

# Behavior Dynamics Journal

A bi-monthly publication focusing on the Operational Application of Behavior

## MICROEXPRESSIONS

Microexpressions; sounds like a fancy science term. Its actually a very simple phrase that deals with expressions that appear on the face. Microexpressions consist of very brief expressions of emotion (e.g., they can be as fast as 1/15 of a second) that come across the face really quickly, often lasting fractions of a second. They occur when a person either deliberately or unconsciously conceals an emotion. Seven emotions have been identified as universal microexpressions of emotion: anger, fear, sadness, disgust, contempt, surprise and happiness. Microexpressions help identify meaningful content areas in interviews, gain insight to a person's personality, motivations and intentions, establish relationships, build rapport, gather information, vet individuals, determine trustworthiness, detect clues to deception and understand what the baseline is for an individual. Emotions have been linked to microexpressions; and moods, personality traits and clinical psychopathology can be potentially determined from careful observations. Researchers are investigating technology to

evaluate microexpressions in order to determine the intent of an individual. Microexpression evaluation techniques are used by law enforcement to interview suspects, by national security interrogators at borders, checkpoints and transportation security venues. Microexpression detection is also used by the state department and used by immigration officers to determine visa eligibility and fraud.

In regards to national security applications, in an article published in the Chronicle of Higher Education written by Christopher Shea, Dr. Paul Ekman, a pioneer in the study of microexpressions, was asked why he hasn't published more of his research on microexpressions. He stated, "how much am I going to publish when the Chinese follow my work very closely." Ekman further states in the article, "the face is the most powerful indicator of deception but it only gets you to 70% accuracy. That's not a useful figure. In order to get over 90 percent you need to involve gesture, voice and nuance of the content of speech."

Ekman is renowned for his ability to read faces for signs of what people are thinking and feeling. In his bestseller *Blink*, Malcolm Gladwell writes, "much of our understanding of mind-reading is owed to Ekman and his collaborators". He relates how Ekman, an Emeritus Professor of Psychology at the University of California at San Francisco, could tell by their faces alone when figures as dissimilar as Bill Clinton and Kim Philby (the infamous British spy) were lying—Clinton in real time, Philby on historical video.

Lie to Me, a television show featuring a human lie detector modeled on Ekman, ran from 2009 to 2011 on Fox. His work on lying is one reason the American Psychological Association



deemed Ekman one of the 100 most influential psychologists of the 20th century. Microexpressions reached an all-time high several years ago in the research field when Dr. David Matsumoto wrote of his research into blind athletes at the Paralympic games who displayed the same exact facial expressions of emotion of sighted individuals!

### Special points of interest:

- Microexpressions are; Sub-conscious cross-cultural expressions of emotion.
- Microexpressions are expressions of emotions that appear on the face very quickly.

### NEXT Issue:

Attempts to control behavior

Below are the 7 universal, cross-cultural, sub-conscious microexpressions of emotions. These emotions appear very quickly on and off the face so detection can be difficult if you are not paying attention. You need to be observing after asking a question while listening to the answer. The real feelings will often show on the face despite the verbal message being spoken. This is a major signal to what an individual's true thoughts and feelings are.

### The Seven Universal Facial Expressions of Emotion

