LSHSS

Introduction

Best Practice for Developmental Stuttering: Balancing Evidence and Expertise

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Purpose: Best practice for developmental stuttering remains a topic of debate. In the clinical forum following this introduction,

tuttering is a multifactorial disorder characterized by atypical disruptions in the forward flow of speech. Among the (at least) 5% of young children who start to stutter, 70%-80% will recover naturally (i.e., stop stuttering without formal treatment; e.g., Yairi & Ambrose, 2005). For the remaining 20%-30% who continue to stutter, persistent stuttering can lead to significant negative academic, emotional, social, and vocational consequences (e.g., Craig, Blumgart, & Tran, 2009; Ezrati-Vinacour, Platzky, & Yairi, 2001; Langevin, Packman, & Onslow, 2009, 2010; Yaruss & Quesal, 2004). More specifically, school-aged children who stutter are at greater risk of being rejected socially by their peers, they are bullied and teased more often, and they are less likely to be rated as popular by their peers (Blood & Blood, 2007; Davis, Howell, & Cook, 2002; Langevin, Kleitman, Packman, & Onslow, 2009; Schlagheck, Gabel, & Hughes, 2009). In addition, children who stutter more frequently demonstrate communication apprehension and rate themselves as poor communicators (Blood, Blood, Tellis, & Gabel, 2001). Given the documented adverse long-term consequences of stuttering—and that predicting whether a *particular* child will recover without intervention is not yet possibleearly intervention is considered best practice. However, the efficacy of intervention approaches for early childhood stuttering warrants further investigation.

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four fluency experts balance the evidence and expertise to describe their approach to assessment and treatment.

Empirical investigations of stuttering treatment have largely focused on two differing approaches: fluency shaping and stuttering modification. Fluency shaping views stuttering as a learned behavior and utilizes operant conditioning practices aimed at reinforcing fluency and eliminating stuttering through reinforcement and correction (e.g., O'Brian et al., 2013; Onslow, Andrews, & Lincoln, 1994). Stuttering modification moves beyond an exclusive focus on reducing stuttered speech to account for the impact of stuttering on the family as a whole, the heterogeneity of stuttering, negative perceptions and feelings related to stuttering, and the diversity of interactions between parents and their children (e.g., Hill & Gregory, 2003; Millard, Nicholas, & Cook, 2008; Richels & Conture, 2007; Rustin, Botterill, & Kelman, 1996; Starkweather & Gottwald, 1990; Yaruss, Coleman, & Hammer, 2006). Central to such family-focused approaches is the consideration of the potential quality-of-life implications for those children whose stuttering persists, as well as the immediate social-emotional difficulties stuttering poses for parents and children until it remits.

Researchers and clinicians are frustrated by the lack of well-controlled outcome studies examining and contrasting the effectiveness of various stuttering interventions. The few comparison studies of fluency shaping versus stuttering modification reveal that reductions in stuttering occur more rapidly with treatment than expected with natural recovery, but the overall success rates do not appear to be significantly greater for any single approach (e.g., de Sonneville-Koedoot, Stolk, Rietveld, & Franken, 2015; Franken, Kielstra-Van der Schalk, & Boelens, 2005). These results have been interpreted to suggest the approaches work equally well, with some researchers encouraging clinicians to select the approach that, based on their clinical judgment, is best suited to the individual child, with the assurance that either approach should lead to virtually

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identical outcomes (Franken, de Sonneville-Koedoot, Stolk, Rietveld, & Bouwmans-Frijters, 2015). However, this interpretation may be problematic considering that the modest main effects relative to natural recovery suggest substantial variability in treatment response and may even suggest that neither approach yields meaningful outcomes (Bergþórsdóttir & Ingham, 2017).

Alternatively, there may be a common factor or set of factors that moderate the remarkably similar findings across these two distinct approaches (Wampold, 2015). For example, the therapeutic alliance has been shown to be the best predictor of successful outcomes for many behavioral interventions. Perhaps this is also the case with stuttering, where the strength of the relationship between the clinician and the individual who stutters and their family might be the strongest indicator of change, regardless of the approach. The one-on-one time spent with parents, parent response latency, and a host of other factors that are present in both approaches may be the "common factor" yielding comparable outcomes, but previous studies did not account for these possibilities.

As practicing clinicians navigate best practice for children who stutter without significant guidance from the literature, many report that they rely solely on their clinical expertise. Unfortunately, relying only on experience increases the potential for cognitive bias. For example, if we expect a treatment to work, do those expectations influence our interpretation of the data? Moreover, if we have observed positive effects of that approach with many consecutive clients, does that compromise our ability to observe contraindicative findings? Finally, when deciding which treatment to select, we focus on what works for most but spend minimal time analyzing the unique factors of those clients for whom the treatment does not work. Perhaps, we should shift our research focus across the distinct approaches toward those individuals who do not demonstrate the expected outcomes.

Evidence-based practice dictates that clinicians integrate the latest scientific evidence with their clinical expertise and the values of the family into the clinical decision-making process. The present clinical forum is intended to show how four fluency experts do just that. Both the similarities and the differences across these discussions demonstrate that there is no universally accepted intervention for all children who stutter. Nippold (2018) and Bernstein Ratner (2018) offering unique perspectives regarding best practice for a preschooler who stutters, and Marcotte (2018) and Coleman (2018) provide the distinct ways in which they would address an adolescent who stutters. All four authors are thoughtful in their approaches, candid in their navigation of the complexities, and should be commended for their willingness to expose the vulnerabilities in their selection and implementation of the treatments described.

Finally, as is noted by each author across each of these two debates, there are pros and cons with all approaches. As a result, instead of merely selecting which approach to take, clinical decision making routinely involves integrating aspects of various approaches based on the specific needs of the individual and their family. In addition to drawing on their experiences, the fours authors offer evidence to support their perspectives, with the goal to facilitate muchneeded discussion and understanding of the diversity in treatment approaches. Readers are invited to weigh the evidence and decide for themselves how they would proceed.

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