Case Study: Successful Treatment for Atypical Fluency Disorder

Samantha Wasilus, M.A., CF-SLP | Vivian Sisskin, M.S., CCC-SLP

Results

Frequency of Disfluency: Pre & Post Therapy over Time

<table>
<thead>
<tr>
<th>Time Interval</th>
<th>Within-word</th>
<th>Between-word</th>
<th>Atypical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to treatment</td>
<td>4.7</td>
<td>2.4</td>
<td>12.7</td>
</tr>
<tr>
<td>Post treatment</td>
<td>0.7</td>
<td>0.7</td>
<td>1.7</td>
</tr>
</tbody>
</table>

• Reduction in frequency and duration of all types of disfluencies, including the two atypical behaviors targeted, final part-word repetitions and braided phrase repetitions.
• Increase in speech efficiency, measured by increase in speech rate (intended syllables/minute).
• Outcomes generalized to all communication contexts and remained 10 weeks post therapy.

Method

Case History & Assessment
• Seven-year-old male.
• Onset of disfluencies at age 4.
• Behavioral profile - Asperger’s Syndrome.
• Structural language skills above-average to superior (CELF-4; PPVT; EVT).
• Pragmatic language skills average with specific deficits in perspective taking (SLDF-2).
• Self-Assessment – Mild-moderate life impact (OASES-S).
• Spontaneous speech sample (see graphs)
• No secondary behaviors

Treatment
• Thirteen, 50-minute treatment sessions (twice weekly) over an 8-week period.
• Single clinician in university clinic setting.
• Treatment included elements from stuttering modification therapy, including identification and correction.
• Session design and teaching strategies targeting modifiable behaviors.

Data Collection & Analysis
• Spontaneous speech samples were video recorded, transcribed, and coded: Baseline measures, 6 months apart; periodic probes through treatment; post-treatment; 10 weeks post treatment.
• Samples were transcribed and linked to transcripts using the CHILDES Project “sonic” CHAT utility. Samples were re-coded for reliability by a trained undergraduate student.

Discussion

Although this study did not add to our understanding of the cause of these disfluencies, we were successful in reducing them significantly. The symptoms do not appear to represent a form of developmental stuttering, but they did respond to self-monitoring strategies often associated with stuttering modification therapy.

It is likely that these behaviors may serve different functions for different individuals. For this particular child, we may speculate that atypical disfluencies served a function of “persistence” as a means of self-regulation. It would appear that our treatment targeted self-monitoring, whereby he was taught self-monitoring, self-evaluation, and behavioral adjustment.

Background

Childhood onset stuttering is characterized by disfluencies occurring primarily at the beginning of words or over the entire word (da-da-daddy, but-but-but). Atypical disfluencies, have been reported through case histories and include final part-word repetition in the form of a “rhyme repetition” (fast-fast-fast) and in the form of a sound repetition (but-but-but). Other reported atypical disfluencies include mid-word insertions (see-see-hee) and final phrase repetition (He won the game - the game - the game).

Many of these reported cases are children with autism spectrum disorders; however, these disfluencies have been reported in typically developing children as well (see handout or contact authors for reference list).

The profile of children with atypical disfluency is different from that of developmental stuttering. They are aware of the disfluencies, have little or no tension or reactive behavior, and do not report emotional and attitudinal symptoms.

While not a concern for the children themselves, the symptoms often interfere significantly with communication, and impact academic performance and social interaction.

To our knowledge, there have been no documented treatments for atypical disfluencies despite growing anecdotal concern among parents and speech language pathologists that these cases have not responded to traditional therapy.

Purpose

• To present the results of a single therapy trial aimed to reduce the frequency of atypical disfluency, specifically final part-word repetition and “braided” final phrase repetition.

Mid-word insertion


Final part-word repetition

“You mean that- ean that- at- ean that” (mean that)

Final sound prolongation

“classessss” (classes)

www.bsos.umd.edu/hesp
visskin@umd.edu | samanthawasilus@gmail.com

Special thanks to Tara Holden who re-coded speech samples for reliability.

Symptoms of Atypical Disfluency

Final phrase repetition

“wait- ait-ait” (wait)

Within-word

“classess” (classes)

Syllables Stuttered [%]

<table>
<thead>
<tr>
<th>Time Interval</th>
<th>Within-word</th>
<th>Between-word</th>
<th>Atypical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to treatment</td>
<td>120</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>Post treatment</td>
<td>5</td>
<td>5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Syllables/minute

<table>
<thead>
<tr>
<th>Time Interval</th>
<th>Within-word</th>
<th>Between-word</th>
<th>Atypical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to treatment</td>
<td>120</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>Post treatment</td>
<td>5</td>
<td>5</td>
<td>0.5</td>
</tr>
</tbody>
</table>