## THERE IS CLEAR DISCONNECT BETWEEN WHAT SPEECH THERAPISTS THINK FAMILIES WANT AND WHAT FAMILIES ACTUALLY WANT AN INTERVIEW WITH PROFESSOR SEAN M REDMOND FROM THE UNIVERSITY OF UTAH

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Překlad tohoto článku do češtiny si můžete přečíst zde.



Sean M Redmond

Sean M Redmond is a certified speech--language pathologist and professor of Communication Sciences and Disorders. He teaches and conducts research in the Department of Communication Sciences and Disorders at the University of Utah on language development, socioemotional development, and differential assessment and presents his work regularly at national and international conferences. Dr. Redmond has published over 45 peer reviewed articles as well as book chapters on these topics. His scholarship has been funded by the National Institutes of Health. He has also served as Editor in Chief for the Journal of Speech, Language and Hearing Research, and Associate Editor for Language, Speech, and Hearing Services in Schools. One focus of his research has been to provide information on the nature and course of communication disorders across different clinical populations: specific language impairment, ADHD, cerebral palsy, hearing impairment, vocal nodules, HIV and CMV. A complementary research focus has attempted to untangle the relationship between primary communication disorders and the emergence of secondary socio-emotional difficulties.

Thank you very much for taking the time to be interviewed for our Journal. You came to the Czech Republic to collaborate on a project with Professor Filip Smolík. We have the opportunity to meet in person, which would not have otherwise been easy, so our thanks for this interview also go to Professor Smolík.

First of all, let's go to a slightly wider field of your research interest, to neurodevelopmental disorders - specifically to ADHD. The age of diagnosing an individual with ADHD has been raised. And now, according to the DSM, adults can also be diagnosed with ADHD. Those who are diagnosed later are, for example, children and adults with higher IQ scores and/or girls and women. Can you explain the reasons for this? Both of those issues or aspects apply to the changes in who's getting diagnosed. Relative to the past, people had some assumptions that ADHD was largely a male problem or something that kids have but then grow out of. And so if you work with those assumptions, you're going to basically confirm your bias. Which is what more current research has done, sort of expanded, and the criteria were very male-centric. To be honest, this is true for both ADHD and autism. And in both of those groups, there's been an appreciation that girls actually have different symptoms and they compensate in different ways than boys do. And so that's been part of what's been increasing the rates of diagnoses. ADHD is an interesting condition, because there's always the concern

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in the background that we might be over-medicating children. And when we see the prevalence rates or the diagnostic rates increase, that confirms our suspicion that people are over-medicating. But it is the case that some of the criteria have been adjusted and expanded to include more varieties. And I think another assumption that people had was that if you had ADHD, you weren't as smart as people who didn't have ADHD. And so there's a bias thinking that those two things cannot exist simultaneously, a high IQ and ADHD. And again, if you are smart, you might be able to figure out ways to compensate, mask your problems. When it starts to interfere with that person's capacity to meet their life goals is when an adult would seek out a diagnosis of ADHD. And so it goes on to involve academic challenges, risky behaviors, and things like that would be what would bring someone into a diagnosis as an adult. Or challenges in the workplace...

ADHD is a lifespan condition. This statement becomes more and more accepted not only by clinicians, but also by caregivers and by parents. With developmental language disorders, the situation is still a bit different. Although it is, as well as ADHD, a neurodevelopmental disorder, people - and not only parents but also some clinicians - believe that, with appropriate care and training, the DLD can go away. Yet there is clear evidence of DLD persisting into adolescence and young adulthood. Why is it still so? Why do even clinicians believe that the development of language will continue and that children with developmental language disorders will catch up?

One assumption that might encourage people to think of it as a temporary delay or something like that, is if you don't appreciate that language development is across a lifespan, that you never stop developing language. And so if your threshold is, can this child hold a conversation? If they can, then they can't have a language disorder. That's way down the developmental process. That's like an expectation of a preschooler. But for a high school student, their command of language goes into lots of other areas. And what we know about kids with developmental language disorders, who've been followed longitudinally from preschool to the end of high school, is that they are always underperforming relative to their peers. And the magnitude of their underperformance is more or less the same. They're always in the bottom percentiles relative to their age comparisons. But a twelve-year-old is a lot different than a preschooler. If you have a vision of what a language disorder looks like and it includes challenges in the conversational domain, that won't manifest in an older student, but that older student is going to have problems with reading and reading comprehension and writing and using language in the workplace. So the challenges are still there. They just change, because the expectations of language ability in different stages of our lives change as well. There is something that's loaded in the term 'developmental language'. Just the developmental part of the expression encourages people to think of it as temporary. None of the neurodevelopmental conditions are temporary - autism, ADHD...

## But somehow it's easier for parents to accept this in ADHD than in a developmental language disorder. They somehow think the child will catch up...

The idea of catching up is actually interesting, if you think about it. The child starts off slow. They're slow to talk. And logically, in order for someone to catch up, they have to go through a phase of development where they're developing faster than normal, otherwise they'll never catch up. Now, there are kids who are late talkers whose early profile suggests a delay, and they do catch up, but we have no idea what's behind that. How do they catch up? How do they go through a period of fast development and then their body says, okay, we're where we need to be, we can stop, instead of just zooming through for the rest of their lives at this accelerated rate. So, there's a lot of really interesting questions that we don't have answers to. And I think it's frustrating for parents that we don't have the answers. We can't say with certainty, especially in an individual case, what this child's outcomes are going to be. They're very young and parents are very concerned about what the prognosis is and what life is going to look like and what kinds of challenges are ahead. And I wish we had a crystal ball where we can see the future, but we're not there yet.

Concerning the therapy of speech and language disorders, we still don't know much about what concepts are really proven evidence and what is really a somewhat useless path that when you stimulate this, the child will develop with or without you and you are just wasting your time. What are the already proven language skills that are prone to be therapeutically changed? I mean, we know about phonological skills. It's proven that they are sensitive to therapy. What other fields of language can be therapeutically targeted and should be regarded as useful for somehow evidence-based therapy in our clinical practice?

You're asking the million-dollar question. Multimillion-dollar question! There is robust evidence in our literature to suggest that if you apply a variety of techniques, you can improve children's morphological skills and grammatical skills. What we don't have present in the literature is a study that showed that we were able to cure the problem. You do not have something like that with speech sound disorders where you're able to show that the child is now performing within normal limits. The language problems are more intractable than the speech problems. It could be a number of things. It could be that we haven't stumbled upon the right strategies to do this. It could be that language development is something that goes back to your biological premise. Maybe it's just those disorders are more intractable because they have a stronger biological basis than some of these other conditions. And that could be part of the story, or it could be that because language development is a lifelong process. We're giving ourselves a challenge to improve this situation, and the goals keep moving. Whereas, in speech, there's a particular phase in your development where you're supposed to have all your phonemes, or you're not normal anymore. And it's an easier goal to hit. Language is a big idea. It includes more things than phonology does. It overlaps with reading. It overlaps with other skills, academic skills that children are supposed to have. And it does seem to be the case that to get things to move takes a bigger dose in language. So that's a good question. I wish I had a better answer, but thank you.

In one of your articles, you discuss the results of short conversational language sample analysis. You mention there the use of what is called the 'subordination index'. Can vou explain to our readers what the subordination index means and why it is so important in assessing the conversational language sample?

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The subordination index is a measure that's calculated automatically, using the particular program that we used in that study. The systematic analysis of language transcripts was developed at the University of Wisconsin, and it's a nice tool for speech pathologists, because it still takes time to collect and transcribe a language sample. But once it's transcribed, the program will do these automated analyses. The subordination index is keeping track of how many subordinate clauses are within the child's utterances. It's an average of how many sentences they produce which have more than one clause in them. It's been useful, and people often use it with older children, because that's a place where you can see kids with language disorders falling behind. They might be doing reasonably well with the production of basic sentences.

The motivation for that particular study, for that paper, was to encourage people to do this more often, because, as you can imagine, it's pretty labor-intensive. It takes a lot of time to do this. In that particular study, we were asking the question, could you get good quality information with a shorter sample? The guideline that we teach students is you need samples of 100 utterances, and the motivation for 100 utterances is weak because I think it's there because it's easy to divide by 100. More than anything else, it hasn't really been subjected to rigorous testing, whether or not you really need that many. In this study, what we were playing around with was the idea that, well, which of these measures do you really need 100 utterances for? And one of our conclusions was that you can get away with about half as much as what's been conventionally suggested, which is good news, but it may not be enough good news for speech pathologists to do it more routinely. The language sample analyses are very helpful in situations where you have kids who are very difficult to assess. They may not be able to complete the tests for a variety of reasons. But when you collect a natural conversational sample and you apply a set of well-regarded metrics, you can identify

the presence of a language impairment. A lot of the measures have norms attached to them, so you can use them in the same way as you do a standardized test. You could just say, here's a child whose mean length of utterance, which is average sentence length, is one standard deviation or two standard deviations below where it's supposed to be. And kids like to do this. Most kids don't even notice you're assessing them when you're doing a conversational sample. So that's nice.

You mentioned in your article that a 10-minute interview is sensitive enough to detect language difficulties. May I ask you: are the questions that the children are asked always the same? I mean, the prompting conversational questions...

So, yes, in that particular study, it wasn't an interview. There wasn't a prepared set of questions. There were play materials, and those were standardized, and we trained clinicians to be more active participants in conversations. So one of the things that happens when you ask kids a lot of questions is they answer with very short answers. But if you are playing with a child and you say 'I wonder where this goes?' or 'I wonder which car is broken?', you start to encourage the child to produce sort of natural play conversational contributions. We actually train clinicians to avoid using questions. So the playable interaction would be comments. It's like improvisational theater when it works. If both people in the exercise agree to take what the other person just said and to extend it to something new. And it's a nice, non-invasive procedure. And there are techniques that are also used for interventional purposes to encourage kids to produce particular forms that we're interested in. You can avoid asking questions if you switch into things like, 'I wonder if this character is happy?' or something like that.

The topic of screening for language disorders in the population of preschool children is currently being widely discussed in our professional community. What screening tools would you suggest to us?

Wow, that's a big question. One question you have to answer is, what kind of language disorder do you want to catch? Because that's going to determine whether your screening tool is calibrated for what you want to identify as having a language

disorder. We've been talking about this quite a bit during my visit here in Czech Republic. One definition of a language disorder you might entertain is high rates of parental concern. And so, then before you evaluate your screening tool, you would want to identify a group of people whose parents have said, 'this child is struggling in communication. And then you have a group of kids who don't have that. Then you can see: is my screening tool putting the kids in the right categories? There are limitations with using parental reporters, and you might decide, 'I want a more objective measure'. And then you have to answer: 'well, what are my choices when it comes to objective measures? Which ones are established as having high levels of validity and reliability?' Another way to work around these things is to say, 'oh, well, there are kids who are getting services already. And so socially we've already said these are kids with language disorders. We'll use that as our criteria for language disorders and see if our screener puts the kids into the right groups'. You could also say, 'I want to have everything. I want to require that to be in this group'. You have to have a parental concern, receiving services and a low test score, and you could calibrate things that way. So that would be the first thing you would have to decide, you have to figure out where you're trying to go with this. Then you have to think about, 'okay, who's going to do the screening and how? What's the skill set that's required for someone to do that? Is this something that a parent can do? Is this something a pediatrician can do? Is this something that a teacher could do? Or is it something that really requires a speech language pathologist to do, because it's requiring some judgments that just aren't part of everyday life for folks. And one of the measures that Professor Smolik and I have been interested in for a lot of reasons is a task that is pretty easy for lots of people to administer, which is sentence recall. And we've been exploring the possibility in Utah of having paraprofessional teacher aides administer our protocol. We got some resistance from the focus groups that had individuals who were speech language pathologists, because some speech language pathologists felt that this was inappropriate, that it was really something that 'I should do as a speech language pathologist, and not a paraprofessional'. And if you decide that that's the way you want to go, then you have to realize that that's a commitment

of your resources. That may not be necessary if you allow other people to do the screenings. The other issue that you might want to consider is, 'do I want my screening to be sensitive to different kinds of language disorders or just language disorders generally? Do I want it to be capable of differentiating between autism and specific language impairment or ADHD?' That doesn't matter. I just want to find out about people who have problems. And then the reality of screening is that you're always going to have quite a few false positives, and you might decide, 'what is my threshold for how many false positives are going to be worth our while to do this?'

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## We know from the data from researchers that there is high specificity and sensitivity and less false positivity in the performance of 'sentence repeating' tasks. Is that so?

Yes. This is one of the most sensitive tools, with not too many false positives. So that's very helpful. There are other measures, but they require a little bit more expertise. So non-word repetition is another one that people have used, but you have to know how to transcribe phonetically to do that.

My last question is, if there was only one book or article published in the past ten years that you could recommend to our colleagues for a better understanding of the phenomenon of neurodevelopmental disorders, what book or article would it be?

So, I could choose an article that I feel does a good job of making the case for increased advocacy. And if I was to go that route, Karla McGregor did a paper on how we fail children with developmental language disorders, and it does a very good job of laying out, for a variety of reasons, why speech language pathologists have been coming up short in serving this group. One aspect that she highlights is a reluctance among speech language pathologists to tell families, 'Your child has a language disorder'. And that I think is motivated because clinicians think that families can't handle it, that it's too stigmatizing, it's too upsetting for families to get that information. But it seems to be the case that, from the family's perspective, the exact opposite is true. Not being given a clear signal. Not

being given a clear signal for why my child is struggling causes harm, and one of the harms it causes is the perception of our field that we don't know what we're talking about. So, I brought my child to a specialist in language development, and they won't tell me what's wrong. They say, 'oh, well, we can start therapy next week, and I'll work on this, this and this'. But they never use helpful labels, at least in the United States, there's a general reluctance to use diagnostic terms. They're like taboo. And when we've done focus groups with parents, they cry, they get physically shaken, talking about how frustrated they are that 'nobody will tell me what's wrong with my child'. That's a clear disconnect between what speech therapists think families want and what families actually want. And that's laid out nicely there in Dr. McGregor's article.

Thank you, that's probably what most of us need to know.

Thank you very much for your kind responses and for your time.