

Letter to the Editor

Stuttering in School-Age Children: A Comprehensive Approach to Treatment

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Purpose: This letter, prepared through a close collaboration between the authors and more than 100 colleagues, responds to a paper by the editor of *Language, Speech, and Hearing Services in Schools* that highlighted the need for research on treatment for stuttering in school-age children.

Method: Our response addresses 3 themes: First, we offer agreement with the editor's call for research because more evidence about treatment for children who stutter is certainly needed. Second, we provide an overview of recent literature, demonstrating that the majority of current treatments include strategies for helping children improve speech fluency *in addition to* helping them increase acceptance of their stuttering and diminish the negative consequences of the disorder. Third, we present several strategies designed to help clinicians respond to the individual needs of children

who stutter in a data-based, comprehensive manner that focuses on minimizing the adverse impact of stuttering on children's educational endeavors, and on their lives as a whole.

Conclusion: Much has been learned about the factors that contribute to the successful treatment of stuttering in school-age children, and evidence will continue to accumulate. Meanwhile, speech-language pathologists can help children increase their fluency while simultaneously minimizing the adverse impact of their speaking difficulties and helping them improve their overall communication.

Key Words: stuttering, fluency disorders, treatment, school-age, assessment

In a recent editorial, Dr. Marilyn Nippold, editor of *Language, Speech, and Hearing Services in Schools* (LSHSS), called for more research on the treatment of stuttering in school-age children (Nippold, 2011). She presented the case of a 9-year-old boy, Ben, who was experiencing communication problems and other difficulties associated with stuttering. Ben was reported to exhibit many characteristics that are often seen in school-age children who stutter (e.g., Vanryckeghem & Brutten, 1996, 1997; Vanryckeghem, Hylebos, Brutten, & Peleman, 2001;

Yaruss & Quesal, 2010), including negative emotional reactions and avoidance of speaking situations, such as answering questions in class and interacting with peers. He was also observed to exhibit a recent increase in the severity of his observable stuttering behaviors.

Dr. Nippold's editorial described the process by which Ben's speech-language pathologist (SLP) attempted to "design and implement an individualized intervention program to help Ben establish and maintain fluency in natural speaking situations" (Nippold, 2011, p. 99). A problem presented itself, however, when the clinician discovered that very few treatments of this sort have been empirically tested in the peer-reviewed literature. Seeking guidance, the clinician contacted her former university professor, who expressed one of the major points of the article: "There is an urgent need to conduct and publish studies that examine the effectiveness of methods used to treat stuttering in school-age children" (Nippold, 2011, p. 99).

We agree that more research on treatment for school-age children who stutter is needed. A considerable body of research has shown that many SLPs are uncomfortable working with children who stutter (e.g., Brisk, Healey, & Hux, 1997; Cooper & Cooper, 1996; Kelly

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et al., 1997; Mallard & Westbrook, 1988; St. Louis & Durrenberger, 1993; Tellis, Bressler, & Emerick, 2008), and we believe that clearer empirical guidance would improve clinicians' abilities to treat stuttering. Thus, Dr. Nippold's use of her "From the Editor" column to raise awareness about this gap in our literature is welcomed and applauded.

That said, there are other statements in Dr. Nippold's editorial that concerned us, and it is mainly toward these statements that this letter is addressed. Our purposes are threefold: first, to offer support for Dr. Nippold's call for additional research; second, to raise a question about the scope of Dr. Nippold's proposed treatment research while discussing the value of a more comprehensive approach to treating school-age children who stutter; and, third, to suggest ideas about how an SLP might approach treatment for a child such as Ben. Our overarching goal is to support readers (especially school-based clinicians) in making informed, evidence-based decisions about how to help children who stutter communicate effectively while simultaneously minimizing the likelihood that stuttering will cause negative consequences in their lives.

This letter is the result of a substantive collaboration between the three primary authors and more than 100 colleagues (listed in the Acknowledgments) who contributed directly to the development of the manuscript. Our goal is to provide readers with a perspective about stuttering that is (a) consistent with common clinical practice, based on the experience of numerous clinicians and researchers with expertise in the evaluation and treatment of school-age children who stutter, and (b) reflective of the real-life experiences and needs of people who stutter. Such *expertise* and *experience*, when combined with the (admittedly inadequate) empirical *research* literature, form the three key pillars of evidence-based practice (e.g., American Speech-Language Hearing Association [ASHA], 2005; Dollaghan, 2007; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996; Straus, Richardson, Glasziou, & Haynes, 2010). Thus, our list of contributors includes *SLPs* (e.g., researchers and clinicians working in the schools and other settings, board-recognized specialists in fluency disorders, and members of ASHA's Special Interest Group for Fluency Disorders), *clinical psychologists* and *social workers, people who stutter* (several of whom are also SLPs), and individuals representing the *stuttering support* and *self-help organizations* (e.g., the Stuttering Foundation, Friends: The National Association of Young People Who Stutter, the National Stuttering Association, and the Our Time Theatre Company). We hope that the perspectives offered here will provide readers with a widely held set of viewpoints about the multifaceted nature of stuttering and about a broad-based approach to its treatment. We further hope that this will lead to the development, implementation, and analysis of comprehensive goals and treatment procedures for school-age children who stutter.

A COMPREHENSIVE, INDIVIDUALIZED APPROACH TO STUTTERING TREATMENT

Our primary concern about Dr. Nippold's editorial relates to its seemingly narrow focus on treatment aimed at "building fluent speech" (Nippold, 2011, p. 99). In her example, Dr. Nippold notes that the SLP "detected a trend in the literature toward counseling children to accept their stuttering and to learn to cope with its negative side effects *instead of* [emphasis added] working directly on the stuttered speech" (Nippold, 2011, p. 99). She further characterizes approaches that incorporate acceptance as "*throwing in the towel* on the effort to achieve fluency in school-age children" (Nippold, 2011, p. 99). The italicized portions of these two quotes highlight important issues regarding the *goals* of treatment for school-age children who stutter and the role of *acceptance* in that treatment.

The Goals of Stuttering Treatment: Acceptance Versus Fluency

Dr. Nippold presents a dichotomy between treatments that focus on increasing fluency and treatments that focus on helping people reduce negative attitudes. This distinction has been debated extensively over the years (e.g., Gregory, 1979; Starkweather, 1970; see also Bloodstein, 1993; Bloodstein & Bernstein Ratner, 2008). More recently, however, many authors have embraced the idea that stuttering is a multi-dimensional disorder (e.g., Conture, 2001; Smith & Kelly, 1997) and that people who stutter are a heterogeneous group. In this view, treatment plans should include multiple goals that can be selected for each individual's unique needs. Moreover, the level of fluency (or stuttering) a person exhibits may be only moderately related—or even unrelated—to the adverse impact he or she experiences (e.g., Beilby, Byrnes, & Yaruss, 2012; Blumgart, Tran, Yaruss, & Craig, 2012; Koedoot, Versteegh, & Yaruss, 2011). Thus, a more comprehensive approach to treatment might address increased fluency *as well as* other goals. Examples of these other goals include increasing acceptance of stuttering and of being a person who stutters, reducing secondary behaviors, minimizing avoidance, improving communication skills, increasing self-confidence, managing bullying effectively, and, ultimately, minimizing the adverse impact of stuttering on the child's life.

Addressing all of these goals may seem, at first, to be impossible for clinicians to meaningfully achieve, especially in a school setting. Fortunately, the literature contains numerous examples of comprehensive treatment approaches that address acceptance *in addition to* (rather than *instead of*) increased fluency, and this literature can provide school clinicians with needed guidance about how to implement comprehensive treatment approaches. For example, in a 1995 issue of *LSHSS* that focused on the treatment of fluency

disorders, both articles addressing school-age children included a multifactorial set of strategies for improving fluency, minimizing negative reactions to stuttering, and reducing the impact of stuttering on communication (Healey & Scott, 1995; Ramig & Bennett, 1995). In a paper that reviewed strategies for desensitization and cognitive restructuring, Murphy, Yaruss, and Quesal (2007a) stated that such techniques “can be combined with commonly applied techniques for helping children modify speech fluency and other aspects of the stuttering disorder” (p. 123). Chmela and Reardon (2001), Ramig and Dodge (2010), Reitzes (2006), and Reeves and Yaruss (2012) all provided examples of activities aimed at enhancing fluency *and* improving communication attitudes. Yaruss, Pelczarski, and Quesal (2010; see also Yaruss, 2010; Yaruss & Pelczarski, 2007) described a “comprehensive” treatment aimed at increasing fluency, reducing negative reactions by the child and people in the child’s environment, increasing functional communication abilities, and minimizing the impact of stuttering on quality of life. These recommendations were based on an adaptation of the *International Classification of Functioning, Disability, and Health* (ICF) developed by the World Health Organization (WHO, 2001) that was designed to provide clinicians with a broad-based road map for comprehensive assessment and treatment of stuttering (Yaruss & Quesal, 2004). Finally, there are many examples of “integrated” treatments for children in books and articles on stuttering (e.g., Bennett, 2006; Bloom & Cooperman, 1999; Conture, 2001; Dell, 2000; Gregory, 2003; Guitar, 2006; Kelman & Nicholas, 2008; Manning, 2010; Millard, 2011; Ramig & Bennett, 1997; Ramig & Dodge, 2010; Reitzes, 2006; Shapiro, 2011; Starkweather & Givens-Ackerman, 1997; Yairi & Seery, 2011; see also ASHA, 1995).

Such broad-based approaches to treatment are consistent with the scope of practice for SLPs as defined by ASHA (2007). Specifically, the ASHA scope of practice states that “speech-language pathologists work to improve quality of life by reducing impairments of body functions and structures, activity limitations, participation restrictions, and barriers created by contextual factors.” These terms, “impairments in body functions and structures,” “activity limitations,” “participation restrictions,” and “contextual factors” are all drawn specifically from the WHO’s ICF model mentioned above. Thus, ASHA has determined that our role as clinicians is not only to improve speech fluency; it is also to address the broader concerns that may result from difficulties with the production of fluent speech. Of course, this means that clinicians must address *more* in treatment, even though meaningfully addressing stuttering in a school setting is already sufficiently challenging. Nevertheless, we have argued that taking a comprehensive approach to stuttering treatment (i.e., one that addresses more than just the observable stuttering behaviors) ultimately results in better outcomes in terms of the child’s overall success in communication

and his or her ability to effectively cope with stuttering (Yaruss et al., 2010).

Finally, it is worth noting that a comprehensive, individualized approach to treatment can be consistent with the principles of evidence-based practice because it incorporates the clinician’s expertise and the needs and values of each client in addition to the (still developing) empirical literature. As Dr. Nippold stated, however, many such treatments have not (yet) been extensively evaluated via empirical research. Clinicians should not select a treatment just because it is found in a book or article, and expert opinion derived from clinical experience is only one part of evidence-based practice. Thus, we support Dr. Nippold’s call for further research. We would simply like to see this research encompass a broader range of approaches than just those, highlighted by Dr. Nippold, that involve “working directly on the stuttered speech.”

Moreover, we would favor a continuation of research focused on identifying the specific factors that appear to contribute to successful treatment. Many investigations in a variety of areas, including fluency disorders (e.g., Franken, Kielstra-Van der Schalk, & Boelens, 2005; Hancock & Craig, 1998; Herder, Howard, Nye, & Vanryckeghem, 2006; Huinck et al., 2006; Plexico, Manning, & DiLollo, 2010), have revealed a set of “common factors” (including therapeutic alliance, therapeutic allegiance, and clinician expertise) that explain more of the variance in successful outcomes than the specific treatment protocol that is selected (e.g., Baldwin, Wampold & Imel, 2007; Wampold, 2001). Taking too narrow a view of the therapeutic process limits the wide range of victories that can be experienced by a speaker during successful treatment—and the range of data that can be considered in treatment outcomes research in order to establish the potential value of a particular therapeutic intervention. A comprehensive approach to treatment, combined with a comprehensive approach to assessment and outcomes evaluation, yields a broader range of options, both for clinicians and for the clients with whom they work.

The Purpose and Consequences of Acceptance

Based on the comments in her editorial, it appears that Dr. Nippold views acceptance of stuttering as standing in opposition to the desire for improved fluency. Our reading of the substantial literature on acceptance (both in and out of the field of speech-language pathology) leads us to believe instead that acceptance should not be seen as a sign that a person has given up. Rather, acceptance can be viewed as just one step in a broader process that can lead to better resilience, improved regulation of emotional and cognitive reactions, better overall mental health, and improved quality of life (e.g., Plexico, Manning, & Levitt, 2009; Powers, Vörding, & Emmelkamp, 2009; Ryff, 1995; Ryff & Keyes, 1995; Starkweather & Givens-Ackerman, 1997). Such concepts are central to cognitive behavioral therapy (e.g.,

Menzies, Onslow, Packman, & O'Brian, 2009) as well as approaches such as acceptance and commitment therapy (Beilby & Byrnes, 2012; Beilby et al., 2012; Ciarrochi, Bilich, & Godsell, 2010; Fletcher & Hayes, 2005; Hayes, Luoma, Bond, Masuda, & Lillis, 2006; Orsillo & Roemer, 2007) and mindfulness (Boyle, 2011; Cheasman, 2007) as applied both within the field of fluency disorders and for other conditions. With these approaches, acceptance is not a matter of passively resigning oneself to one's problems, nor is it a sign that one is running away. It also does not mean that one approves of or is happy with one's difficulties. Instead, acceptance involves recognizing a problem for what it is, being willing to experience it, and finding newer or more adaptive ways of addressing it. Thus, acceptance should not be viewed as an *alternative* to change; it is a critical part of the process of change.

In stuttering therapy, acceptance can be defined as a therapeutic goal that is specifically aimed at helping children minimize physical tension, struggle behaviors, avoidance, and other negative experiences that may result from their attempts to "not stutter." Acceptance is rooted in an awareness of what the speaker is doing during moments of stuttering (e.g., Williams, 1957)—and in how those actions can change. Thus, acceptance can not only diminish the adverse impact of stuttering and increase the child's willingness to speak; it can also lead to reduced stuttering severity, increased fluency, and improved communication (Manning, 2010; Murphy et al., 2007a; Plexico, Manning, & DiLollo, 2005; Reeves, 2010; Van Riper, 1973). Acceptance can enhance generalization and minimize the likelihood of relapse (DiLollo, Neimeyer, & Manning, 2002). Thus, we view acceptance as a key that can open the door to a future in which children can speak freely, without concern about how listeners might react to stuttering (or any other characteristics of their speech). Of course, the efficacy of treatments that address acceptance has not yet been fully explored through empirical research, so further study is needed.

HELPING SCHOOL-AGE CHILDREN WHO STUTTER IMPROVE FLUENCY AND INCREASE ACCEPTANCE

While the field awaits additional research, clinicians are still faced with an immediate need to help the children on their caseloads. This is an admittedly difficult task, though again, there is a sizable body of literature that can help school-based clinicians develop individualized treatment plans to address the problems faced by a child who stutters. In the next part of this letter, we offer ideas about how an SLP might help a child like Ben. We recognize that many of these strategies have not yet been fully evaluated through empirical research, but, as noted above, empirical research is just one part of the overall method of evidence-based

practice. These ideas reflect the consensus opinion of many specialists and others with expertise in stuttering, such as our collaborators listed in the Acknowledgments. We present these ideas in this paper as a starting place for our own "call for treatment research" in the hopes of stimulating further study of treatment outcomes for multifactorial or comprehensive approaches to stuttering therapy.

Preliminaries to Comprehensive Stuttering Treatment

Before starting treatment, clinicians should conduct a thorough assessment of a child's stuttering behaviors and of factors such as the child's reactions to stuttering, ability to interact with others, attainment of educational objectives, communication skills, and more. This includes a determination of whether the child exhibits concomitant disorders in addition to stuttering (e.g., Arndt & Healey, 2001; Blood, Ridenour, Qualls, & Hammer, 2003; Ntourou, Conture, & Lipsey, 2011; cf. Nippold, 2012), as well as an evaluation of the adverse impact of stuttering on the child's life (e.g., Yaruss & Quesal, 2010). Such information is critical for preparing an individualized treatment plan that addresses a child's needs in a comprehensive fashion.

Next, clinicians should recognize that taking a broad-based approach to stuttering means that success cannot be measured solely in terms of fluency; it must also be defined in terms of reductions in the child's (and others') negative reactions to stuttering *and* in terms of improvements in the child's communication abilities across a range of key situations. If improved speech fluency were the sole outcome measure, then a child who reduces stuttering by substituting one word for another, or by avoiding difficult speaking situations, might be counted as being successful. Of course, a child who remains silent even when he wishes to speak, or who does not say the words he wants to say in an attempt to not stutter, should not be viewed as fluent—or as achieving his educational objectives. Indeed, it is possible that a child may stutter *more* during or after treatment than before treatment, as he learns to speak more spontaneously and to minimize avoidance behaviors that may have previously limited his communication (Manning, 1999). Helping a child say what he wants to say, regardless of whether he stutters, can improve his ability to succeed in educational and social settings, as well as in his future vocational and professional endeavors.

Finally, regardless of whether data about a particular treatment are available in the published empirical literature, it is still necessary for clinicians to collect their own data to document changes in their clients' speech and other behaviors. Therefore, as we propose specific treatment strategies in the next section, we also describe the types of data that clinicians should be prepared to collect and analyze in order to evaluate the real-world effectiveness of their intervention. Our goal in providing these recommendations is not

to increase the burden on clinicians by suggesting that they need to measure every possible aspect of the stuttering disorder. Instead, our goal is to support clinicians in following the principles of evidence-based practice by collecting the specific data they need to document and justify the treatment strategies they implement with school-age children who stutter.

Helping Ben Improve His Overall Communication

In her editorial, Dr. Nippold highlights several ways in which Ben might benefit from treatment, including (a) increasing understanding of stuttering, (b) decreasing negative reactions to stuttering (to reduce anxiety and avoidance), (c) increasing participation in educational and social activities (such as interacting with friends and giving presentations), and (d) learning strategies for minimizing bullying. As we have argued above, all of these goals may be pursued *in addition to* goals aimed at decreasing the frequency or severity of overt stuttering behaviors. Also, given the mother's concerns that Ben's future may be adversely affected by stuttering, it will also be important to help the family see that people can lead successful, fulfilling lives regardless of whether they stutter (Ahlbach & Benson, 1994; Hood, 1998; Manning, 1999, 2010; Shapiro, 2011; St. Louis, 2001). In contrast, people who experience anxiety about stuttering, who refuse to speak due to their fears of stuttering, or who engage in severe struggle behaviors in an attempt to avoid stuttering (Johnson, 1955), are far more likely to experience negative consequences in their lives (see also Douglass, 2011; Murphy, Quesal, & Gulker, 2007). Thus, greater acceptance of stuttering and improved fluency are closely related to one another.

Recognition of the interrelations between reductions in negative reactions to stuttering and improvements in speech fluency also has notable implications for helping clinicians manage the burden of treating stuttering, particularly in the school setting. Specifically, clinicians do not necessarily need to explicitly address every aspect of the stuttering disorder for all of the children on their caseloads. In a comprehensive approach to stuttering treatment, clinicians should at least *consider* the many ways in which stuttering can affect a child's life. Careful planning of therapy, taking into account each child's unique experiences with stuttering, will help clinicians address the overall stuttering disorder in an efficient and effective manner. Thus, some children will need a more direct focus on enhancing speech fluency, whereas others may need more focus on reducing negative communication attitudes, minimizing functional difficulties in communication, or educating others in the child's environment. Before implementing treatment, therefore, clinicians should conduct an appropriate, comprehensive evaluation in order to identify the specific aspects of each individual child's life that might be affected by stuttering.

Selecting Specific Treatment Goals and Strategies

Treatment should always start with the identification of specific long-term goals that follow from a comprehensive evaluation, as well as a set of short-term goals and strategies that can help children achieve those long-term goals. We cannot present all possible goals and strategies in the context of this letter. Instead, we take three statements about Ben's speech from Dr. Nippold's editorial to show how they can be used to motivate a specific set of treatment strategies aimed at improving Ben's overall communication abilities in the context of a comprehensive approach to stuttering treatment.

“Ben refuses to answer questions in class and is terrified by an upcoming assignment to deliver a 5-min expository speech” (Nippold, 2011, p. 99). It can be difficult for children who stutter to answer questions or give presentations in class, but these skills directly relate to their ability to succeed in school. Thus, one appropriate long-term functional goal is for Ben to be able to answer questions when called upon. Related to this, treatment should incorporate goals for supporting Ben's language planning during such challenging tasks, as needed (e.g., Weiss, 2004). Because these are challenging goals, the clinician can start by helping Ben select a series of intermediate goals that will help him work toward his long-term goal. For example, one short-term functional goal might be raising his hand to participate in class at least once each day. This will help Ben gain a greater sense of control over when he speaks, which can help to reduce his anxiety about talking in class. Later, Ben might work toward answering questions on pre-arranged topics with which he is relatively comfortable. Then, he can move toward answering questions whenever he is called upon. This will improve his participation in class, and the quantity and quality of this participation can be objectively measured to document his progress.

The “expository speech” mentioned by Dr. Nippold provides an excellent opportunity to help Ben accomplish the *long-term goal* of desensitizing him to fears associated with stuttering (Murphy et al., 2007a). This can be addressed through *short-term goals* such as being able to tolerate stuttering while practicing with the clinician, with others in his therapy group or from his class, or with family members. Note that the purpose of this practice is not simply to ensure that Ben can give a presentation fluently; other aspects of treatment will focus on helping him increase his fluency. This is an important point: Ben is not afraid that he will *be fluent* during the presentation; he is afraid that he will *stutter*. He therefore needs to have repeated opportunities to face the feared event (in this case, stuttering, or the risk of stuttering) in a supportive, accepting environment (e.g., Foa & Kozak, 1986). This will help Ben experience a reduction in these fears through desensitization. Pseudostuttering or voluntary disfluency (e.g., Bennett, 2006; Dell, 2000; Gregory, 2003; Grossman, 2008; Sheehan, 1970;

Van Riper, 1973) can also help speakers overcome their fears. Desensitization can increase fluency by reducing the likelihood that Ben will increase physical tension due to anxiety. Ben can also use this opportunity to tell his classmates that he stutters, which can help reduce anxiety for both the speaker and listeners (Murphy et al., 2007b). Like any other skill, this will need to be introduced gradually in therapy, for example, by systematically planning and carefully evaluating short-term and long-term goals. This can help Ben become more comfortable talking about his speech, more willing to speak (and stutter) in different ways, and, ultimately, more accepting of his stuttering. This acceptance can reduce Ben's fear of answering questions in class and increase the likelihood that he will be able to feel successful in giving his expository speech. Ben's completion of these activities can be measured through rating scales and observations by the teacher, the SLP, and Ben himself, to document his progress.

“Although Ben was once a popular playmate, he no longer spends time with his peers after school. . . this change in behavior is related to an increase in the amount of teasing and bullying that he has experienced at school” (Nippold, 2011, p. 99). Ample research has shown that SLPs can help children minimize bullying, regardless of their observable level of stuttering behaviors (Blood, Boyle, Blood, & Nalesnik, 2010; Langevin, 1997, 2000; Murphy & Quesal, 2002; Murphy et al., 2007b). For example, Ben can discuss the stuttering disorder with his peers and educate them about his speaking difficulties. Of course, talking openly about stuttering can initially be quite difficult for children, so Ben and his clinician might start with role-play activities to help Ben plan his responses to his peers. Ben can also invite friends to therapy so they can provide a base of support as he educates other classmates. Working with the teacher, Ben and his SLP can develop a classroom presentation (Murphy et al., 2007b) in which Ben can, for example, provide facts about stuttering, engage his classmates in a trivia contest about stuttering, or discuss differences between individuals in general. Ben can also learn strategies for responding directly to a bully's comments (e.g., Guitar, 2006; Murphy et al., 2007b). Together, these and other activities can help Ben and his peers see that stuttering is not something to be afraid of; it is just one of the many characteristics that make people unique. As Ben internalizes this important message, his fears about stuttering will diminish, and he will find it easier to successfully regulate and minimize his negative reactions to stuttering.

“Ben's stuttering has increased in frequency and severity, resulting in numerous emotional outbursts at home and a growing tendency to avoid speaking situations” (Nippold, 2011, p. 99). Based on what Dr. Nippold has presented in her scenario, it appears that Ben is becoming frustrated with his speaking difficulties. His desire to avoid stuttering is understandable. To minimize avoidance, the SLP can help Ben recognize that trying to hide stuttering can

actually lead to even more negative outcomes because it prevents him from saying what he wants to say. Ultimately, we want children to be able to communicate effectively regardless of whether or not they stutter. Desensitization and acceptance (combined with appropriate skills for enhancing fluency and modifying moments of stuttering) can help children minimize their desire to avoid stuttering. This, in turn, can improve generalization as the child becomes better able to face and manage his fears in a variety of real-world situations.

When people experience negative emotions, it can be helpful for them to express their feelings with people who understand the difficulties they are facing (e.g., Hayes et al., 2006). The clinician can provide this support by letting Ben know that it is acceptable to discuss stuttering openly. This can help him manage the reported “emotional outbursts” more effectively. Another way of helping children learn that stuttering does not have to have a negative effect on their lives is to introduce them to other people who stutter. Meeting people who share his communication problem can help Ben reduce his feelings of isolation, give him a safe place to express his concerns, and provide role models of people who are coping successfully with stuttering (Trichon & Tetnowski, 2011; Yaruss et al., 2002; Yaruss, Quesal, & Reeves, 2007). This can be achieved through group therapy or through self-help organizations such as Friends: The National Association of Young People Who Stutter (www.FriendsWhoStutter.org), the National Stuttering Association (www.WeStutter.org), and the Our Time theatre company (www.OurTimeStutter.org). Resources on the Stuttering Home Page (www.StutteringHomePage.com) can help students better understand stuttering, and materials from the Stuttering Foundation (www.StutteringHelp.org) can help children and their families face stuttering in a more open and accepting manner, even as they work toward improving fluency and communication. We encourage all clinicians to take advantage of the support and expertise these organizations provide (e.g., Yaruss et al., 2007).

Finally, to reduce the severity of Ben's stuttering directly, the clinician can introduce both stuttering and speech modification strategies to help Ben minimize disfluencies while decreasing his physical tension and secondary behaviors (Bothe, 2002; Williams & Dugan, 2002). Ben may find that it is easier to use such strategies when he is no longer struggling with his speech due to his fears about stuttering. Indeed, many tasks are more difficult to perform when one is feeling anxious or when one's muscles are physically tense, and speaking—or using fluency-enhancing strategies—is no exception. Thus, desensitization and acceptance of stuttering are interrelated, and reductions in the child's sensitivity can pave the way for greater success in the management of speech fluency. The relationships between these aspects of the child's experience of the stuttering disorder helps to minimize the potential burden on clinicians (and children) associated with a comprehensive approach to stuttering

therapy. The more a child can come to terms with stuttering, the easier it will be for him to manage his stuttering (and his reactions to stuttering) effectively.

Documenting Treatment Outcomes

Documenting and evaluating the effectiveness of intervention is a critical component of any clinical endeavor, particularly within the context of evidence-based practice. Regardless of the specific treatment strategy employed, clinicians should not simply “do” the therapy without evaluating whether the treatment goals are achieved. It is our field’s long history of insufficient documentation that has led to the situation, lamented by the professor in Dr. Nippold’s editorial (and by us), in which we do not have all of the evidence we need in order to evaluate our clinical methods (Bernstein Ratner, 2005). We assert that such assessment should be comprehensive, just like the treatment approach. If treatment involves more than just an increase in observable fluency, then the measurement of outcomes must include more than just an assessment of the child’s speech fluency. Clinicians should measure outcomes in all of the domains they treat to ensure that they document the breadth and depth of their intervention.

Fortunately, there are many ways that clinicians can document the results of treatment for children who stutter. Examples include various portfolio-based assessments and rating scales provided in books and manuals about stuttering treatment (e.g., Chmela & Reardon, 2001; Millard, Edwards, & Cook, 2009; Ramig & Dodge, 2010; Reeves & Yaruss, 2012); measures that examine the speaker’s ability to respond proactively to life situations through coping skills and increases in agentic behavior (e.g., Lee, Manning, & Herder, 2011); and tests or frameworks that address the broader impact of stuttering, such as the Behavior Assessment Battery (Brutten & Vanryckeghem, 2006), the Cognitive, Affective, Linguistic, Motoric, and Social (CALMS) model (Healey, Scott Trautman, & Susca, 2004), the Inventory of Life Perspectives of Stuttering (St. Louis, 2001), or the Overall Assessment of the Speaker’s Experience of Stuttering (Yaruss & Quesal, 2006, 2010).

All of these measures should be made *in addition to* more commonly used assessments of the child’s observable stuttering, such as frequency counts (e.g., Conture, 2001; Yaruss, 1998) and tests such as the Stuttering Severity Instrument (Riley, 2009) or the Test of Childhood Stuttering (Gillam, Logan, & Pearson, 2009). Thus, if a child is working on entering speaking situations that he previously avoided, the clinician should document which new speaking situations the child is able to enter. The clinician can also assess other factors, such as the child’s communication success in those situations, his emotional reactions before and after entering the situations, his use of avoidance strategies in those situations, and, of course, his fluency or speech management success in those situations. Similarly, if treatment is focused

on building skills for responding appropriately to bullying, then the clinician should measure the child’s ability to use statements that minimize bullying, as well as whether the bullying actually diminishes (e.g., Langevin, Bortnick, Hammer, & Wiebe, 1998). In this way, clinicians can document the results of their intervention in an ongoing fashion—using their own observations and data provided by their clients—and then use those results to support their implementation of comprehensive, individualized treatment plans.

While Evidence Accumulates, Clinicians Can Help School-Age Children Who Stutter

We have written this letter because we want clinicians to be aware of a broad range of approaches for helping school-age children who stutter. In particular, we wished to present a “comprehensive” approach to stuttering that focuses not only on the observable speech disfluencies, but also on the broader consequence of stuttering that a child might experience. By addressing the child’s entire experience of stuttering, clinicians can help children minimize the adverse education and social impact of the disorder while improving children’s overall communication success. As Dr. Nippold noted, there is a need for further research on these and other approaches to treating stuttering, so we wholeheartedly echo her closing statement: “New investigators. . . would be well advised to ponder the many possibilities and rewards that a career that focuses on the treatment of stuttering in school-age children can offer” (p. 101). We add to this our belief that practicing clinicians, including school-based SLPs, can and should find stuttering to be a gratifying area of clinical practice, for there are numerous resources available to increase their comfort with this population. Helping children feel more confident in saying what they want to say, supporting them as they minimize their use of avoidance and other fear-based behaviors that limit their ability to interact with other people, and guiding them as they learn to speak more easily and with less physical effort—these are rewarding accomplishments that can have a substantive, positive impact on the lives of children who stutter. We therefore encourage clinicians and researchers alike to take a broader, more comprehensive view of stuttering so they can help children achieve their greatest possible success, both in and out of therapy.

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REFERENCES

- Ahlbach, J., & Benson, V. (Eds.).** (1994). *To say what is ours*. Anaheim Hills, CA: National Stuttering Project.
- American Speech-Language-Hearing Association.** (1995, March). Guidelines for practice in stuttering treatment. *Asha*, 37 (Suppl. 14), pp. 26–35.
- American Speech-Language-Hearing Association.** (2005). *Evidence-based practice in communication disorders* [Position statement]. Available from www.asha.org/policy.
- American Speech-Language-Hearing Association.** (2007). *Scope of practice in speech-language pathology*. Available from www.asha.org/policy.
- Arndt, J., & Healey, E. C.** (2001). Concomitant disorders in school-age children who stutter. *Language, Speech, and Hearing Services in Schools*, 32, 68–78.
- Baldwin, S., Wampold, B., & Imel, Z.** (2007). Untangling the alliance-outcome correlation: Exploring the relative importance of therapist and patient variability in the alliance. *Journal of Consulting and Clinical Psychology*, 75(6), 842–852.
- Beilby, J. M., & Byrnes, M. L.** (2012). *Acceptance and commitment therapy for people who stutter*. Manuscript submitted for publication.
- Beilby, J. M., Byrnes, M. L., & Yaruss, J. S.** (2012). *Psychosocial impact of stuttering on western Australian children and adolescents*. Manuscript submitted for publication.
- Bennett, E. M.** (2006). *Working with people who stutter: A life-span approach*. Columbus, OH: Merrill Prentice Hall.
- Bernstein Ratner, N.** (2005). Evidence-based practice in stuttering: Some questions to consider. *Journal of Fluency Disorders*, 30, 163–188.
- Blood, G. W., Boyle, M. P., Blood, I. M., & Nalesnik, G. R.** (2010). Bullying in children who stutter: Speech-language pathologists' perceptions and intervention strategies. *Journal of Fluency Disorders*, 35, 92–109.
- Blood, G. W., Ridenour, V. J., Qualls, C. D., & Hammer, C. S.** (2003). Co-occurring disorders in children who stutter. *Journal of Communication Disorders*, 36, 427–448.
- Bloodstein, O.** (1993). *Stuttering: The search for a cause and cure*. Needham Heights, MA: Allyn & Bacon.
- Bloodstein, O., & Bernstein Ratner, N.** (2008). *A handbook on stuttering* (6th ed.). Clifton Park, NY: Delmar.
- Bloom, C., & Cooperman, D.** (1999). *Synergistic stuttering therapy: A holistic approach*. Woburn, MA: Butterworth-Heinemann.
- Blumgart, E., Tran, Y., Yaruss, J. S., & Craig, A.** (2012). Australian normative data for the Overall Assessment of the Speaker's Experience of Stuttering. *Journal of Fluency Disorders*, 37, 83–90.
- Bothe, A.** (2002). Speech modification approaches to stuttering treatment in schools. *Seminars in Speech and Language*, 3, 181–186.
- Boyle, M. P.** (2011). Mindfulness training in stuttering therapy: A tutorial for speech-language pathologists. *Journal of Fluency Disorders*, 36, 122–129.
- Brisk, D. J., Healey, E. C., & Hux, K. A.** (1997). Clinicians' training and confidence associated with treating school-age children who stutter: A national survey. *Language, Speech, and Hearing Services in Schools*, 28, 164–176.
- Brutten, G., & Vanryckeghem, M.** (2006). *The Behavior Assessment Battery for school-aged children who stutter*. San Diego, CA: Plural Publishers.
- Cheasman, C.** (2007, Spring). Revealing and healing—A mindfulness approach to stammering. *Speaking Out*, pp. 9–10.
- Chmela, K., & Reardon, N.** (2001). *The school-age child who stutters: Working effectively with attitudes and emotions*. Memphis, TN: Stuttering Foundation of America.
- Ciarrochi, J., Bilich, L., & Godsell, C.** (2010). Psychological flexibility as a mechanism of change in acceptance and

- commitment therapy. In R. A. Baer (Ed.), *Assessing mindfulness and acceptance processes in clients* (1st ed., pp. 51–75). Oakland, CA: New Harbinger Publications.
- Conture, E. G.** (2001). *Stuttering: Its nature, diagnosis and treatment*. Boston, MA: Allyn & Bacon.
- Cooper, E. B., & Cooper, C. S.** (1996). Clinician attitudes towards stuttering: Two decades of change. *Journal of Fluency Disorders, 21*, 119–136.
- Dell, C. W.** (2000). *Treating the school-age child who stutters* (2nd ed.). Memphis, TN: Stuttering Foundation of America.
- DiLollo, A., Neimeyer, R. A., & Manning, W. H.** (2002). A personal construct psychology view of relapse: Indications for a narrative therapy component to stuttering treatment. *Journal of Fluency Disorders, 27*, 19–42.
- Dollaghan, C. A.** (2007). *The handbook of evidence-based practice in communication disorders*. Baltimore, MD: Brookes.
- Douglass, J.** (2011). *An investigation of the transition process from covert stuttering to overt stuttering: An interpretive phenomenological analysis of individuals who stutter*. Unpublished doctoral dissertation. University of Louisiana, Lafayette.
- Fletcher, L., & Hayes, S.** (2005). Relational frame theory, acceptance and commitment therapy, and a functional analytic definition of mindfulness. *Journal of Rational–Emotive and Cognitive–Behavioral Therapy, 23*, 315–336.
- Foa, E. B., & Kozak, M. J.** (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin, 99*, 20–35.
- Franken, M. C., Kielstra-Van der Schalk, C. J., & Boelens, H.** (2005). Experimental treatment of early stuttering: A preliminary study. *Journal of Fluency Disorders, 30*, 189–199.
- Gillam, R., Logan, K., & Pearson, N.** (2009). *TOCS: Test of Childhood Stuttering*. Austin, TX: Pro-Ed.
- Gregory, H. H.** (1979). *Controversies about stuttering therapy*. Baltimore, MD: University Park Press.
- Gregory, H. H.** (2003). *Stuttering therapy: Rationale and procedures*. Boston, MA: Allyn & Bacon.
- Grossman, H.** (2008). *Voluntary stuttering: A mixed-methods investigation*. Unpublished doctoral dissertation. University of Louisiana, Lafayette, LA.
- Guitar, B.** (2006). *Stuttering: An integrated approach to its nature and treatment* (3rd ed.). Baltimore, MD: Williams & Wilkins.
- Hancock, K., & Craig, A.** (1998). Predictors of stuttering relapse one year following treatment for children aged 9 to 14 years. *Journal of Fluency Disorders, 23*, 31–48.
- Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J.** (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour Research and Therapy, 44*, 1–25.
- Healey, E. C., & Scott, L. A.** (1995). Strategies for treating elementary school-age children who stutter: An integrative approach. *Language, Speech, and Hearing Services in Schools, 26*, 151–161.
- Healey, E. C., Scott Trautman, L. A., & Susca, M.** (2004). Clinical applications of a multidimensional model for the assessment and treatment of stuttering. *Contemporary Issues in Communication Science and Disorders, 31*, 40–48.
- Herder, C., Howard, C., Nye, C., & Vanryckeghem, M.** (2006). Effectiveness of behavioral stuttering treatment: A systematic review and meta-analysis. *Contemporary Issues in Communication Science and Disorders, 33*, 61–73.
- Hood, S. B. (Ed.)**. (1998). *Advice to those who stutter* (2nd ed.). Memphis, TN: Stuttering Foundation of America.
- Huinck, W. J., Langevin, M., Kully, D., Graamans, K., Peters, H. F. M., & Hulstijn, W.** (2006). The relationship between pre-treatment clinical profile and treatment outcome in an integrated stuttering program. *Journal of Fluency Disorders, 31*, 43–63.
- Johnson, W.** (1955). A study of the onset and development of stuttering. In W. Johnson & R. R. Leutenegger (Eds.), *Stuttering in children and adults* (pp. 37–73). Minneapolis, MN: University of Minnesota Press.
- Kelly, E. M., Martin, J. S., Baker, K. I., Rivera, N. J., Bishop, J. E., Krziske, C. B., ... Stealy, J. M.** (1997). Academic and clinical preparation and practices of school speech-language pathologists with people who stutter. *Language, Speech, and Hearing Services in Schools, 28*, 195–212.
- Kelman, E., & Nicholas, A.** (2008). *Practical intervention for early childhood stammering: Palin PCI approach*. Milton Keynes, UK: Speechmark.
- Koedoot, C., Versteegh, M., & Yaruss, J. S.** (2011). Psychometric evaluation of the Dutch translation of the OASES-A. *Journal of Fluency Disorders, 36*, 222–230.
- Langevin, M.** (1997). Peer teasing project. In E. Healey & H. F. M. Peters (Eds.), *Second World Congress on Fluency Disorders: Proceedings* (pp. 169–171). Amsterdam, The Netherlands: Nijmegen University Press.
- Langevin, M.** (2000). *Teasing and bullying: Unacceptable behaviour. The TAB program*. Edmonton, Alberta: Institute for Stuttering Treatment and Research.
- Langevin, M., Bortnick, K., Hammer, T., & Wiebe, E.** (1998). Teasing/bullying experienced by children who stutter: Toward development of a questionnaire. *Contemporary Issues in Communication Science and Disorders, 25*, 12–24.
- Lee, K., Manning, W., & Herder, C.** (2011). Documenting changes in adult speakers' locus of causality during stuttering treatment using origin and pawn scaling. *Journal of Fluency Disorders, 36*, 231–245.
- Mallard, A. R., & Westbrook, J. B.** (1988). Variables affecting stuttering therapy in school settings. *Language, Speech, and Hearing Services in Schools, 19*, 362–370.
- Manning, W.** (1999). Progress under the surface and over time. In N. Bernstein Ratner & E. C. Healey (Eds.), *Stuttering research and practice: Bridging the gap* (pp. 123–130). Mahwah, NJ: Erlbaum.
- Manning, W.** (2010). *Clinical decision making in fluency disorders* (3rd ed.). Clifton Park, NY: Cengage Learning.
- Menzies, R., Onslow, M., Packman, A., & O'Brian, S.** (2009). Cognitive behavior therapy for adults who stutter: A tutorial for speech-language pathologists. *Journal of Fluency Disorders, 34*, 187–200.
- Millard, S. K.** (2011). Intensive group therapy for children who stutter: Early evidence. *Perspectives on Fluency and Fluency Disorders, 21*, 22–32.

- Millard, S. K., Edwards, S., & Cook, F. (2009). Parent-child interaction therapy: Adding to the evidence. *International Journal of Speech-Language Pathology, 11*(1), 61–76.
- Murphy, W. P., & Quesal, R. W. (2002). Strategies for addressing bullying with the school-age child who stutters. *Seminars in Speech and Language, 23*, 205–211.
- Murphy, W. P., Quesal, R. W., & Gulker, H. (2007, August). Covert stuttering. *Perspectives on Fluency and Fluency Disorders*, pp. 4–9.
- Murphy, W., Yaruss, J. S., & Quesal, R. W. (2007a). Enhancing treatment for school-age children who stutter I: Reducing negative reactions through desensitization and cognitive restructuring. *Journal of Fluency Disorders, 32*, 121–138.
- Murphy, W., Yaruss, J. S., & Quesal, R. W. (2007b). Enhancing treatment for school-age children who stutter II: Reducing bullying through role-playing and self-disclosure. *Journal of Fluency Disorders, 32*, 139–162.
- Nippold, M. (2011). Stuttering in school-age children: A call for treatment research. *Language, Speech, and Hearing Services in Schools, 42*, 99–101.
- Nippold, M. (2012). Stuttering and language ability in children: Questioning the connection. *American Journal of Speech-Language Pathology, 21*, 183–196.
- Ntourou, K., Conture, E. G., & Lipsey, M. W. (2011). Language abilities of children who stutter: A meta-analytical review. *American Journal of Speech-Language Pathology, 20*, 163–179.
- Orsillo, S. M., & Roemer, L. (2007). An open trial of an acceptance-based behavior therapy for generalized anxiety disorder. *Behavior Therapy, 38*, 75–82.
- Plexico, L., Manning, W., & DiLollo, A. (2005). A phenomenological understanding of successful stuttering management. *Journal of Fluency Disorders, 30*(1), 1–22.
- Plexico, L. W., Manning, W. H., & DiLollo, A. (2010). Client perceptions of effective and ineffective therapeutic interactions. *Journal of Fluency Disorders, 35*, 333–354.
- Plexico, L., Manning, W., & Levitt, H. (2009). Coping responses by adults who stutter: Part II. Approaching the problem and achieving agency. *Journal of Fluency Disorders, 34*, 108–126.
- Powers, M. B., Vörding, M., & Emmelkamp, P. M. G. (2009). Acceptance and commitment therapy: A meta-analytic review. *Psychotherapy and Psychosomatics, 8*, 73–80.
- Ramig, P. R., & Bennett, E. M. (1995). Working with 7–12 year old children who stutter: Ideas for intervention in the public schools. *Language, Speech, and Hearing Services in Schools, 26*, 138–150.
- Ramig, P. R., & Bennett, E. M. (1997). Clinical management of children: Direct management strategies. In R. F. Curlee & G. M. Siegel (Eds.), *Nature and treatment of stuttering: New directions* (2nd ed., pp. 292–312). Needham Heights, MA: Allyn & Bacon.
- Ramig, P. R., & Dodge, D. M. (2010). *The child and adolescent stuttering treatment and activity resource guide* (2nd ed.). Clifton Park, NY: Thompson Delmar Learning.
- Reeves, N. A., & Yaruss, J. S. (2012). *School-age stuttering therapy: A practical guide*. McKinney, TX: Stuttering Therapy Resources.
- Reeves, P. L. (2010, May/June). Acceptance. *Letting go*. New York: National Stuttering Association.
- Reitzes, P. (2006). *50 great activities for children who stutter: Lessons, insights, and ideas for therapy success*. Austin, TX: Pro-Ed.
- Riley, G. (2009). *Stuttering Severity Instrument for Children and Adults* (4th ed.). Austin, TX: Pro-Ed.
- Ryff, C. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science, 4*(4), 99–104.
- Ryff, C., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719–727.
- Sackett, D. L., Rosenberg, W. M. C., Gray, J. A. M., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: What it is and what it isn't. *British Medical Journal, 312*, 71–72.
- Shapiro, D. (2011). *Stuttering intervention: A collaborative journey to fluency freedom* (2nd ed.). Austin, TX: Pro-Ed.
- Sheehan, J. G. (1970). *Stuttering: Research and therapy*. New York, NY: Harper & Row.
- Smith, A., & Kelly, E. (1997). Stuttering: A dynamic, multifactorial model. In R. F. Curlee & G. M. Siegel (Eds.), *Nature and treatment of stuttering: New directions* (2nd ed., pp. 204–217). Boston, MA: Allyn & Bacon.
- St. Louis, K. O. (2001). *Living with stuttering*. Morgantown, WV: Populore.
- St. Louis, K. O., & Durrenberger, C. H. (1993). What communication disorders do experienced clinicians prefer to manage? *Asha, 12/35*, 23–31, 35.
- Starkweather, C. W. (Ed.). (1970). *Conditioning in stuttering therapy: Applications and limitations* (Publication No. 7). Memphis, TN: Speech Foundation of America.
- Starkweather, C. W., & Givens-Ackerman, J. (1997). *Stuttering*. Austin, TX: Pro-Ed.
- Straus, S. E., Richardson, W. S., Glasziou, P., & Haynes, R. B. (2010). *Evidence-based medicine: How to practice and teach EBM* (4th ed.). Edinburgh, Scotland: Churchill Livingstone.
- Tellis, G., Bressler, L., & Emerick, K. (2008). An exploration of clinician views about assessment and treatment of stuttering. *Perspectives on Fluency and Fluency Disorders, 18*(1), 16–23.
- Trichon, M., & Tetnowski, J. (2011). Self-help conferences for people who stutter: A qualitative investigation. *Journal of Fluency Disorders, 36*, 290–295.
- Van Riper, C. (1973). *Treatment of stuttering*. Englewood Cliffs, NJ: Prentice Hall.
- Vanryckeghem, M., & Brutton, G. J. (1996). The relationship between communication attitude and fluency failure of stuttering and nonstuttering children. *Journal of Fluency Disorders, 21*, 109–118.
- Vanryckeghem, M., & Brutton, G. J. (1997). The speech-associated attitude of children who do and do not stutter and the differential effect of age. *American Journal of Speech-Language Pathology, 6*, 67–73.
- Vanryckeghem, M., Hylebos, C., Brutton, G. J., & Peleman, M. (2001). The relationship between communication attitude and emotion of children who stutter. *Journal of Fluency Disorders, 26*, 1–15.

- Wampold, B. E.** (2001). *The great psychotherapy debate: Models, methods, and findings*. Mahwah, NJ: Erlbaum.
- Weiss, A.** (2004). Prologue: What child language research may contribute to the understanding and treatment of stuttering. *Language, Speech, and Hearing Services in Schools, 35*, 30–33.
- Williams, D. E.** (1957). A point of view about “stuttering”. *Journal of Speech and Hearing Disorders, 22*(3), 390–397.
- Williams, D., & Dugan, P.** (2002). Administering stuttering modification therapy in school settings. *Seminars in Speech and Language, 23*, 187–194.
- World Health Organization.** (2001). *International classification of functioning, disability, and health*. Geneva, Switzerland: Author.
- Yairi, E., & Seery, E.** (2011). *Stuttering: Foundations and clinical applications*. Needham Heights, MA: Allyn & Bacon.
- Yaruss, J. S.** (1998). Real-time analysis of speech fluency: Procedures and reliability training. *American Journal of Speech-Language Pathology, 7*(2), 25–37.
- Yaruss, J. S.** (2010). Evaluating and treating school-age children who stutter. *Seminars in Speech and Language, 31*, 262–271.
- Yaruss, J. S., & Pelczarski, K. M.** (2007). Evidence-based practice for school-age stuttering: Balancing existing research with clinical practice. *EBP Briefs, 2*(4), 1–8.
- Yaruss, J. S., Pelczarski, K. M., & Quesal, R. W.** (2010). Comprehensive treatment for school-age children who stutter: Treating the entire disorder. In B. Guitar & R. McCauley (Eds.), *Treatment of stuttering: Conventional and controversial interventions* (pp. 215–244). Baltimore, MD: Lippincott Williams & Wilkins.
- Yaruss, J. S., & Quesal, R. W.** (2004). Stuttering and the International Classification of Functioning, Disability, and Health (ICF): An update. *Journal of Communication Disorders, 37*, 35–52.
- Yaruss, J. S., & Quesal, R. W.** (2006). *Overall Assessment of the Speaker's Experience of Stuttering (OASES): Documenting multiple outcomes in stuttering treatment*. *Journal of Fluency Disorders, 31*, 90–115.
- Yaruss, J. S., & Quesal, R. W.** (2010). *Overall Assessment of the Speaker's Experience of Stuttering*. Bloomington, MN: Pearson Assessments.
- Yaruss, J. S., Quesal, R. W., & Reeves, P. L.** (2007). Self-help and mutual aid groups as an adjunct to stuttering therapy. In E. G. Conture & R. F. Curlee (Eds.), *Stuttering and related disorders of fluency* (3rd ed., pp. 256–276). New York, NY: Thieme Medical.
- Yaruss, J. S., Quesal, R. W., Reeves, L., Molt, L., Kluetz, B., Caruso, A. J., . . . McClure, J. A.** (2002). Speech treatment and support group experiences of people who participate in the National Stuttering Association. *Journal of Fluency Disorders, 27*, 115–135.

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