

LYING

FROM ATTRIBUTION THEORY PERSPECTIVE



**SOCIAL PSYCHOLOGY
PRESENTATION**

INTRODUCTION



- ❧ Lying - the part of everyday life.
- ❧ Yet until recently lying was almost entirely ignored by psychologists, leaving serious discussion of the topic in the hands of ethicists and theologians.
- ❧ But as psychologists delve deeper into the details of deception, they are finding that lying is a surprisingly common and complex phenomenon.

..... CONTD.



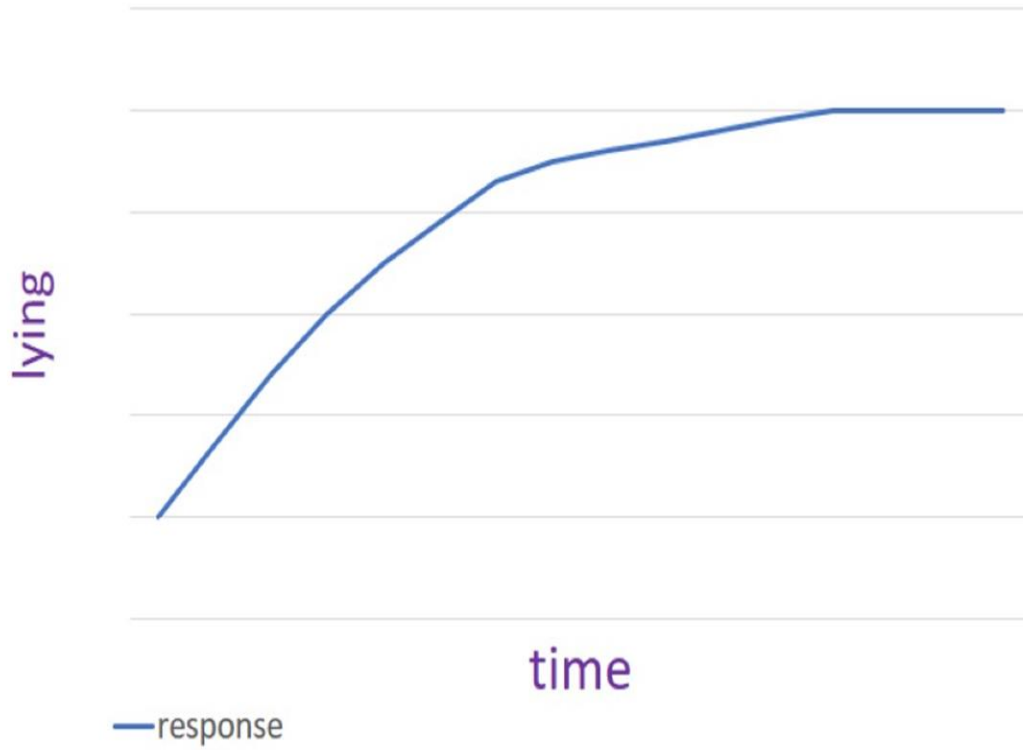
- ❧ Bella DePaulo, Ph.D., a psychologist at the University of Virginia, confirms Nietzsche's assertion that the lie is a condition of life.
- ❧ Some types of relationships – parents and teens, couples, are virtual magnets of deception
- ❧ Although taught to tell the truth always, in reality society often encourages and even rewards deception.
- ❧ Lies - ranging from sweet little lies to heinous deceptions

LYING AND ITS REASONS



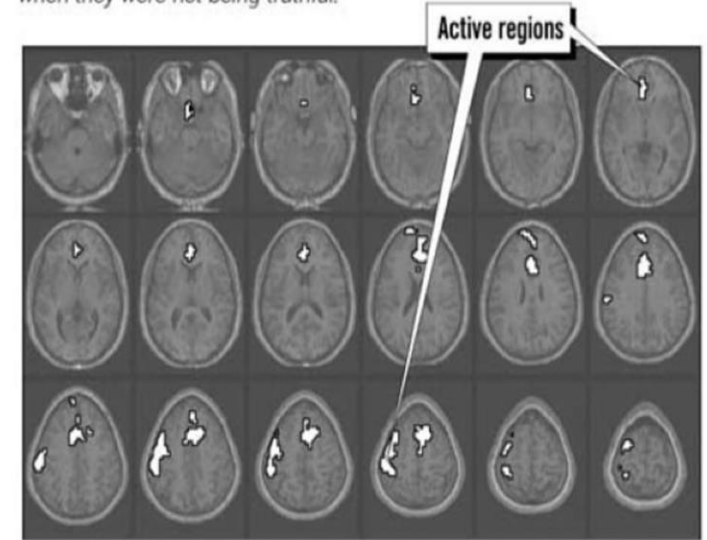
- ❧ The question of why people lie is profoundly important and endlessly intriguing.
- ❧ Various experiments were conducted on the pattern of activity in the brain of those who are lying and those who told the truth and active regions were demarcated.

Brain response while lying



This is your brain, lying

Using a type of brain scan called functional magnetic resonance imaging, scientists found certain brain regions — shown here in white and black in a series of horizontal cross sections — were more active in test subjects when they were not being truthful.



Source: University of Pennsylvania





TO LIE IS GOOD FOR KIDS



Kang Lee, a senior child psychologist did an experiment to find whether good liars had higher thinking capabilities.

Experiment:-

In a room filled with hidden cameras, toys were placed behind children's back and then sounds which the toys made were played, like a bark for a toy dog and then kids were asked to guess the toys to win a prize. The first two audio clues were easy to guess, but in case of the 3rd toy, the audio clue had no relation with the toy. So, there was no way anyone could have guessed the toy.

On the pretext of attending a call or something else, the experimenter then left the room telling the kids that they should not turn and peek.

When the experimenter returns he asks the kids whether they had peeked or not.

RESULTS



- ☞ Almost all kids peeked at the toy.
 - ☞ 30% of 2yrs lied
 - ☞ 50% of 3yrs lied

Then these little liars along with their truth telling friends were subjected to tests of theory of mind and executive functioning.



..... CONTD.



Result:-

The liars outperformed the truth tellers in the test. Hence , liars had better developed the higher thinking skills, which we learn as we grow.

Reason and explanation:-

Mind reading ability: The ability to reasonably guess what the person before me knows and what he/she doesn't.

(Theory of Mind: ToM allows one to attribute thoughts, desires, and intentions to others and to predict or explain their actions).

Self Control: The ability to regulate ones body language, behaviour and attitude to achieve the required goal. (executive functioning skills)

WHY ARE WE SO BAD AT DETECTING LIES ?



- ❧ People are pretty lousy in detecting lies.
- ❧ Studies conducted say that on an average people detecting lies correctly is slightly more often than chance.
- ❧ Correlation coefficient of the statistical data from the study on this topic conducted by Bella DePaulo came out to be 0.64

BLIND CUES PEOPLE USE



∞ Cues like :

1) Liars won't look you in the eye.

2) Liars seem tense.

3) Liars have awkward tone and sentence structure.

∞ People easily accept those with friendly or amiable faces to be telling the truth than those without.

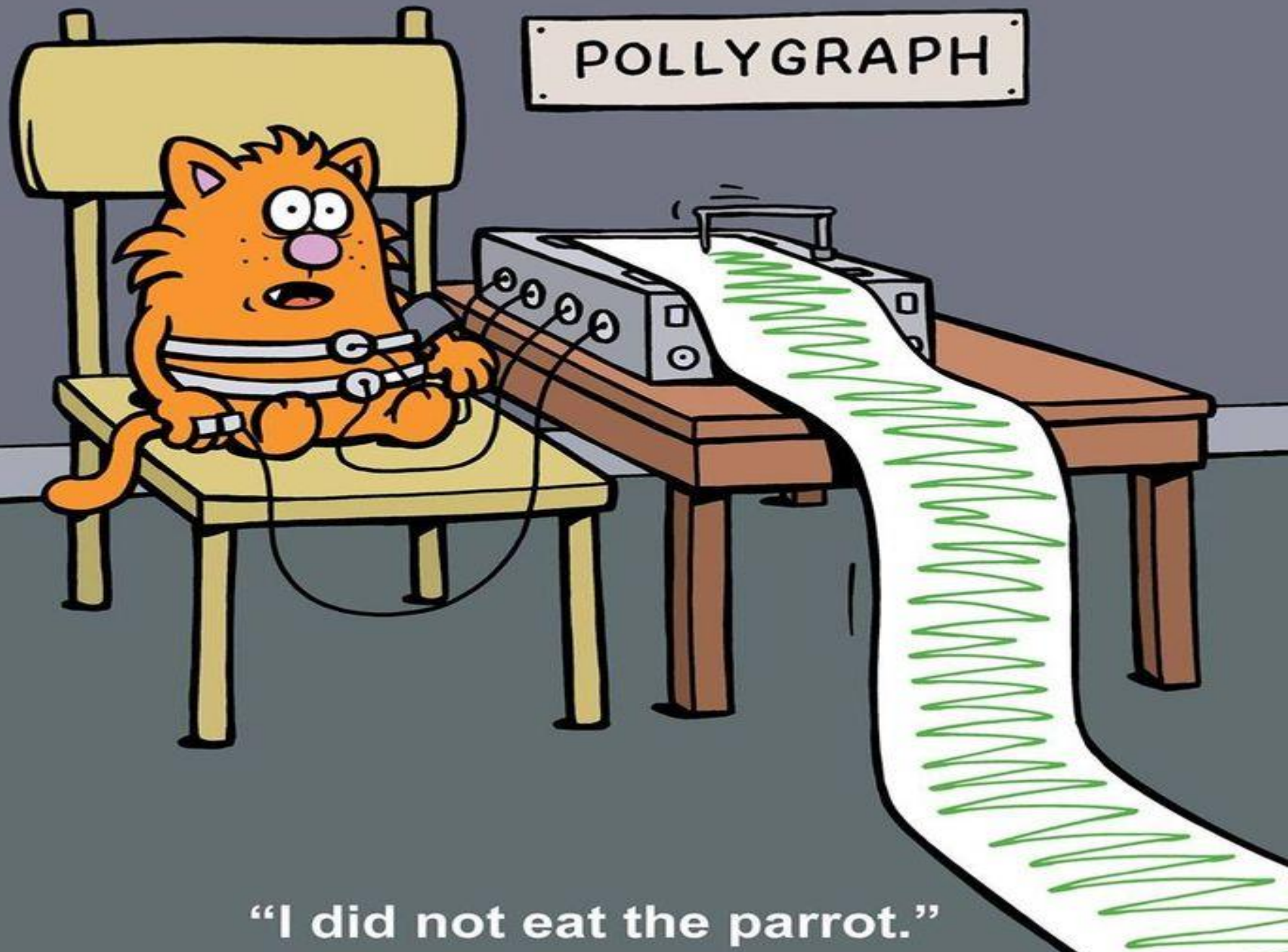


POLYGRAPH



- ❧ A **polygraph**, popularly referred to as a **lie detector**, measures and records several physiological indices such as blood pressure, pulse, respiration, and skin conductivity while the subject is asked and answers a series of questions.
- ❧ The accuracy (i.e., validity) of polygraph testing has long been controversial. An underlying problem is theoretical: There is no evidence that any pattern of physiological reactions is unique to deception. An honest person may be nervous when answering truthfully and a dishonest person may be non-anxious.

POLLYGRAPH



“I did not eat the parrot.”

ARE THESE CUES AND METHODS UNIVERSAL ?



- ❧ People generally use correct cues but in the same manner in all cases.
- ❧ They tend to ignore other factors that can negate them.
- ❧ On the average, liars seem more nervous than truth-tellers. But the difference is unimpressive in its size.

☞ People can be nervous for reasons that have nothing to do with whether they are lying or telling the truth.

☞ There is a need to go out and find more reliable evidence.



CAN A COMPUTER TELL WHEN YOU ARE LYING?



Well it's a Machine Learning
problem.

This comes under the category of
supervised classification problem!

HOW TO USE MACHINE LEARNING ?



The computer is fed up large amounts of data scripts of both lies and truths. It is told about each script whether it's a lie or a truth. The computer processes the large amounts of data and then searches for similarities between the truths/lies or moreover the differences between truths and lies.

CUES THE COMPUTERS FOUND

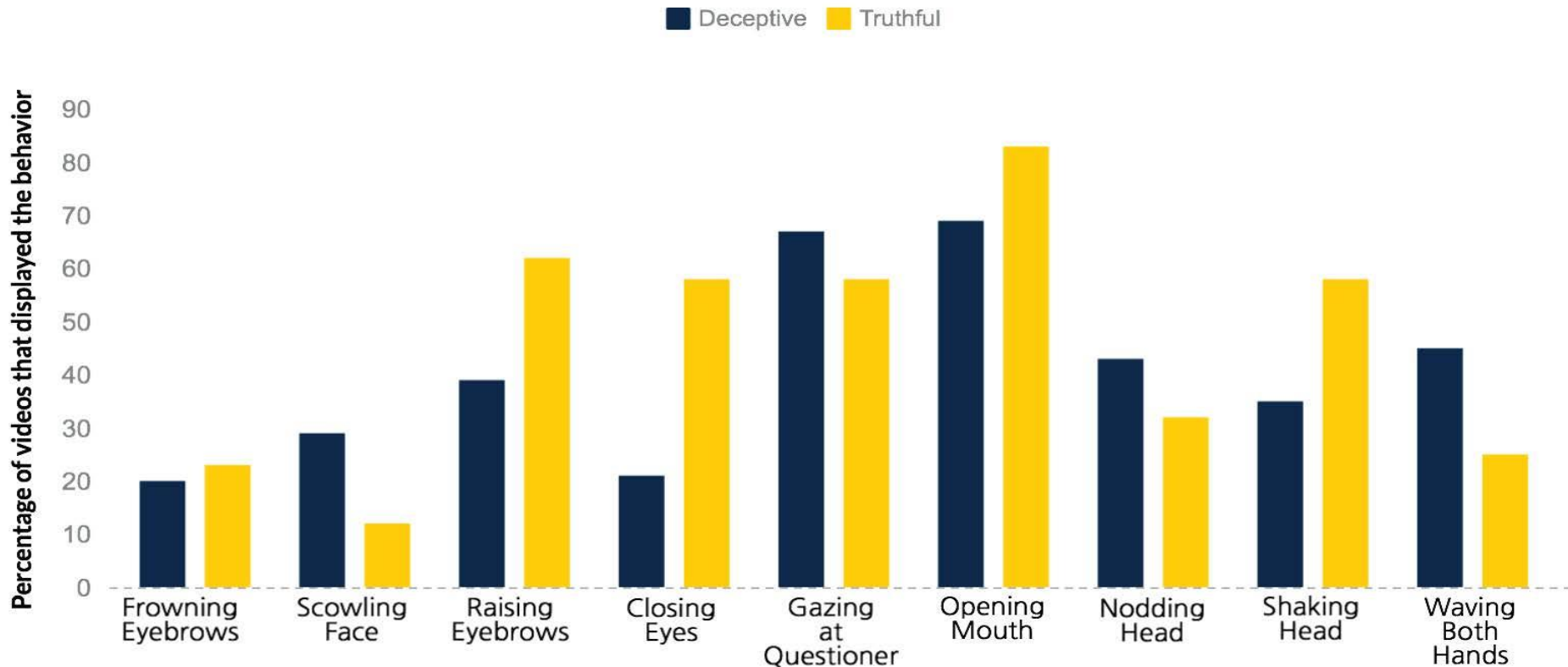


- ❧ Number of words used.
- ❧ Number of sentences used.
- ❧ Expression of anger in the sentences.
- ❧ Odds of expressing different expressions.
- ❧ Language.

Out of 38 cues given to the computer, 5 had good probabilities.
5/38 hmm... It is a complex work then.

What does lying look like?

By studying videos from high-stakes court cases, University of Michigan researchers are building a unique lie-detecting software that's based on real-world data.



..... CONTD.



- ❧ Liars don't access the same range of vocabulary that truth-tellers do. They fall back on the same words rather than using a variety of words.
- ❧ Liars focus on what they want to lie on and hence don't have much to say.
- ❧ Liars use anger to hide their lies.
- ❧ Words like *except*, *but*, and *without* are used less often by liars.
- ❧ Specifically liars are less likely to use the first person ("I") and are more likely to use the second person ("you") or the third person ("he" or "she" or "they").

FUTURE OF LYING



- ❧ According to a **2011 survey of Americans**, we humans lie about 1.65 times a day.
- ❧ It's a common assumption that the advent of the Internet and electronic communication has made it easier than ever for us to deceive one another. Without the visual tells of body language, it is often difficult to read emotion, much less intention or honesty. Lying is, as Jeff Hancock notes, "central to the human experience."

In one study, it was found that people lie less in email than over phone conversations or even in face-to-face interaction. Online resumes, such as those found on [linkedin.com](https://www.linkedin.com), also tend to be more honest than paper resumes. In another study, a group of people were asked to judge the personality of a mutual friend. A group of strangers was then asked to judge the same individual's personality based upon his or her Facebook profile. In most cases, these two assessments were fairly equal, suggesting that we are actually more truthful in our online personas than is often believed. A final study looked at online dating profiles and found that while most users do tell lies, they are often only small lies (overestimating height by a few inches, for example), and usually these people only lie about one or two aspects of their appearance or personality.



REFERENCES



- ❧ <https://www.psychologytoday.com/blog/living-single/201305/why-are-we-so-bad-detecting-lies>
- ❧ <https://www.psychologytoday.com/blog/living-single/201706/why-do-people-lie-you>
- ❧ <https://www.psychologytoday.com/blog/living-single/201412/can-computer-tell-when-you-are-lying>
- ❧ <https://www.coursera.org/learn/wharton-communication-skills/lecture/98tN8/cues-to-detect-deception>
- ❧ <http://www.apa.org/research/action/polygraph.aspx>
- ❧ <https://digitalhumanitiesseminar.ua.edu/work/theory-reviews/the-future-of-lying/>

THANK YOU

PRESENTATION BY



❧ Madha Ganesh Reddy	(16CS01003)
❧ Yatam Venu Madhav	(16CS01007)
❧ Abhisekh Patnaik	(16EC01044)
❧ Rahul Kumar	(16CS01010)
❧ Ankit Pradhan	(16CS01014)
❧ T K R Arvind	(16EC01023)
❧ Rahul Kumar Singh	(16EC01020)
❧ Ayush Sharma	(16EE01041)
❧ Prathyush N P	(16CS01043)