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**First theme choice:** Clinical/Behavioral/Intervention

***SENSE Theatre: A Novel Peer Intervention Program Improving Social Cognition in Autism***

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**Introduction:** Individuals diagnosed with autism spectrum disorder (ASD) show persistent deficits in social ability across multiple contexts (APA, 2013). Social cognition is information processing in a social setting in order to understand and make sense of other members of the interaction. Deficits in social cognition are coordinated in differing ways to behavioral symptoms. One representative measure of social cognition is Theory of Mind (ToM), or an individual's faculty to combine a related set of intellectual abilities in order to impute others' emotions, desires, beliefs, or intentions that may differ from the individual's own (Korkmaz, 2011). SENSE<sup>®</sup> Theatre is an intervention method aimed at improving social competence in youth with ASD. The purpose of the study was to compare hypothesized changes in ToM skills in the experimental condition (SENSE Theatre<sup>®</sup>) compared to an active control condition (Tackling Teenage). Pre-intervention and post-intervention ToM scores for an experimental group and an active control condition can confirm or deny the hypothesis that SENSE<sup>®</sup> Theatre is an effective intervention method in terms of significantly improving social cognition in those diagnosed with ASD.

**Methods:** Participants included children between 10-to-16 years of age across three cohorts of the randomized clinical trial. Specifically, analyses were conducted on 35 youth in the experimental group and 28 youth in the active control condition. ToM skills were measured via the Developmental Neuropsychological Assessment, or NEPSY (Korkman et al. 2007) at Pre-test prior to engaging in the intervention and Post-test, immediately following the interventions. The interventions were conducted over 20 2-hour sessions. For both interventions, participants were paired with trained, typically developing peers who helped facilitate the intervention.

**Results:** An independent sample T-test between subjects revealed that there were no significant differences between the experimental group and the active control condition in terms of age, sex, or IQ, so these did not have to be controlled. Another independent sample T-test test between subjects revealed that there were significant statistical differences between the experimental groups in contextual ToM scores ( $p=0.037$ ) and total ToM scores ( $p=0.046$ ), but not verbal ToM scores ( $p=0.057$ ).

**Discussion:** The primary aim of the study was to examine whether SENSE Theatre<sup>®</sup> is effective at improving ToM skills in youth with ASD. The study found a significant difference between the SENSE Theatre<sup>®</sup> intervention and the active control condition in improving ToM scores. The results suggest improved social cognition following the theatre-based, peer-mediated intervention. It is plausible that a theatre-based intervention method, during which participants practice engaging socially via role play, imitation, and acting lead to improved ToM social cognition and perspective taking of other people's thoughts and behaviors.

**References, if any:** American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.) Korkmaz, B. (2011). Theory of Mind and Neurodevelopmental Disorders of Childhood. Journal of Pediatric Research, 69, 101-108.

**Keywords:**  
Theory of mind, Social cognition, Autism spectrum disorders