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FACIAL EXPRESSIONS

What's in a face?

Do facial expressions reflect inner feelings? Or are they social devices for influencing others?

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After 30 years of renewed interest in facial expression as a key clue to human emotions, frowns are appearing on critics' faces. The face, they say, isn't the mirror to emotions it's been held out to be.

The use of facial expression for measuring people's emotions has dominated psychology since the late 1960s when Paul Ekman, PhD, of the University of California, San Francisco and Carroll Izard, PhD, of the University of Delaware, reawakened the study of emotion by linking expressions to a group of basic emotions.

Many took that work to imply that facial expressions provided the key to people's feelings. But in recent years the psychology literature has been sprinkled with hotly worded attacks by detractors who claim that there is no one-to-one correspondence between facial expressions and emotions. In fact, they argue, there's no evidence to support a link between what appears on someone's face and how they feel inside.

But this conflict masks some major areas of agreement, says Joseph Campos, PhD, of the University of California at Berkeley. Indeed, he says, "there is profound agreement that the face, along with the voice, body posture and hand gestures, forecast to outside observers what people will do next."

The point of contention remains in whether the face also says something about a person's internal state. Some, such as Izard, say, "Absolutely."



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*Alan Fridlund
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Detractors, such as Alan Fridlund, PhD, of the University of California, Santa Barbara, say an adamant "No." And others, including Campos and Ekman, land somewhere in the middle. The face surely can provide important information about emotion, but it is only one of many tools and should never be used as a "gold standard" of emotion as some researchers, particularly those studying children, have tended to do.

"The face is a component [of emotion]," says Campos. "But to make it the center of study of the human being experiencing an emotion is like saying the only thing you need to study in a car is the transmission. Not that the transmission is unimportant, but it's only part of an entire system."

WHERE IT ALL BEGAN

Based on findings that people label photos of prototypical facial expressions with words that represent the same basic emotions--a smile represents joy, a scowl represents anger--Ekman and Izard pioneered the idea that by carefully measuring facial expression, they could evaluate people's true emotions. In fact, since the 1970s, Ekman and his colleague Wallace Friesen, PhD, have dominated the field of emotion research with their theory that when an emotion occurs, a cascade of electrical impulses, emanating from emotion centers in the brain, trigger specific facial expressions and other physiological changes--such as increased or decreased heart rate or heightened blood pressure.

If the emotion comes on slowly, or is rather weak, the theory states, the impulse might not be strong enough to trigger the expression. This would explain in part why there can sometimes be emotion without expression, they argue. In addition, cultural "display rules"--which determine when and whether people of certain cultures display emotional expressions--can derail this otherwise automatic process, the theory states. Facial expressions evolved in humans as signals to others about how they feel, says Ekman.

"At times it may be uncomfortable or inconvenient for others to know how we feel," he says. "But in the long run, over the course of evolution, it was useful to us as signalers. So, when you see an angry look on my face, you know that I may be preparing to respond in an angry fashion, which

means that I may attack or abruptly withdraw."

THE FACE IS LIKE A SWITCH

Although Fridlund strongly disagrees with Ekman in his writings, arguing that expressions carry no inherent meaning, the two basically agree that facial expressions forecast people's future actions. But instead of describing expressions from the point of view of the expresser, as Ekman tends to do, Fridlund thinks more in terms of people who perceive the expressions.

Expressions evolved to elicit behaviors from others, says Fridlund. So, a smile may encourage people to approach while a scowl may impel them to stay clear, and a pout may elicit words of sympathy and reassurance. And, he contends, expressions are inherently social. Even when people are alone they are holding an internal dialogue with another person, or imagining themselves in a social situation.

"The face is like a switch on a railroad track," says Fridlund. "It affects the trajectory of the social interaction the way the switch would affect the path of the train."

Thinking of facial expressions as tools for influencing social interactions provides an opportunity to begin predicting when certain facial expressions will occur and will allow more precise theories about social interactions, says Fridlund. Studies by him and others find that expressions occur most often during pivotal points in social interactions--during greetings, social crises or times of appeasement, for example.

"At these pivotal points, where there's an approach, or proximity, or more intimacy, the face as well as the gestures form a kind of switching station for the possibilities of social interactions," says Fridlund.

The University of Amsterdam's Nico Frijda, PhD, agrees that expressions are a means to influence others. They also, he believes, occur when people prepare to take some kind of action whether there are others present or not. For example, if you're scared and want to protect yourself, you frown and draw your brows in preparation--what Ekman would call a "fear" expression. But there is no one-

to-one correspondence between the face and specific emotions, Frijda contends.

"There is some affinity between certain emotions and certain expressions," he says, "if only because some emotions imply a desire for vigorous action, and some facial expressions manifest just that."

NOT A 'GOLD STANDARD'

Herein lies the major point of contention within the facial expression community, says Berkeley's Campos.

"All sides agree that the face--and voice and posture, for that matter--forecast what a person will do next," he says. "But over and above that, is feeling involved?"

Although much work in the emotion literature relies on a link between facial expression and emotions, there's a paucity of evidence supporting it.

"There's some sense in which faces express emotion, but only in the sense that everything expresses emotion," says psychologist James Russell, PhD, of the University of British Columbia, a long-time critic of the expression-emotion link. "Music does, posture does, words do, tone of voice does, your behavior does. The real question is, 'Is there anything special about faces?' And there we really don't know much."

What's more likely, argues Russell, is that facial expressions tell others something about the overall character of a person's mood--whether it's positive or negative--and context then provides details about specific emotions.

Others, including Ekman and Campos, contend that the face can display information about emotions. But, they admit, it is by no means a "gold standard." The face is only one of many measures researchers can use to infer emotion. And those who only examine faces when trying to study emotion will jump to false conclusions.

"There is a link between facial expression and emotion," explains developmental psychologist Linda Camras, PhD, of DePaul University. "But it's not a one-to-one kind of relationship as many once

thought. There are many situations where emotion is experienced, yet no prototypic facial expression is displayed. And there are times when a facial expression appears with no corresponding emotion."

In a classic set of experiments with infants, Camras found that some facial expressions can occur in the absence of the emotions they supposedly represent.

"An emotion has to be plausible [for the situation you're examining]," she says. "You can't do blind coding of facial expression and necessarily be on the right track, even for infants."

But to say, as Fridlund does, that there's no connection between some facial expressions and some emotions is simply wrong, says Ekman. When we look at people's expressions, he says, we don't receive direct information about their heart rate or other physiological changes that accompany emotions. We might even think, "He's going to whack me" rather than "He's angry," says Ekman.

"But these signals--facial expressions and physiological changes associated with internal emotions--can't exist independently," he contends.

Further Reference

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