Faces Are More Likely to Seem Alive When We Want to Feel Connected

September 08, 2014

Feeling socially disconnected may lead us to lower our threshold for determining that another being is animate or alive, according to new <u>research</u> published in *Psychological Science*, a journal of the <u>Association for Psychological Science</u>.

"This increased sensitivity to animacy suggests that people are casting a wide net when looking for people they can possibly relate to — which may ultimately help them maximize opportunities to renew social connections," explains psychological scientist and lead researcher Katherine Powers of Dartmouth College.



These findings enhance our understanding of the

factors that contribute to face perception, mind perception, and social relationships, but they could also shed light on newer types of relationships that have emerged in the modern age, Powers argues, including our relationships with pets, online avatars, and even pieces of technology, such as computers, robots, and cell phones.

Feeling socially connected is a critical part of human life that impacts both mental and physical health; when we feel disconnected from others, we try to replenish our social connections.

"As social beings, we have an intrinsic motivation to pay attention to and connect with other people," says Powers. "We wanted to examine the influence of this social motive on one of the most basic, low-level aspects of social perception: deciding whether or not a face is alive."

Powers and colleagues had 30 college students view images of faces, which were actually morphs created by combining inanimate faces (such as a doll's face) with human faces. The morphs ranged from 0% human to 100% human and showed both male and female faces.

The morphs were presented in random order and the students had to decide whether each face was animate or inanimate. Afterwards, they completed a survey that gauged their desire for social connections, in which they rated their agreement with statements such as "I want other people to accept me."

The data revealed that desire for social connections was associated with a lower threshold for animacy. In other words, participants who had high scores on the social connections measure didn't need to see as many human-like features in a face order to decide that it was alive.

To see if there might be a causal link, Powers and colleagues conducted another study in which they experimentally manipulated feelings of social connection.

A separate group of college students completed a personality questionnaire and were provided feedback ostensibly based on the questionnaire. In reality, the feedback was determined by random assignment. Some students were told that their future lives would be isolated and lonely, while others were told their lives would contain long-lasting, stable relationships. The feedback also included personality descriptions and statements tailored to each participant to ensure believability.

The students then viewed the face morphs.

As expected, students who had been told they would be isolated and lonely showed lower thresholds for animacy than those who were told they would have long-lasting relationships.

These findings are particularly interesting, the researchers argue, because previous research has shown that people are typically cautious in determining whether a face is alive:

"What's really interesting here is the degree of variability in this perception," says Powers. "Even though two people may be looking at the same face, the point at which they see life and decide that person is worthy of meaningful social interaction may not be the same — our findings show that it depends on an individual's social relationship status and motivations for future social interactions."

"I think the fact that we can observe such a bias in the perception of basic social cues really underscores the fundamental nature of the human need for social connection," Powers adds.

Study co-authors include Andrea L. Worsham, Jonathan B. Freeman, Thalia Wheatley, and Todd F. Heatherton of Dartmouth College.

This work was supported by a grant from the National Institute of Mental Health (R01MH059282) to T. F. Heatherton.