

## Detecting Deception as a Probable Healing Tool for Clients: A Review of Dr. Paul Ekman

Rivka Edery M.S.W., L.C.S.W.\*

Fordham University Graduate School of Social Work, United States of America

\*Corresponding Author: Rivka Edery M.S.W., L.C.S.W, Fordham University Graduate School of Social Work, United States of America.

Received: January 05, 2019; Published: February 28, 2019

### Abstract

The ability to detect if someone is lying is one of the most important skills a person can have, across roles and professions. Demonstrating a generalized understanding of emotions and lies is a noteworthy foundation in life. Observers who are skilled in discerning emotions, which are universal, and lies, which can be argued are universal as well, make their judgments on two important dimensions that support Dr. Ekman's general hypothesis. As the research demonstrates, people have different abilities to lie (consistent with Ekman, *et al.* 1991 and Kraut 1980); a remarkable cross-situational finding, especially since it is generalized. With regards to gender, the research has indicated that men differ from women in their deception clues (DePaulo, *et al.* 1985). Researchers have studied and documented unplanned facial expressions, including face measurement. Dr. Paul Ekman's extensive and intriguing work has been about the analysis of emotions and facial expressions, and the overall relationship between these two. He became famous, and accepted as a world-renowned expert, for his talent to discriminate truth from deception. My professional intrigue with his study of emotions and facial expressions, is tied in to my work as a psychotherapist. The ability to assist clients who are struggling and/or in denial, is strengthened by directing the client to be as truthful as possible, for their own benefit.

**Keywords:** Deception; Emotions; Paul Ekman; micro-expressions; detection; truth

### Introduction

Dr. Paul Ekman is a contemporary psychologist, with extensive, intriguing work on the analysis of emotions and facial expressions, and the overall relationship between these two .

Dr. Ekman was a student at both New York University and the University of Chicago, and in 1958, graduated from Adelphi University with a PhD in clinical psychology.

He received his first internship at Langley Porter Neuropsychiatric Institute, which was followed with employment as a consultant. For several years, he was employed as First Lieutenant and chief psychologist at Fort Dix, New Jersey. Following this, he became a psychology professor in the Department of Psychiatry at the University of California in San Francisco, retiring from both institutions in 2004. Dr. Ekman's professional accomplishments are extensive and impressive, receiving many awards, multiple honorary degrees and is the author of over fourteen books and one hundred and seventy published articles [1].

### Early research

Dr. Ekman's began researching hand movements and gestures in the mid 1950's. A decade later, he was awarded a research grant to examine multicultural studies of nonverbal behavior. The consequence of being the recipient of this grant, and the opportunities it afforded

him, led to his acclaimed studies in emotion and facial expression. In the late 1960's, he studied nonverbal behavior of the Fore people, in Papua, New Guinea. Dr. Ekman's choice to study this particular group, was based on their physical isolation in the South East Highlands, and Stone Age. Not surprisingly, his research yielded the most persuasive that facial expressions are universal [1].

Dr. Ekman started to analyze deception in 1967, specifically working with patients who lied to the clinicians about their emotional state. He analyzed patients who lied about not being depressed, but who eventually took their own lives. Ekman and Friesen studied slow motion films of the patients, and micro facial expressions which exposed strong negative feelings *the patient was attempting to conceal* [2].

Ekman's findings instigated the advancement of the Facial Action Coding System (FACS), the gold standard for detecting any movement the face can make. In 1978, Ekman, together with W. Friesen, established FACS as the first and only all-inclusive tool for independently calculating facial movement. The Facial Action Coding System (FACS), labeled every facial and bodily expression. Ekman has studied the science and social influence behind lying and *what significance lying has to our mental well-being*. In 2003, Ekman together with J. Hagar, made some adjustments, and J. Hagar is the third author. With the partnership of Terry Sejnowski, Ekman was able to study facial measurements with the aid of computers [2].

### Current work

In 2004, Dr. Ekman retired from his three-decade long professor role. He endeavored to convert his research into resources that would be beneficial for the general public. Forming the Paul Ekman Group (PEG), writing, his popular book, *Emotions Revealed*, and with his earlier publication, *Telling Lies*, national and regional law enforcement groups began reaching out to his organization for assistance. Responding to the need, he established seven training tools to augment understanding of emotions and relationships. Dr. Ekman's two main products are: Micro Expressions Training Tool (METT) and Subtle Expressions Training Tool (SETT). METT educates the user how to notice covert emotions in under an hour. SETT educates the user to notice the first signs of emergent emotions, also in under an hour [1].

Dr. Ekman is famously known as "the human lie-detector". His significant contribution to the field of psychology, and to society in general, is his decades-long research into human emotions and matching facial expressions. Amazingly, he has catalogued thousands of facial expressions, theorizing that not all expressions are the upshot of culture. He theorized that *facial expressions are biological since they convey human universal emotions*, such as surprise, sadness, anger, fear, disgust and joy. Basic human emotions are also universal, and Ekman identifies them as: sensory pleasure, contempt, relief, excitement, guilt, contentment, amusement, embarrassment, pride in achievement, shame, and satisfaction. He postulated that culture would not be a barrier to translating the matching emotion, to facial expression [3].

Taking his fascinating work even further, he partnered with Dr. Maureen O'Sullivan, to analyze micro-expressions. (Micro-expressions are diminutive, involuntary modifications in facial expression that can denote discomfort and anxiety). These micro-expressions exhibited by people, were analyzed by Ekman and O'Sullivan, in order to distinguish if they were telling the truth or lying. They discovered, during the course of their research, that very few people can naturally identify dishonesty. (I would be curious to know if micro-expressions can express unconscious motives, especially if the person is not aware, they are being deceptive, due to a variety of reasons [3].

### The Role of Emotion

When referring to emotions, perhaps we initially cogitate the subjective state of the person experiencing them, not to include the role of emotion on behavior and physiology. However, it is crucial to mention the role of emotional reactions on body chemistry and functioning. Emotions can actually alter body chemistry, a fact well known in today's day and age of science. Let's consider the emotion of fear, for example, an emotion that is primitive and relatable by everyone. Fear raises blood pressure, which triggers a release of adrenaline, and the person experiences the shift of bodily state. Another very well known, relatable example on the role of emotion, is with anxiety or sadness. These emotions involve the process of secretion and absorption of dopamine and serotonin [3].

The significance of discussing the role of emotion is that behavior is significantly affected by emotion. Some typical examples would

include a person's angry response in response to social injustice. If that anger is used constructively, the person can use that emotion to fight against social injustice, influencing others to do the same. This is a positive example of how emotion affects behavior. A person who is predominantly ruled by fear, and I emphasize predominantly because just having certain emotions, does not necessarily mean their behavior will be affected by it every time, may avoid contact or exhibit hiding behaviors. A positive emotion, like happiness, may inspire more open, talkative and friendly behavior. Since emotions strongly affect behavior, emotions also affect moral development. Consider all of the actions and behaviors that have propelled society forward, changes and policies made all driven by emotion and other factors [4].

### Same emotions across the Globe

Every person, no matter where in the world, encounters emotion, and although out of scope for this paper, I will mention that animals also experience emotions (think happy puppy when owner comes home). Although some cultures emphasize certain emotions over others, the following basic emotions are experienced by people across the universe, and cultures. These basic emotions identified by psychologists are anger, fear, disgust, surprise, happiness, and sadness. The reason for mentioning these main emotions as universal, is because they can be read and understood by most people. For example, any person regardless of their culture, would recognize a frown as possible sadness, a smile as happiness, or a scowl as potential anger. But what about shame? Would that be easily detectable across cultures? And specifically related to Dr. Ekman's work, can truth or deceit be detected and if so, is this universal? To answer this question, we must first ask how precise people are at discerning lies [4].

### Deception detection and the role of signals

At the onset of Dr. Ekman's research, he believed that the face might be a promising place to look for signals. His reasoning was that humans had a significant history of using the face to communicate, and that natural selection would have rewarded the ability to obscure emotion. He focused on things like "illustrators" (hand gestures while talking; which Ekman found to lessen as a liar focused on keeping his facts straight), or the even stronger "emblems" (including the Freudian slip of giving an interviewer the finger absent-mindedly). Ekman states that the exception in which the face proved revealing, was "micro affect displays," or micro-expressions. These are fleeting flashes of the emotional truth contradicting a false face. These "micro affect displays" lasted between one twenty-fifth and one-fifth of a second and could be noticed only by the instinctively gifted or the well trained, or via slow-motion video [5].

Lying is defined as a deliberate falsification, in which the target has not been forewarned of the speaker's intention to lie [6]. This is dissimilar to other forms of deception, like with poker players or magicians, where the audience is made aware, directly or indirectly, that incorrect information may be furnished.

Studies done on lie detection suggest that, overall, people's accuracy in detecting adults' lies basically happen by chance [7]. These results may reflect adult liars' ability to conceal indicators of deception, observers' inability to perceive cues exhibited by liars, or both. These research findings can also be made available for use in the courts and in the legal arena. It is hard to tell when witnesses are telling the truth or are being deceitful.

As children age, according to developmental research, they have a better understanding of deception, and are better able to lie to others as well (DePaulo, Stone, and Lassiter, 1985; Lewis, 1993; Talwar and Lee, 2002; Wilson, Smith, and Ross, 2003). Another interesting point is that the research does not support that young children's lies can more easily be discerned in comparison to adults who lie. However, some evidence shows that discerning truth and lies in children aged six to seven years old, were easily detectable by adults observing them.

The role of emotional signals is a critical element to discuss. They are the conduit for exchanging or sharing of vital information. Emotional signals are vital to human survival, especially when warning of danger. Emotional signaling plays an integral and evolutionary purpose, and it would come as no surprise that it is linked in with detecting deception. There is a broad scope of signals that people use to express how they feel, such as gestural, vocal and facial signals [4].

Research has also been conducted on voice signals. In a study done where British listeners were compared to people from remote Namibian villages unexposed to Western culture, the recognition of non-verbal emotional vocalizations, such as screams and laughs, were

examined. The results revealed that from non-verbal vocal signals, multiple emotions can be universally recognized. The same research also showed a specific pattern, that with a few other emotions, it was **recognized** across these cultural groups, but only **acknowledged** within this group. The results also showed that there are a group of mostly negative emotions that have more developed signals across various modalities [4].

In contrast to mostly positive emotions, that are shared with signals that are culture-specific [8], of particular interest to the investigators, was if the precision in spotting deception from demeanor in high-stake lies is unique to those lies or generalizes to other high-stake lies. The investigators discovered that observers' precision in judging deception in the crime scenario was positively correlated with their precision in judging deception in the opinion scenario. Their results found, as well as P Ekman and M O'Sullivan's (1991) finding of a positive correlation between the skill to ascertain deceit, and the ability to identify micromomentary facial expressions of emotion. The research results indicated that the skill to detect high-stake lies is extended to different high-stake situations involving deception. The researchers hypothesize that this is most likely because of the presence of emotional clues that betray deception in high-stake lies. What was significant in their discovery, is that detection accuracy and confidence in one's ability were not connected; these null results reproduce other findings that confidence and detection accuracy are not correlated (e.g., DePaulo and Pfeifer, 1986; Ekman and O'Sullivan, 1991).

### The Critics

Dr. Ekman's work stimulated an enormous federal program in American airports called SPOT, which stands for Screening of Passengers by Observational Techniques. With a huge cost of about \$200-million annually--\$900-million in all since 2007--the program, run by the Transportation Security Administration, organizes more than 3,000 officers to look for behavioral cues in the faces and body language of airline passengers. If any passengers seem suspicious, they are separated and prevented from further travel, until cleared. In some cases where passengers display more signs of deceitfulness during an interview, they are referred to law enforcement [5].

However, Dr. Ekman's lie-detection work has long had academic critics, with the main criticism being that he did not prove that his behavior-based lie-detection techniques are effective. The Government Accountability Office, during November 2013, advocated that Congress cease funding of the TSA program. Their main argument was that neither scholarship in general nor specific analyses of SPOT provided any proof that destructive intent could be deduced by looking at body language or facial cues. There are many academics who maintain this negative view of SPOT. Ekman provided a counter-argument that the government did not evaluate the most up-to-date and pertinent research on the subject. Furthermore, by removing behavioral-detection officers out of airports, it may open the doors for terrorists to inflict damage. His critics complain that the world's most famous lie detector, has provided an exaggerated account of his findings to a credulous press and policy makers, perhaps even exaggerating the truth [5].

### Conclusion

The ability to detect if someone is lying is one of the most important skills a person can have, across roles and professions. **Demonstrating a generalized understanding of emotions and lies is a noteworthy foundation in life.** Observers who are skilled in discerning emotions, which are universal, and lies, which can be argued are universal as well, make their judgments on two important dimensions that support Dr. Ekman's general hypothesis. As the research demonstrates, people have with very different abilities to lie (consistent with Ekman, *et al.* 1991, and Kraut, 1980); a remarkable cross-situational finding, especially since it is generalized. It is remarkable, especially since there is the additional modification which is the result of having different abilities to lie. With regards to gender, the research has indicated that men differ from women in their deception clues (DePaulo, *et al.* 1985). Researchers have studied and documented unplanned facial expressions, including face measurement. Perhaps inspired by Freud, who once wrote, "*No mortal can keep a secret. If his lips are silent, he chatters with his finger-tips; betrayal oozes out of him at every pore*" [5].

Dr. Ekman's work has been categorized into basic research and applied research. The basic research portion that applies to my direct practice involves the research pertinent to the psychology of emotion. However, the basic research also encompasses basic topics in psychology, like deception and pain. The applied research portion includes studies analyzing measurements taken of the face, pertaining to mental or physical health factors, something I most likely will not apply to my direct practice.

Teaching my clients contemplative practices, based on research, offers them a good chance to ease some aspects of their psychological problems, promote prosocial behavior and self-awareness. One significant tool I share with clients, is helping them to learn about one's emotions, especially those that make deception a more favorable choice. Psychological science has well established tools and models for understanding the mind and encouraging well-being, and Dr. Ekman's work is a significant part of this.

For a client to experience long-lasting change, it will require effort and commitment on their part. As their therapist, it is incumbent upon me to syndicate the techniques and frameworks from these traditions, and on the research of deception, to help my clients advance their emotional experience and socioemotional behavior. For example, take Client A, a male in his mid-30's, with a life-long history of difficulty mediating and regulating his anger. He self-reports prior refusal to seek professional help, and has only come to me for help, due to a work suspension by his current employer. As an initial intervention, the first task after the initial intake and assessment procedures, would be to guide Client A in being completely honest about this problem. Since I am not professionally trained in Dr. Ekman's approach, I would not be measuring this client's facial expressions to determine if he is in fact, being completely honest about his anger management issue. However, I would monitor his micro-facial expressions, without making it obvious or uncomfortable for either of us. Some of the benefits of using this approach, would include setting a very necessary professional boundary: the need for Client A to tell the truth, so appropriate interventions can be formulated. Another benefit would be to find out if he committed any crimes, or plans on hurting himself or anyone else, as a consequence of his anger.

The preassessment, assessments, and post assessment, include self-reports and tasks to capture changes in emotional behavior, and that require, and perhaps even assume, that the client is telling the truth. In my professional view, I see the relationship between understanding emotions, and truth telling, as inseparable. Each of my tasks, in unison with Client A, include increasing mindfulness so he can become aware of his emotions.

I would share the research of Dr. Ekman's and the field of psychological science, on emotion, and the powerful effect it has on human behavior. Following this, would be assisting him using breathing and relaxation techniques, to reduce trait negative affect, rumination, negative thinking depression, and anxiety. My clinical tools would not end with this. The positive aspect is just as important, and therefore I would coach him in increasing trait positive affect and mindfulness. Utilizing a series of behavioral tasks, our ongoing clinical work will aid Client A, and subsequent clients, to have an increased recognition of emotions in himself, and others, and greater self-management. Hopefully, this will help mitigate more functional behaviors [9-15].

### Bibliography

1. Ekman P. "About Paul Ekman" (2018).
2. Ekman P. "Why don't we catch liars?" *Social Research* 63.3 (1996): 801-817.
3. Ekman P., et al. "A few can catch a liar". *Psychological Science* 10.3 (1999): 263-266.
4. Ekman P. "What Scientists Who Study Emotion Agree About". *Perspectives on Psychological Science* 11.1 (2006): 31-34.
5. Shea C. "The Liar's 'Tell'". *The Chronicle of Higher Education* (2014).
6. Frank MG and Ekman P. "The ability to detect deceit generalizes across different types of high-stake lies". *Journal of Personality and Social Psychology* 72.6 (1997): 1429-1439.
7. Vrij A., et al. "Pitfalls and Opportunities in Nonverbal and Verbal Lie Detection". *Psychological Science in the Public Interest* 11.3 (2010): 89-121.

8. Eisner F, *et al.* "Universal vocal signals of emotion". Proceedings of the Annual Meeting of the Cognitive Science Society (2009): 31.
9. Frank MG., *et al.* "Investigative interviewing and the detection of deception". *Investigative Interviewing: Rights, Research and Regulation* (2013): 229-255.
10. Kemeny ME., *et al.* "Contemplative/emotion training reduces negative emotional behavior and promotes prosocial responses". *Emotion* 12.2 (2012): 338-350.
11. Levenson RW, *et al.* "Meditation and the startle response: a case study". *Emotion* 12.3 (2012): 650-658.
12. Robin S Edelstein., *et al.* "Detecting Lies in Children and Adults". *Law and Human Behavior* 30.1 (2006): 1-10.
13. Sauter DA., *et al.* "Emotional Vocalizations Are Recognized Across Cultures Regardless of the Valence of Distractors". *Psychological Science* 26.3 (2015): 354-356.
14. Turan B., *et al.* "Anticipatory sensitization to repeated stressors: the role of initial cortisol reactivity and meditation/emotion skills training". *Psychoneuroendocrinology* 52 (2015): 229-238.
15. Williamson T. "Investigative Interviewing". London: Willan (2006).

**Volume 8 Issue 3 March 2019**

**©All rights reserved by Rivka Edery.**