Study shows facially expressive people to be more likable and socially successful

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Excerpt of video call paradigm, taken from the conflict condition, during which the confederate suggests an unfair division of the reward, and both partners negotiate. Credit: *Scientific Reports* (2024). DOI: 10.1038/s41598-024-62902-6

Analysis of more than 1,500 natural conversations suggests that humans may have evolved more complex facial muscle movements to help us bond with each other.

In the first part of the study, researchers posed as participants in semi-structured video calls with 52 people to record natural reactions and expressions during various everyday scenarios.

The conversations were designed to involve a range of behaviors, including listening, humor, embarrassment, and conflict. To test ability

to inhibit facial expression, participants were also asked to keep a still face while their partner tried to make them move.

The same individuals later recorded short video clips of their face while trying to achieve social goals such as looking friendly, appearing threatening, and disagreeing without being disliked.

More than 170 people were then shown clips from a selection of the video calls and recordings and were asked to rate the emotions and expressions being conveyed to see how "readable" the participant was, as well as how likable they were.

The facial expressivity of each participant was calculated using FACS (Facial Action Coding System), a method of measuring facial muscle activity.

To test the findings on a larger scale, the researchers conducted a follow-up analysis of unscripted video conversations between 1,456 strangers from an existing dataset, where conversation partners rated how much they liked each other.

The likeability ratings were analyzed in relation to the FACS results and other recognized measures, and the scientists found that expressive participants were liked more both by independent raters and by their conversation partner.

They were also found to be easier to read and better able to adapt their facial behavior to achieve social goals.

In the conflict scenario where participants were offered a bad deal in terms of reward payment for the study, those who were both agreeable and expressive in their negotiations were found to achieve a better outcome.

Dr. Eithne Kavanagh, research fellow and lead author on the study at NTU's School of Social Sciences, said, "This is the first large scale study to examine facial expression in real-world interactions.

"Our evidence shows that facial expressivity is related to positive social outcomes. It suggests that more expressive people are more successful at attracting social partners and in building relationships. It also could be important in conflict resolution."

The work is part of a project led by NTU's Professor Bridget Waller. "Individual differences in facial expressivity: Social function, facial anatomy and evolutionary origin (FACEDIFF)" is an interdisciplinary project investigating the evolution of facial expression and how this results in benefits or costs in an individual's social engagement.

Professor Waller said, "This research is important in evolutionary terms as it may explain why humans have developed more complex facial expression than any other species—it helps us to create stronger bonds and better navigate the social world."

"Being facially expressive is socially advantageous" by Dr. Kavanagh, Dr. Jamie Whitehouse and Professor Waller from NTU's Department of Psychology is published in the journal Scientific Reports.

More information: Eithne Kavanagh et al, Being facially expressive is socially advantageous, *Scientific Reports* (2024). DOI: 10.1038/s41598-024-62902-6

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