

Title: Factors Influencing the Efficacy and Implementation of Teletherapy for Stuttering.

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Abstract:

Purpose: Telepractice is a promising alternative to treat children who stutter. This study aimed to investigate factors influencing telepractice for treating stuttering in a group of school-aged children.

Methods: This study involved 20 children aged 7 to 9 years who were recruited from the phoniatrics clinic, Center of Medical Excellence, at the National Research center (NRC), Cairo., Egypt. They were diagnosed with moderate to severe stuttering using the Stuttering Severity Instrument (SSI) - Arabic version. There were 7 females and 13 males, and all children stuttered for at least 6 months. They all live in Sheikh Zayed, Cairo, Egypt, have the same socioeconomic class, and go to the same school. The Stanford-Binet Intelligence Scales (SB-5), Fifth Edition was applied. Speech teletherapy, which was applied by a speech pathologist with 17+ years of experience via Zoom, for 9 months in the form of 2 sessions per week. The therapeutic session provided in the study included a combination of the Lidcombe Program and diaphragmatic breathing speech therapy. The Lidcombe Program was utilized due to its evidence-based effectiveness in addressing stuttering in children, while diaphragmatic breathing was incorporated to specifically target airflow irregularities and promote smoother speech production. This combined approach allowed for a comprehensive treatment plan tailored to the needs of the children. After treatment, SSI was measured to check the improvement and to correlate the results to age, sex, and IQ subtests.

Results: The SSI scores decreased significantly after treatment ($p < 0.001$) with a mean percentage of change of $57.4 \pm 27.1\%$ (21.7%-100%). Stuttering severity decreased significantly after teletherapy ($p < 0.001$); all children with moderate stuttering ($n=12$) were converted to slight severity. Three out of eight of those with severe stuttering (37.5%), had slight severity after the end of treatment. The children's attendance and attention during treatment sessions were excellent. The scores on all components of the SB scales and the full-scale IQ were average scores in all children. The treatment outcome was not affected by the children's age, sex, or IQ.

Conclusion: Teletherapy for 9 months is successful in reducing stuttering scores and severity in school-age children. The outcome of treatment was not affected by the child's age, sex, and IQ.

Key Words: Teletherapy, Telepractice, IQ

Biography:

Dr. Rasha Sami is a distinguished medical professional specializing in Phoniatics/Speech and Language Pathology. She earned her medical degree from Cairo University, one of Egypt's most prestigious institutions, where she also completed her Master's and MD in Phoniatics.

With years of experience in speech and language disorders, Dr. Rasha has dedicated her career to research, clinical practice, and academic contributions in this field. She currently serves as the Head of the Speech and Language Department at the National Research Center, Cairo, Egypt, where she leads advancements in speech therapy, voice disorders, and communication impairments for both children and adults.

Throughout her career, Dr. Rasha has contributed significantly to Tailor, a computer program called LET'S LEARN, to help rehabilitate children with speech and language disorders. She has been committed to enhancing diagnostic and therapeutic techniques for individuals with speech, language, and voice disorders. She actively contributes to research projects, including stuttering, ADHD, Autism, Learning disability, and voice disorders. She collaborates with professionals in related fields and mentors aspiring specialists.

Her work is driven by a strong passion for improving communication abilities in individuals of all ages, ensuring they receive the best care and intervention strategies. With a vision for continuous innovation in Phoniatics.