

Fluency and Sound System Disorder: What to do?

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Abstract

Stuttering is a complex disorder that requires a multi-dynamic approach and becomes increasingly more complex when a comorbidity is present; therefore, this poster will present the available data on the comorbidity of fluency and sound system disorders in preschool aged children. Specifically, this poster will provide background information relating to the epidemiology of stuttering in terms of onset, speech characteristics, predictive factors, and current evidence-based practice. Background information pertaining to a sound system disorder and common therapeutic approaches will be discussed as well. Research regarding current clinical practice when treating both disorders and the efficacy behind treating both at the same time will be provided. Lastly, this poster will discuss the efficacy behind treating both disorders in young children.

Learner Outcomes

1. Recall the epidemiology of stuttering and differentiate from a phonological disorder
2. Discuss the relationship between phonology, language, and stuttering
3. Recall treatment approaches commonly used with both stuttering and phonology
4. Identify previous and current treatment approaches for addressing both disorders
5. Identify the areas that still need more research

A Fluency Disorder

- “A fluency disorder is an interruption in the flow of speaking characterized by atypical rate, rhythm, and repetitions in sounds, syllables, words, and phrases. This may be accompanied by excessive tension, struggle behavior, and secondary mannerisms” (“Definitions of Communication Disorders,” 1993).
- Specific stuttering techniques include: easy onset, delayed auditory feedback, and tension release techniques.

Stuttering and Phonology

- “...children who stutter are far more likely to have a phonological disorder than their peers who do not stutter” (Nippold, 2002).
- For children who stutter, articulation and phonology disorders are the highest co-occurring disorders with males at a greater risk than females (Blood, Ridenour Jr., Qualls, & Hammer, 2003).
- Problems with articulation, phonology, and language often coexist with stuttering but do not cause one another (Ryan, 2001).
- Recent research indicates that reduced phonological skills may contribute to a greater risk of developing persistent stuttering (Spencer & Weber-Fox, 2014).

Stuttering and Language

- Multiple studies have been conducted to investigate the language abilities of young individuals who stutter.
- Researchers conducted a meta-analysis and concluded that the language abilities of children who stutter may be reduced in comparison to those who do not stutter which may play a role in onset of stuttering (Ntourou, Conture, and Lipsey, 2011).
- The vast differences in findings make it difficult to determine a general approach to the relation between language and childhood stuttering (Ntourou, Conture, and Lipsey, 2011).

Clinical Implications

- The available research lists a variety of treatment options; however, clinicians should take into consideration the needs of the client.
- A combination of cycles and speech-rate reduction have shown to be efficacious throughout the literature (Koehlinger, Louko, & Zebrowsk, 2014).

Efficacy behind Treating Both

- Most recent research urges clinicians to plan a blended approach that treats both disorders simultaneously (Koehlinger, Louko, et al., 2014; Wolk, 2011)
- Discrete Approach: blocks of time are set aside within a session to work on each disorder independently (Wolk, 2011).
- Blended Approach: use indirect phonological therapy and emphasize prolonged speech. This approach places fluency skill practice in the lowest phonological and linguistic demand (Wolk, 2011).

Future Research

- Continue to explore the relationship between a sound system disorder and fluency disorder
- Conduct research pertaining to the efficacy of treating both disorders as well as specific techniques used with larger sample sizes

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