Thinking in Speech®: Developing inner speech helps autistic individuals improve their self-regulation ability

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Type selection

Preferred presentation type: Oral

General data

Theme: 11: Autistic communication and autistic interaction **Alternative theme**: 10: Autism and overlapping neurodivergence

 $\textbf{Keywords} : inner \ speech, \ emotional \ dysregulation, \ therapy, \ Self-regulation, \ Neurocognitive$

Practical impact: 1. This autistic-friendly therapy focused on developing inner speech can reduce emotional dysregulation in autistic children.

- 2. This therapy can be administered remotely so that families with autistic children can be reached anywhere in the world.
- 2. This 11-hour training can be conducted remotely, so that therapists anywhere can learn this therapy without traveling.

Trigger warning: No Trigger Warning

Abstract Section

Title: Thinking in Speech®: Developing inner speech helps autistic individuals improve their self-regulation ability

Abstract body: **INTRODUCTION.** Autistic children often have difficulty regulating their emotions. This pilot study evaluated the effectiveness of an intervention to reduce emotional dysregulation by developing inner speech in autistic children. Inner speech is the voice in our head we use when thinking. The therapy, *Thinking in Speech* (*TiS*), is a neurocognitive intervention; it was developed by an autistic speech-language pathologist in her private practice with over 100 neurodiverse individuals.

METHODS. Nine certified speech-language pathologists were trained remotely, in an 11-hour training program over five week. They remotely administered *TiS* to 22 autistic children. Participating children were randomly assigned to either a therapy immediate or a waitlist control condition. Both groups of children received sixteen 30-minute therapy sessions over 8-10 weeks. Parents rated the amount of emotional dysregulation on three measures before the intervention, and after the sixteen sessions were completed.

OUTCOME. Cross-over analysis were conducted. The autistic children showed significant improvement from pre-test to post-test on the Emotion Dysregulation Index-Dysphoria scale (p=.008), and a trend toward significance on the Emotion Dysregulation-Reactivity scale (p=.089). The Brief2 Emotion Control results were not significant.

DISCUSSION. These findings suggest a potential impact of developing inner speech to reduce emotion dysregulation in autistic children. Additionally, we were able to show TiS therapy can be trained remotely in a relatively short time, and the treatment can be administered remotely. This pilot study needs to be replicated with a larger sample size, more therapists, and more therapy sessions to determine the generalizability of these results.

Plain English version: Autistic children often have difficulty regulating their emotions. This pilot study evaluated the effectiveness of an intervention to reduce emotional dysregulation by developing inner speech, voice in our head we use when thinking, in autistic children. We found that nine speech-language pathologists trained remotely were able were able to reduce emotional dysregulation in 22 autistic children after delivering only sixteen 30-minute remote therapy sessions over 8-10 weeks.

<u>Genera</u>

- 1. I confirm that the abstract and that all information is correct Yes
- 2. I confirm that I submit this abstract on behalf of all authors Yes
- 3. Ethical Compliance: Yes
- 4. Abstract Usage License: Yes
- 5. Do you have any potential conflict of interest? No
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