



LUCY MILLER AGAINST POPEYE

popular myths in psychology

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DECIMALS?



- Erich von Wolf, 1870.
 - 3.5 grams, mistakenly became 35 grams
- In 1937 an error was noticed, but it was too late, because ...



PARAPSYCHOLOGY?



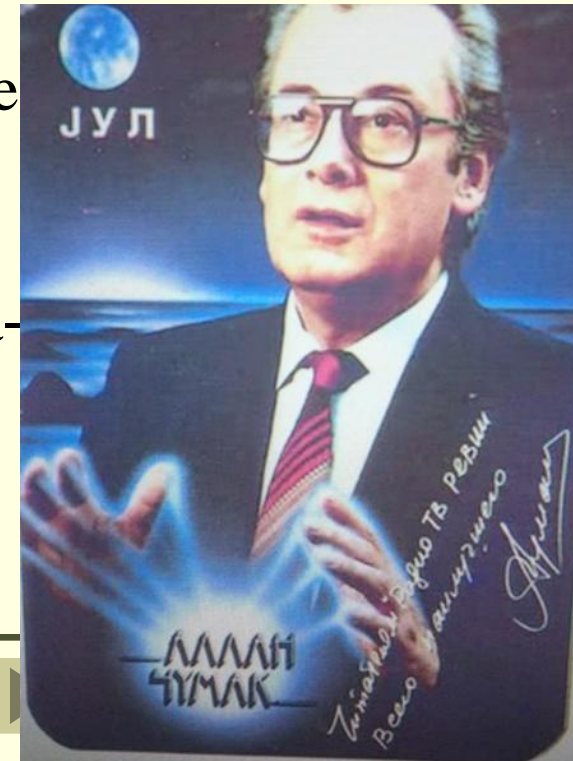
- Extrasensory perception (ESP)
- 1972, US government, \$ 20 million for *Stargate* program
 - *the ability of "remote observers" to perceive militarily useful information remotely*
- Funded until 1995
- Nothing has been shown in controlled studies!
- But what if the effects are small, maybe ...
- Ganzfeld?



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- Ganzfeld?
- Julie Milton, Richard Wiseman (1999) meta-study on 30 Ganzfeld studies
 - The effect size was at the chance level



HYPNOSIS?



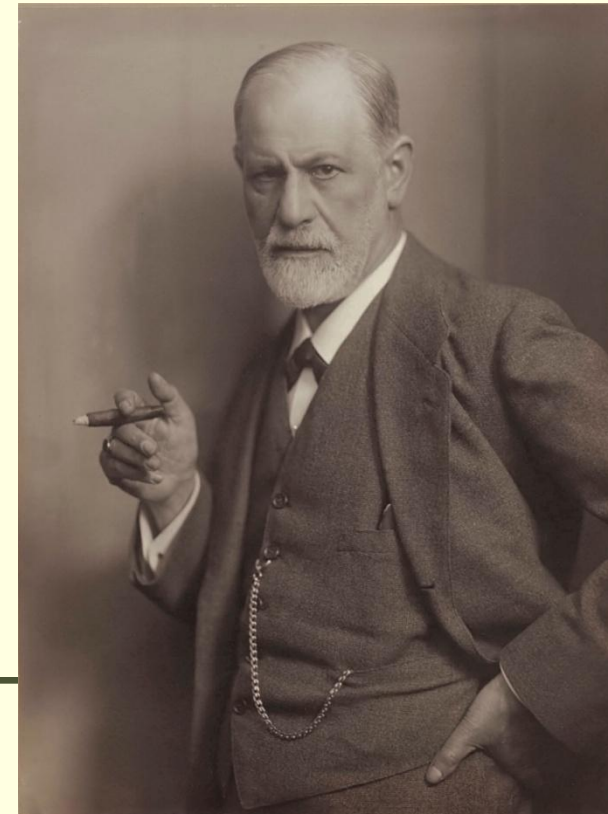
- Larry Mayes 2001, released after 21 years in prison - DNA analysis, he was not guilty for rape and robbery.
 - 100th person to whom it happened!
- The hypnotized victim recognized him, after two witnesses identified him as innocent!
 - Loftus (1980) - 84% of psychologists and 69% of non-psychologists believe that hypnosis can extract any memory
- In fact, hypnosis CANNOT improve memories (Erdelyi, 1994) or can even CHANGE memories (Lynn, Neuschatz, Fite, & Rhue, 2001)
 - In hypnosis - more mistakes than accurate recollections!
- It is useful in the treatment of pain and habit disorders (e.g. smoking) or as an adjunct to REBT techniques (anxiety, etc.).



SUPPRESSION?



- Do we suppress unfavourable experiences and memories?
- Psychoanalysis
- In fact, the data show the opposite
- Baddeley - better memory of emotionally charged events, especially negative ones
- Rats, adrenaline, maze ...



DESTRUCTOTHERAPY?



- Throwing the anger out, yes or no?
 - 1986, Sherrill, after dismissal killed 14 and wounded 6 colleagues in the post office - "going postal"
- Destructotherapy – violence and R’N’R.
- Short-term effect
- Useful only if accompanied by constructive problem solving (Littrell, 1998).



FEAR OF MADNESS?



- Are psychiatric clients violent?
 - 80% of Americans believe they are (Ganguli, 2000).
- Availability Heuristics - Who Makes More Movies Poland or France?
- Paranoia and addiction show increased violence (Harris & Lurigio, 2007)
- But no other disorder (Elbogen & Johnson, 2009).
- 90% of psychiatric clients have NEVER committed violence (Hodgins et al., 1996).
 - About 3-5% of psychiatric cases among criminals (Walsh, Buchanan, & Fahy, 2001).
- In fact, they are victims more often (Teplin, McClelland, Abram, & Weiner, 2005)



THE EPIDEMIC OF AUTISM?



- Autism - a disorder of neuro-psychological development characterized by impaired social interaction and communication and repetitive stereotypical behavior.

- By 1990, the prevalence in the United States was 1 in 2,500.
- 2007. prevalence in the US - 1 in 150 or even 1 in 68?
- Anti-vaccination movement!

- In fact:** the diagnostic criteria are lowered, i.e. it is easier to diagnose it according to newer classifications of the disease

- England, 2005, the prevalence of autism in 1992 and 1998 does not change, if we use the old diagnostic criteria!



WEREWOLF?



- Every 29.53 days a trivial astronomical event happens - does it have psychological consequences?
 - Is there an increase in psychiatric cases and crime during the full moon?
- The word “lunatic”
- “The Lunar Effect” or “Transylvania Effect”
- 81% of professionals believe in this effect
- 69% of hospital technicians believe (Francescani & Bacon, 2008).



WEREWOLF?



- Arnold Lieber (1978, 1996) popularized the idea, the body has 4/5 water ...
- One study found a link to car accidents
 - In that period the full moon was more frequent during weekends!
- It has nothing to do with - murders, other crimes, suicides, psychiatric problems, calls to crisis centres (Rotton & Kelly, 1985).

	Hospital receptions	No hospital receptions
Full Moon	Only this is noticed!	?
Not-full Moon	?	?



SANDMAN?



- Do dreams have meanings?
- 43% of Americans believe that they display unconscious desires (Adler, 2006).
- In India, South Korea, and the United States, 56 %–74% of people believe that dreams contain hidden truths (Morewedge & Norton, 2009).
- ACTUALLY:
 - There is no scientific data to show this
 - The only thing we know:
 - REM phase and its importance for psychological functioning



MOZZART EFFECT?



- Are we getting smarter by listening to Mozart?
- 1993 study - after 10 seconds of listening to Mozart, respondents are better at reasoning tasks
- The effects are short-term! But the "Mozart effect"!
 - Millions of CDs sold, US Georgia, to every newborn per CD!
- The effect cannot be replicated!
- Short-term arousal, short-term effects,
- But anything, not just Mozart, also a cup of coffee!



ALIENATION?



- Kitty Genovese, killed in March 1964 in front of a group of passive street observers
- John Darley and Bibb Latane, *shared responsibility* - the more observers the less likely someone is to help
- **Actually:**
 - Police strike
 - Four people did report the first attack (quarrel)
 - The murder happened later, during the night, without observers!



**“37 WHO SAW
MURDER DIDN'T
CALL THE POLICE”**

- The New York Times

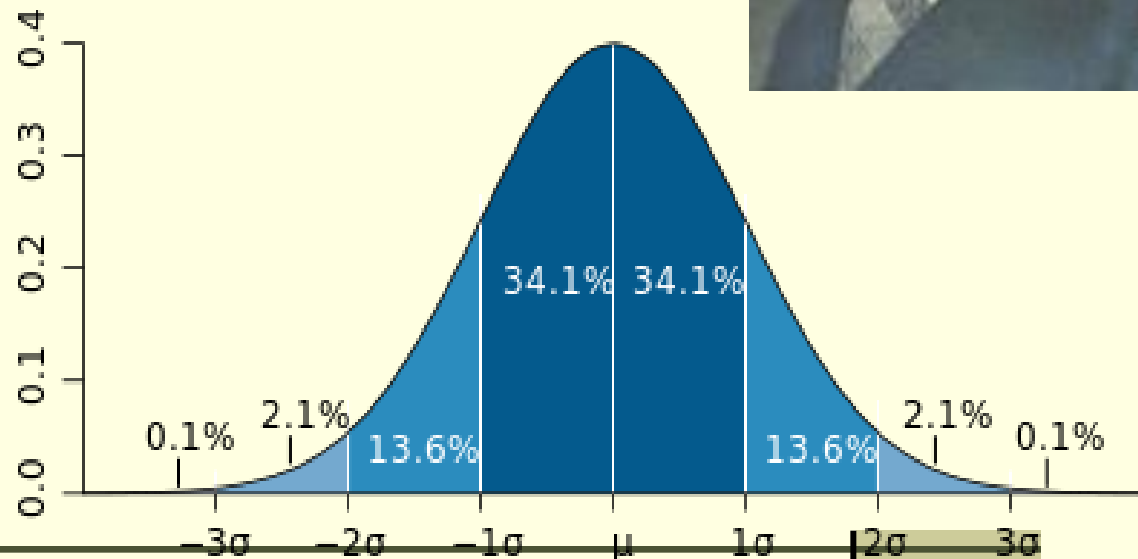
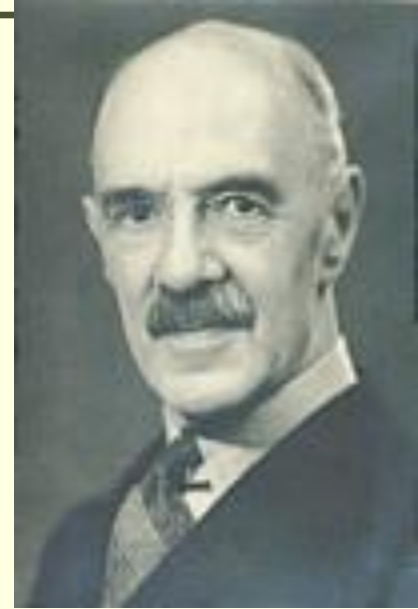
March 27, 1964



WHAT PSYCHO-TESTS ACTUALLY MEASURE?



- Charles Spearman - test theory
- The position of the individual in relation to the group, i.e. the relative position
- What is IQ exactly?
 - Corresponds to % of people from some "our surrounding" from whom we perform better on that test



ARE THE EYES CHEATING US?



•MOSTLY NO!

- Why and WHEN do eyes cheat?
- IN CONDITIONS FOR WHICH THEY HAVE NOT ADAPTED!



25. FRAME



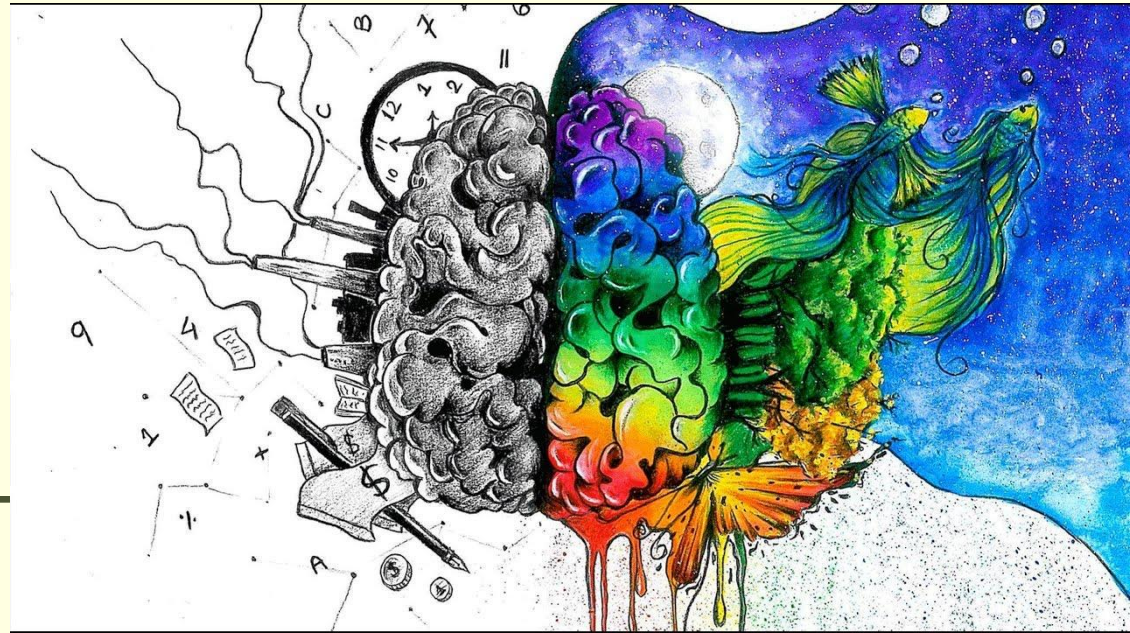
- Subliminal messages - 1/3000 of a second
 - Does it change how we think, behave and what we buy?
- A large number of experiments have shown that there is NO effect on buying or voting
 - Not only studies, but also attempts to implement failed!
- In 1958, the Canadian Broadcasting Corporation played a subliminal message during the "Sunday night show" - "phone now", 352 times.
- No change in number of calls!
- Despite everything:
 - In 2000, Republicans in the presidential election campaign, along with Vice President Al Gore, played the word "RATS".



LEFT AND RIGHT BRAIN?



- Is left hemisphere more analytic and right one more creative?
- NO!
- There are various zones in the brain, performing different functions
 - Some are lateralized, but many of them are performed bilaterally
- We all use both hemispheres!
 - Scott Lilienfeld: *"The two hemispheres are much more similar than different in their functions."*



LUCY and 10%?



- Do we use only 10% of the brain?
 - It began in the 1800s by comparing the learning abilities of gifted children with the average
 - Then in 1900, parts of the brain whose functions they did not know were declared inactive
- William James – “The average person rarely uses more than 10% of the brain”
- Of course we use 100% of the brain, but not all at once
 - Some parts work continuously (breathing regulation), while others are switched on as needed (opinion)
 - The brain is expensive - 2% of weight, and consumes about 20% of energy
- But even today:
 - *It's been said that we use only 10% of our brain capacity. If, however, you're flying _____ Airlines, you're using considerably more”*



MITHS, how they survive?



- Oral communication
- Desire for quick solutions
- Selective data
- Correlation-causality
- Subsequent conclusion
- Non-representative samples
- Heuristic of representativeness – judge a book by it's cover
- Media exaggerations
- Exaggeration of existing effects
- Terminological confusion (literal translations)





COMMUNICATE SCIENCE!

