

Behavior Dynamics Journal

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

STUDIES REGARDING INVOLUNTARY CUES TO DECEPTION

There is a well-established body of literature that reveals: The act of lying to a trained interrogator triggers fear and nervousness for a significant number of individuals (e.g., Ekman, 2001; Frank & Ekman, 1997; Ekman, O'Sullivan, & Frank, 1999; Kraut & Poe, 1980). Liars often experience the fear of getting caught, either because of the negative consequences involved for the guilty party, or because they fear the failure of their mission (Ekman, 2001). Highly motivated deceivers in high-stakes contexts (situations that most closely mirror the terrorist threat in the airport security environment) reveal increased signs of deception such as increased tension, nervous-

ness, and fidgeting (e.g., DePaulo et al., 2003). These high-stakes, face-to-face lies result in 70-90% of the deceivers revealing facial signals of negative emotions (e.g., Ekman, O'Sullivan, Friesen, & Scherer, 1991; Frank & Ekman, 1997). Studies examining face-to-face lies have also found that deceivers have increase in vocal pitch (e.g., DePaulo et al., 2003; Ekman et al., 1991; Streeter, Krauss, Geller, Olson, & Apple, 1977) – which is associated with the emotion of fear – whereas truth tellers do not have an increase in vocal pitch. Studies of naturally-occurring, high-motivation deceptive communication reveal support for leakage cues, facial displays of

stress, decrease in gross body movements, tension in the arms and legs etc. (e.g., Koper & Sahlman, 2001; Mann, Vrij, & Bull, 2002). Studies in which deceivers lied to the camera rather than a live person did not exhibit the recognizable behavioral differences (e.g., Elaad, Levine, Feeley, McCornack, Hughes, & Harms 2005.) As with the research into verbal cues, the findings with vocal indicators are mixed with studies showing both positive and negative results. Finally, some studies discuss outcomes in terms of intra and inter personal (individual) differences. Interpersonal differences are differences in behavior *between* individuals in response to telling a lie. For example, the cues given out by different people telling a lie in the same interview situation will vary. Some will show lots of hand/feet movements, and others less. Some show more changes in their verbal cues than their non-verbal cues. Intrapersonal differences refer to changes in the behavior by or *within* one individual versus another based on how they handle stress.

Special points of interest:

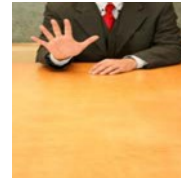
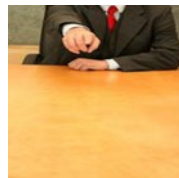
- An individual attempting to deceive, can experience strong emotions
- Deceivers will feel the need to control their behavior to appear more believable. such as guilt or fear.

NEXT Issue: Culture and Non Verbal Behavior

MORE NONVERBAL CUES TO DECEPTION

Research has shown that liars may tend to:

- Use fewer illustrators (hand/arm movements)
- Make fewer hand and finger movements.



A large number of other cues have been examined, these include: soothing gestures and self-adaptors (scratching, stroking movements seen as calming nerves), smiling, eye contact and gaze direction, head movements (such as nodding), and changes in posture and position. There are a range of different cues to discomfort and/or deception that an individual may display and the cues displayed may depend on whether the individual is nervous or fearful (emotional arousal) or having to think hard about their lie (cognitive load). This is why an individual may display different signs of deception in different situations. Furthermore, different individuals may display different cues in the same situation. A generally anxious person may be more nervous when telling a lie whereas someone with a poor memory may have to think harder to recall his/her whereabouts from a few weeks ago.