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Can you trust your gut on a crowd's mood?

People can distinguish between focused and distracted crowds, study shows

ASSOCIATION FOR RESEARCH IN VISION AND OPHTHALMOLOGY

Rockville, Md. - There is good news for frequent public speakers. New research shows that individuals have the ability to quickly and accurately identify a crowd's general emotion as focused or distracted, suggesting that we can trust our first impression of a crowd's mood. The paper, "Mixed emotions: Sensitivity to facial variance in a crowd of faces," was recently published in the *Journal of Vision*.

"When we look at a crowd of faces, what we see is not a bunch of individual faces, but rather an average of the entire crowd," said author Jason Haberman, PhD, of Rhodes College, Department of Psychology, who led the study. "However, how do we know whether this average is reliable? If half the faces are happy and the other faces are angry, it would not be advantageous to see the 'neutral' average."

In a series of experiments, observers were given only one second to interpret how emotionally uniform (or diverse) faces were in an image of a crowd. Observers were consistently able to identify emotionally uniform crowds, such as all happy faces, as well as emotionally diverse crowds like one would see in a distracted audience. The results suggest the brain has evolved to quickly grasp information only a crowd can provide.

"Because crowds convey such important social information, it makes sense that humans are exceedingly sensitive to the average expression in crowds of faces," the authors wrote. "For example, a single fearful face tells us something about the state of that individual; a crowd full of fearful faces tells us something about the state of the world."

The scientists did several other experiments to rule out other visual cues, such as brightness and facial orientation. The results consistently suggested that the brain interprets facial cues to determine the level of a crowd's emotional focus.

Authors hope the study helps speakers understand that by paying attention to the faces in the audience, speakers will learn how much the audience is paying attention to them.

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The Journal of Vision (JOV) is an online, open access, peer-reviewed scientific journal devoted to all aspects of visual function in humans and other organisms. The journal is published exclusively in digital form: full-text articles may be accessed for free via the internet. The journal encourages the effective use of color, multimedia, hyperlinks, program code, and other digital enhancements. JOV is published

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