

Introduction/Purpose

Stuttering interventions are often overlooked or not adequately treated in clinical and educational settings, leading to **increased social anxiety and reduced self-confidence** in children who stutter. Researchers have shown that **stuttering severity and social anxiety are deeply connected**, making it harder for children to communicate effectively and engage in social interactions.

At *Camp Silver-Tongue!*, we designed a **holistic intervention** that integrates **Cognitive Behavioral Therapy (CBT)**, **Solution-Focused Brief Therapy (SFBT)**, and **speech restructuring techniques** to help children process emotions, practice structured speech strategies, and build self-advocacy skills.

Our goals were to:

1. Examine how CBT and SFBT strategies improve social confidence and reduce avoidance behaviors.
2. Assess how speech restructuring techniques enhance fluency and self-perception.
3. Evaluate how peer support and self-reflection contribute to long-term communication success.

By integrating **mental health strategies with speech therapy**, we aimed to **empower children who stutter** by enhancing their **self-perception and reducing the fear and anxiety of speaking**.

Methods/Procedures

We evaluated *Camp Silver-Tongue!*, a structured intervention integrating **Cognitive Behavioral Therapy (CBT)**, **Solution-Focused Brief Therapy (SFBT)**, and **traditional stuttering therapy techniques**. The camp provided a **safe, supportive space** for children who stutter to **practice communication strategies, address social anxiety, and build self-confidence**.

Participants

- Six children (ages 6–11) with moderate to severe stuttering participated.
- Each had been stuttering for 3–5 years before camp.
- **Study Design & Assessments**
- **Pre-Camp Measures:**
 - SSI-4 – Stuttering severity.
 - OASES – Impact on daily life.
 - UTBAS – Avoidance behaviors and self-perception.
 - CASS (Yaruss, in prep) – Stuttering frequency, struggle, fluency.
- Participants **self-rated speech experiences** before and after structured tasks.

Intervention Structure

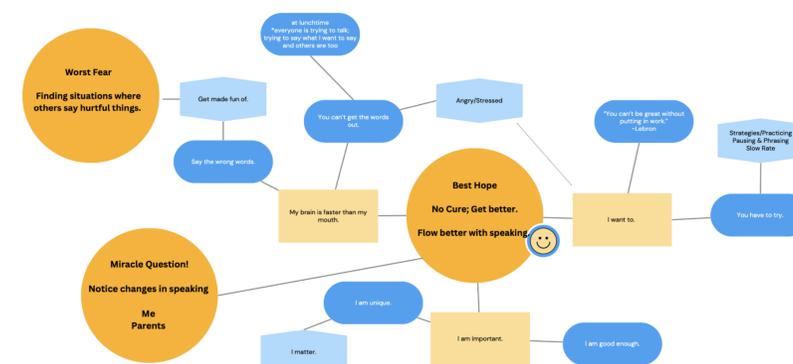
Camp sessions included **small-group and individual activities**, incorporating:

- **Guided social interactions** to improve **peer communication and self-advocacy**.
- **Speech restructuring techniques** (pausing, phrasing, controlled rate) to improve fluency.
- **CBT-based strategies** to reframe negative thoughts and reduce avoidance behaviors.
- **Creative reflection exercises:**
 - **"Helping Hands"** – Identifying **support networks** and reinforcing **self-worth**.
 - **"I Talk Like a River"** – Using **metaphors** and **visualization** to reframe stuttering experiences.
 - **Vision Boards & Goal Setting** – Encouraging **self-expression, confidence, and purpose**.
 - **Mind-Mapping** – Helping campers **organize thoughts** and **speech strategies visually**.
 - **CBT Journaling & Affirmations** – Encouraging **emotional processing and self-confidence**.
- **Graduate clinicians monitored progress** using severity rating scales and provided **individualized feedback**.

Post-Camp Measures

Participants reassessed their **speech fluency, self-confidence, and avoidance behaviors** to measure treatment impact. Findings showed **measurable improvements in speech outcomes, emotional resilience, and communication confidence**, supporting the integration of CBT and SFBT in stuttering interventions.

Figures



Mind map, Figure A.

Figure A represents the emotional, cognitive, and social impact of stuttering on a child's well-being, as presented by one of the Campers. It visually maps the child's **fears, frustrations, and hopes**, highlighting challenges such as social anxiety, communication difficulties, and negative peer interactions. The **Worst Fear** section emphasizes the fear of being mocked or struggling to express thoughts, while the **Best Hope** section reflects aspirations for improved fluency and self-acceptance. The **Miracle Question** explores how the child and their parents might notice changes in speech. The figure also underscores the importance of **self-worth, perseverance, and speech strategies**, emphasizing that progress is possible with practice and support while no cure exists.



Helping hands Figure B.



Helping hands Figure C.

Figures B and C, part of the *Helping Hands* activity, illustrate the **coping strategies and support systems** of a child who stutters.

The **first handprint** represents the child's **copied strategies**, illustrating activities that provide comfort and help manage the challenges of stuttering. These strategies include **Listening to music, playing with friends, watching YouTube, petting a cat, and playing Roblox** help reduce stress, build confidence, and regain control over communication. The **second handprint** is the child's **support network**, with **family and close relationships** (Mom, Dad, Grandpa, and Duke, the pet) offering **emotional support and reassurance**.

These *Helping Hands* illustrate how **copied strategies and strong support systems empower** children who stutter to navigate daily life with **confidence and resilience**.



I Talk Like A River, Figure D.

I Talk Like a River Activity



I Talk Like A River, Figure E.

The *"I Talk Like a River"* activity helped campers visualize their stuttering as a river, with smooth and bumpy moments. **Figure D**. A camper portrays themselves **riding with the river instead of fighting it**, symbolizing acceptance and ease with speech. The flowing river and castle represent **progress and a safe space**. **Figure E**. The youngest camper (age 6) uses **Grimace (McDonald's) as a personal symbol**, illustrating Grimace riding "bumpy waves" to represent **speaking challenges**. Grimace must drink from the "Grimace River" to find a smoother path, mirroring the child's journey toward **self-acceptance and confidence**.

By illustrating their stuttering journey, campers **reframed speech challenges as part of growth, fostering self-awareness and confidence**.

Results/Findings

- Camp participants **demonstrated measurable improvements in social confidence and speech fluency** during the intervention.
- Standardized assessments, including the **Stuttering Severity Index-4 (SSI-4)**, **OASES**, and **UTBAS**, revealed **reductions in stuttering severity, negative self-perceptions, and avoidance behaviors**.
- **Children who initially hesitated to speak in group settings gradually became more comfortable**, actively participating in discussions and presentations.
- Implementing **CBT and SFBT techniques** helped reframe **negative thoughts** about stuttering into **more constructive perspectives**, reducing social anxiety.
- **Activities such as the "I Talk Like a River" and "Helping Hands" exercises** allowed campers to **externalize their experiences, develop coping strategies, and recognize their support systems**.
- **Speech restructuring techniques, including controlled speech rate, pausing, and phrasing**, led to **more fluent and confident communication**.
- Campers reported feeling a **greater sense of belonging and acceptance**, reinforcing the importance of **peer support in stuttering intervention**.
- These findings suggest that **integrating mental health strategies with speech therapy is a promising approach** for helping children manage the severity of their stuttering and the emotional impact of communication challenges.

Discussion/Conclusion

- *Camp Silver-Tongue!* provided a **structured and supportive environment** that allowed children who stutter to **practice communication strategies in real-world social interactions**.
- By using **CBT and SFBT techniques**, participants learned to **recognize and challenge negative self-perceptions**, contributing to improved self-confidence and **reduced avoidance behaviors**.
- The **interactive and peer-driven activities** created a **sense of community**, allowing participants to realize they are **not alone in their experiences**.
- The camp model is an **innovative framework** for speech-language pathologists seeking to **incorporate mental health considerations** into stuttering intervention programs.
- **Future research should explore** long-term follow-ups to assess whether these **therapeutic gains persist over time** and how they influence participants' communication success in **academic and social settings**.
- Ultimately, *Camp Silver-Tongue!* fostered **confidence in communication and built a strong sense of community among children who stutter**.

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