

Intergroup Bias in Smile Discrimination in Autism

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Abstract

Genuine and posed smiles are important social cues (Song, Over, & Carpenter, 2016). Autistic individuals struggle to reliably differentiate between them (Blampied, Johnston, Miles, & Liberty, 2010; Boraston, Corden, Miles, Skuse, & Blakemore, 2008), which may contribute to their difficulties in understanding others' mental states. An intergroup bias has been found in non-autistic adults in identifying genuine from posed smiles (Young, 2017). This is the first study designed to investigate if autistic individuals would show a different pattern when differentiating smiles for in-groups and out-groups. Fifty-nine autistic adults were compared with forty non-autistic adults, matched on sex, age and nonverbal IQ. Roughly, half of each group were further randomly separated into two groups with a minimal group paradigm (adapted from Howard & Rothbart, 1980). There was no real difference between the groups, participants were primed to believe they were more similar to their in-groups. The ability to distinguish smiles was assessed on a 7-point Likert scale. We found both autism and non-autism groups rated genuine smiles more genuine than posed smiles and in-groups more genuine than out-groups. Even though both groups identified themselves more as in-group than out-group members, autistic individuals were less likely than non-autistic individuals. However, autistic participants generally rated smiles as less genuine than non-autistic counterparts. These results indicate that autistic adults are capable of identifying genuine smiles from posed smiles, unlike previous findings; but they may be less convinced of the genuineness of others, which may affect their social communication thereafter. Importantly, autistic adults were equally influenced by social intergroup biases which has the potential to be used in interventions to alleviate their social difficulties in daily lives.

Keywords: smile, autism, intergroup bias

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