

Perception and Imitation of Vocally Expressed Emotion in Individuals with Autism Spectrum Disorder

Prior research has shown that individuals with Autism Spectrum Disorder (ASD) have deficits in areas of pitch processing and mimicry. The ability to track linguistic pitch contours is an essential component of emotion perception and communication. This research examines the perception of vocally expressed emotion and vocal mimicry abilities in individuals with ASD. People generally engage in behavioral mimicry in situations in which there is a need to affiliate with a conversational partner. Vocal pitch contour mimicry is one form of mimicry that has been largely neglected, so there isn't any normative data on this or data from individuals with ASD. College-aged students with ASD were recruited along with age-matched typically developing (TD) participants. The participants were tested for their ability to correctly identify emotion in semantically-controlled vocal expressions of happiness, anger, and sadness in a three-alternative-choice task. In a separate block, participants were also asked to listen to each stimulus and then vocally imitate it to the best of their ability. These vocalizations were recorded. A separate group of raters were asked to evaluate how well each participant mimicked each vocal expression. The results of this study will address whether individuals with ASD have deficits identifying vocal expressions of emotion relative to TD individuals. Additionally, the results will address whether individuals with ASD are able to accurately imitate the vocalizations of others.

Keywords: Vocal expression of emotion, Mimicry, Prosody, Pitch perception, Autism Spectrum Disorders