Improvement in Social Functioning in Youth with Autism Spectrum Disorders Using a Theatre-Based, Music, and Peer-Mediated Intervention

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Background

Autism

Deficits in social skills prevent children with autism spectrum disorder (ASD) from achieving age-appropriate developmental milestones; therefore, they may struggle to establish interpersonal relationships, especially with peers. Many children with ASD exhibit notable stress in response to engaging with others. The purpose of the study was to evaluate social interaction and stress in children with ASD before and after SENSE Theatre.

SENSE Theatre

SENSE Theatre is a unique intervention program aimed at improving reciprocal social interaction in youth with ASD using behavioral strategies and theatrical techniques in a peer-mediated model.

• PEERS: peer mediation techniques are used for peers to present and practice skills with participants
• PLAY: acting, or facilitated play, engage and motivates participation
• PERFORMANCE: live and video modeling allow participants to repeatedly practice new skills

Previous Research

Participants in a study using a three-month model showed improvement in face perception, social awareness, and reductions in stress (Corbett et al., 2011). In another study it both in isolation and as an integral part of the theatre intervention program.

Approaches and Findings

Current Intervention

The current study comprehensively assessed children and youth with ASD participating in a two-week summer camp model of the theatre intervention program.

Participants

Typically developing peers were trained and paired with 16 high functioning ASD youth between 8 and 17 years, 11 of whom participated in the study.

SENSE Theatre Camp structure

Peers and counselors were trained for a total of three days preceding the camp. Fidelity testing was performed before and during the camp to ensure proper administration of protocols. Emphasis was placed on the use of improvisational techniques and theatrical games while following a highly structured schedule.

Music

Researchers drew upon the rich tradition of musicianship-enhancing techniques of Emile Jaques-Dalcroze to enhance internalization of sounds and movement. Researchers designed games to foster kinesthetic imagination, memory, and awareness. Participants moved and interacted musically through quick-reaction, follow, interrupted canon, and continuous canon games to cultivate understanding of harmony, rhythm, pitch, dynamics, articulation, tempo, and improvisation.

Gesture

Improvational techniques were used to convey the differences between cultural gesture and phonomimesis, the melding of gesture and sound. Participants used four of Rudolf Laban’s conducting-like gestures to further explore the understanding of musical concepts and self-expression.

Video Modeling

Roles and target behaviors were performed by peers, videotaped, and placed on a password protected website. Participants watched and practiced the videos at home for 15 minutes per day during the camp.

Social Perception, Interaction, Adaptive Functioning

Significant differences were found from pre-to-post-testing for face memory, social awareness, social cognition, home living and self-care.

Cortisol

Cortisol levels rose on the first day of camp compared to home values; yet, declined by the end of treatment and were further reduced during post-treatment play with peers.

Summary

The results corroborate previous findings that the peer-mediated theatre program contributes to significant improvement in core social deficits in ASD using a short-term summer camp treatment model. The results also support the effectiveness of incorporating trained peers in a community-based program.

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