

You Make Me Laugh! Friends, Strangers and Neurodiversity

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Abstract

Laughter is a positive emotional expression, however, its presence and usage as communicative tool is understudied in autism research. Limited research has focused on autistic children and found that they used laughter for expressing happiness and mirth, but rarely used it for social purposes compared to their neurotypical (NT) peers. To date, no research has included autistic adults.

The current study aims to investigate 1) the difference in laughter behaviour between pairs of one autistic and one neurotypical adult (MIXED dyads) and age-, gender- and IQ-matched pairs of two neurotypical adults (NT dyads); 2) whether the closeness of relationship (Friends/Strangers) would influence laughter production.

In total, 30 MIXED and 29 NT dyads in the Stranger condition and 7 MIXED dyads and 12 NT dyads in the Friend condition were engaged in a conversational task and a video-watching task and their laughter was extracted, quantified and annotated. We calculated the Total duration of laughter and Shared laughter in each dyad.

Regardless of the closeness of relationship, MIXED dyads produced significantly less Total laughter than NT dyads in both tasks. The same tendency was also found for Shared laughter, although participants shared more laughter during video-watching than conversation and this tendency was more pronounced for NT than MIXED dyads. Strikingly, NT dyads produced more shared laughter when interacting with their friend than with a stranger during video-watching task, whilst the amount of shared laughter in MIXED dyads did not differ when interacting with their friend or a stranger.

These findings may indicate that autistic adults show a different pattern of laughter production relative to NT adults during social communication. However, it is also possible that a mismatch between autistic and NT communication, and specifically in existing friendships, may have resulted in patterns of laughter more akin to that seen between strangers.

Keywords: laughter, nonverbal behaviour, dyadic study, autism, social communication, relationship