

## Deception

20 Years of Research on Lying

People rarely get above 60% accuracy

Some groups worse than chance

(Ekman, 1992)

## Who Can't Tell

Secret Service  
Federal Polygraphers  
Judges  
Police  
Psychiatrists  
Students

(Ekman, 1991)

## Who Can't Tell?

Customs inspectors vs. college students)

(Kraut & Poe, 1980)

Federal law enforcement officers vs students  
(DePaulo & Pfeifer, 1986)

Police officers no better than chance  
(Kohnken, 1987)

### Who Can't Tell

Group	% Above Chance
Secret Service	29%
Psychiatrists	12%

(Ekman, 1991)

"A man's gotta know his limitations."

But we don't

Federal law enforcement officers

More Confident Than College Students

No More Accurate

(DePaulo & Pfeifer, 1986)

Confidence and Accuracy

Unrelated

Exceptions: Federal law enforcement

Secret Service

(Ekman, 1991)

## Confidence and Accuracy

Federal officers    Before: Related

After: Unrelated

Secret Service        Before: Unrelated

After: Wrong

(Ekman, 1991)

## Accuracy

What Didn't Make a Difference

Age

Sex

Years of Job Experience

(Ekman, 1991)

## Accuracy

Polygraphers & Secret Service

Worse as Got Older

(Ekman, 1991)

Accuracy

Secret Service

Worse More Years of Job Experience

Worse Accuracy

(Ekman, 1991)

Believing What We Hear

Even believed statements which were openly  
labeled false

(Gerrig and Prentice, 1991; Gilbert, Krull  
et al., 1990;  
Wegner, Lane et al., 1994)

Count numbers in statements

Some labeled true; some false

(Gilbert, Krull et al., 1990)

Results

Increased "False" labeled "True"

No Change in "True"

(Gilbert, Krull et al., 1990)

Old Debate – New Life

Spinoza  
Comprehending is Believing

Descartes  
Comprehend then Believe or Not

Stranger Approaches

Constant Talk

Too Many Details

Detraction

(De Becker, 1997)

Role of Deception

Practical

Part of the High

Part of the Double Life

Shame Driven

## Gaze Aversion

Sadness

Nervousness

Embarrassment

Guilt

Disgust

## Gaze Aversion

"Even the guilty liar probably won't avert his gaze much, since liars know that everyone expects to be able to detect deception in this way. . . Amazingly, people continue to be misled by liars skillful enough to not avert their gaze."

(Ekman, 1992, p. 141)

"At times there was a great amount of shame for being deceitful. At times there was a great amount of pride: well, I pulled this one off again. You're a good one. You're very capable of doing this. It works for you. There were times when little old ladies would pat me on the back and say, 'You're one of the best young men that I ever have known.' I would think back and think, 'If you really knew me you wouldn't say that.'"

"To begin with, how I felt about fooling people is what's really hard to describe. I felt ashamed. For lack of a better word to describe it. Because I knew these people were trusting me. . . When I would lie to them, to start with I felt a lot of shame. But eventually, I had lied so much to, the shame element was no longer there. It was just a matter of keeping my tail covered. Keeping everything covered up."

Good Liars

Practiced Liars

Natural Liars

Psychopaths

Which Signs of Deception Work?

Signs the liar doesn't know to fake

Signs the liar can't fake

What Will Detect Deception?

Gaze Aversion?

Fidgeting?

## Channels of Communication

Face

Words

Voice Characteristics

Body Language

## Facial Expressions

Automatic Expressions

Micro-Expressions - 1/25"

Squelched Expressions

Asymmetry

Timing

## Automatic Expressions

Sadness

Inner corner of eyebrow raises, not full brow

15% voluntarily

(Ekman, 1992)

### Automatic Expressions

Worry, Apprehension, Fear

Both eyebrows raise and pull together

10% voluntarily

(Ekman, 1992)

### Voice Characteristics

Upset      Pitch Rises

Sad        Pitch Drops

Angry     Louder/faster

### Voice Characteristics

Stumbling over words

Repeating words

Pauses

## Body Language

Emblems

Illustrators

## Emblems

Wave goodbye

Thumbs up

Thumbs down

Come here

Hitchhiking

Peace

Crazy (circle ear)

Praying

Sleeping

Middle finger

## Timing

Surprise 1 second

## Duration of Emotion

5 seconds Likely Phony

10 seconds Almost Definitely

Nurse Study

Least Accurate

Face

Words

Nurse Study

Most Accurate

Body

Correct 65% of time

Nurse Study

96% accuracy

Voice Characteristics

Rise in Pitch

Face

Miserable Smiles

Detection Apprehension

High Stakes  
Suspicious Target Up

Low Stakes  
Gullible Target Down

Facial Action Coding System  
(FACS)

44 Action Units

30 Contraction of Specific Muscles  
E.g., Frontalis, pars medialis  
Inner Corner of Eyebrow Raised

13 Unspecified  
E.g., Jaw Thrust

7000 Combinations Observed

Comprehensive Coding Systems for Emotional Recognition

10 Hours of Coding Time Per Minute of Behavior

(Ekman, 1992)

Computerized Analysis of Facial Expressions

96.7% Accurate

(Tian et al., 2000)

Pitt- CMU Au-Coded Face Expression Database

N = 210

69% Female; 31% Male

81% Euro-Americans

13% Afro-American

6% Other

Age 18 to 50

(Kanade et al., 2000)