those strengths for kids and helping them discover them, is really, really important.

Dr. Lauren McGrath [00:21:28]:

And we know it's so critical for our kids where parts of school are going to be really, really difficult. So it's really that journey of helping them find the things that they love and the strengths that are maybe outside the area of weakness that they're experiencing. The second thing that comes to mind for me is really connecting to the LD community, to peer mentors, to the larger neurodiversity movement in our country as a way to build some of those resilient skills. So I work with students more at the high school and the college level, and what I see is so important is students stepping into advocacy roles and stepping into mentorship for younger students themselves, the rewarding experience that has been for them. So I just see this cycle of students wanting the experience of younger students to be better and offering that peer mentorship, and the younger students coming up really benefiting from that. So those kinds of programs, I know, there's different local chapters all over the place, but getting connected to that, I have seen be so, so wonderful for students. So I think about that as a support for students and their families. And then the last point I wanted to make is about building self advocacy.

Dr. Lauren McGrath [00:22:49]:

So, again, in working more with high school and college students, what I see sometimes is internalized messages of maybe things like using my accommodations or my IEP supports. It might be unfair or it might be perceived as cheating, like internalizing those messages that they've received from the outside world. And, one piece of data that I actually gathered from college students is I asked them, has anyone ever explained to you how your accommodations fit your learning needs? So in a sample of students, there's about a 100 students, And they were college students, and they were receiving accommodations. 47% of the students said yes, someone has explained my accommodations and how they fit my learning needs, but 53% of the sample said no, or I'm not sure about why how their accommodations fit their particular learning needs. And that was really striking to me because it seems so important for students to be developing a sense of their own strengths and weaknesses and how these accommodations really support them and work for them. So being able to practice those self advocacy conversations, I think, in some of later middle school, early high school. You know, things like, I've learned that x really works for me.

Dr. Lauren McGrath [00:24:15]:

What recommendations do you, teacher, might have to align with our class goals? Sort of like practicing those pieces to really improve how students are using these accommodations that are really important and understanding how they're going to fit for supporting their own success. So I think about that self advocacy piece, and then I pair that, though, with the systems level changes that also support resilience. So while I am saying that self efficacy is important, I also don't want to neglect the fact that the systems around kids also need to be open to having those



conversations and have more understanding themselves about neurodiversity and learning differences. And so that involves lots of big, big changes that we probably don't have a ton of time to talk about today, but I don't want to put all the burden on individuals themselves. I also think it's so important that we're thinking about how our systems are prepared to engage with the self advocacy conversation.

Lauren Clouser [00:25:20]:

It's a really good point. So how can we...we touched on this a little bit, but how can we take what we know about the neuroscience of comorbidities and apply it more into educational practices?

Dr. Lauren McGrath [00:25:33]:

I think for this, I just want to amplify some of the themes from what we've talked about. And right now, the most important message I think I can give is that when kids with learning disabilities have comorbidities, we need to intervene on the symptoms that are part of that comorbidity, both at the same time in the ideal circumstance. So this might mean interventions for reading while co-occurring support for anxiety might be happening, perhaps in the context of that reading intervention, but perhaps with a school social worker, perhaps with a mental health professional. Same thing for ADHD. And, again, I realize there are incredible financial, access, and time barriers that are going to get in the way for this for families. I think I just don't want to amplify the main problem solving with the wait and see kind of approach, which we see as not being totally effective.

Lauren Clouser [00:26:30]:

Well and then just one last note to wrap up on. What should parents and educators know about comorbidities? This can either be something that you might want to reiterate or something entirely new. But what would you want them to take away from this conversation?

Dr. Lauren McGrath [00:26:45]:

Yeah. I think the first thing is that comorbidities are really common and expected. It's not a failure in any way that a comorbidity has arisen. It's part of the developmental trajectory. For many, many kids with LDs, that comorbidity will occur. So I think sometimes we think about comorbidities as another layer of complexity, whereas, it is, but it's also the most common developmental trajectory for kids. So I think knowing that also helps to contextualize what comorbidity is. It's common, and it's expected. The next theme that I've been mentioning many, many times is that whatever the comorbidities are, they both or all need to be intervened on.

Dr. Lauren McGrath [00:27:46]:

And I think the last thing I'll want people to know is a resource that I think can be really helpful to

parents and educators. So the LDA audience will be really familiar with evidence based instructional approaches and how important that is. What I want to draw a parallel with is how important evidence based mental health approaches are as well. So just as there's evidence based and nonevidence based instructional practices, evidence based and nonevidence based practices in child clinical psychology. And what we're looking for is the most efficient, well researched, mental health approaches that are going to get quick symptom improvement. And this is so important because I am saying sometimes these treatments are going to be simultaneous. So they need to be quick and efficient to make the most possible gains. So there is a wonderful resource that is available from the Society of Clinical Child and Adolescent Psychology.

Dr. Lauren McGrath [00:28:50]:

It's called [effectivechildtherapy.org](http://effectivechildtherapy.org). And that's the website, [effectivechildtherapy.org](http://effectivechildtherapy.org). And what it is, you can put in the set of symptoms that your kid is exhibiting and get a sense of what the science is in a really nicely summarized approach. And what I would recommend for families that might be seeking a mental health provider is you can use that information to interview people that you might be interested in seeing. You can ask what's your familiarity, is this an approach you use? What's your perspective on it? To really kind of engage around what kind of services you might get. And psychologists are really open to these conversations and willing to have them and share their approaches. And so I just encourage people to take the same evidence based approach on the mental health front that they would take in the instructional side, and that will support the most efficient gain possible. And it's my recommendation on the mental health side.

Lauren Clouser [00:29:57]:

I'm so glad you brought that up. That sounds just like a wealth of empowering knowledge for parents. So thank you. We'll include that link in the show notes as well, and we'll also include a link to the LEaRN Lab so we can see all the exciting things coming out of there. Dr. McGrath, thank you so much for taking time to share your expertise with us today, and we're so glad to have you on the podcast.

Dr. Lauren McGrath [00:30:19]:

It's really my pleasure. Thanks for the opportunity.

Lauren Clouser [00:30:30]:

Thank you for listening to the LDA podcast. To learn more about LDA and to get valuable resources and support, visit [Idaamerica.org](http://Idaamerica.org).