

Competition Enhances Mentalizing Ability in Autism

Heidi Chang

Abstract

The present study was designed to examine the effect of a competitive context in enhancing false belief performance in individuals with autism. Thirty-eight participants with a mean age of 12.04 years ($SD = 1.92$ years) were recruited in Study 1 from a local special school in Hong Kong. Cantonese was used as the main language for the tests. Replicating the study of Peterson, Slaughter, Peterson, and Premack (2013) with modifications, two false belief tasks, the traditional Sally-Anne, and the Dot-Midge task, were administered to the participants. Results showed that with a competitive context, as in the Dot-Midge task, individuals with autism showed higher rates of passing than in the Sally-Anne task (no competition). To further investigate the roles of engagement and competition in the participants' success, Study 2 was implemented. Thirty subjects with a mean age of 12.50 years ($SD = 2.23$ years) were recruited from two special schools in Hong Kong. Three false belief tasks, including the Reward task, the Engagement task, and the Dot-Midge task, were presented to subjects in Cantonese. Performance on tasks was compared statistically and it was revealed that participants performed significantly better in the Dot-Midge task than in the other two tasks, suggesting that competition, rather than mere engagement in an activity would cause individuals with autism to perform better on false belief.

Keywords: autism, Theory of Mind, false belief, competition, engagement