

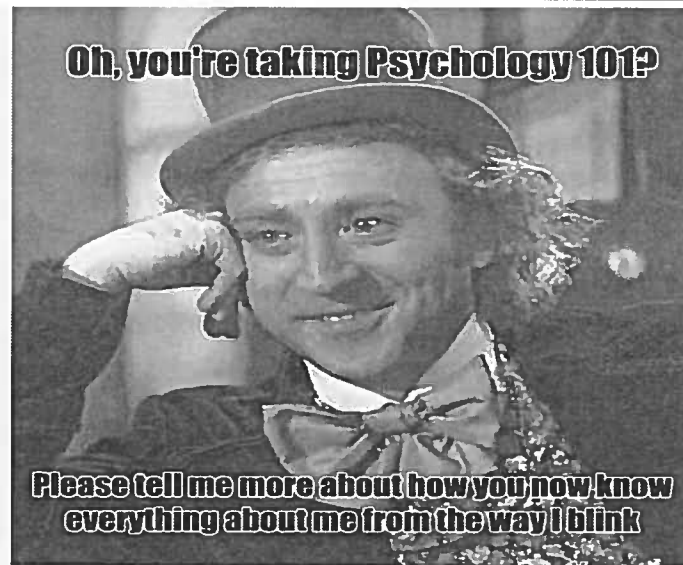
## Chapter 8 – Thinking, Language, and Intelligence

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Discussion questions are due between today and the Monday before class.

# Psych Meme

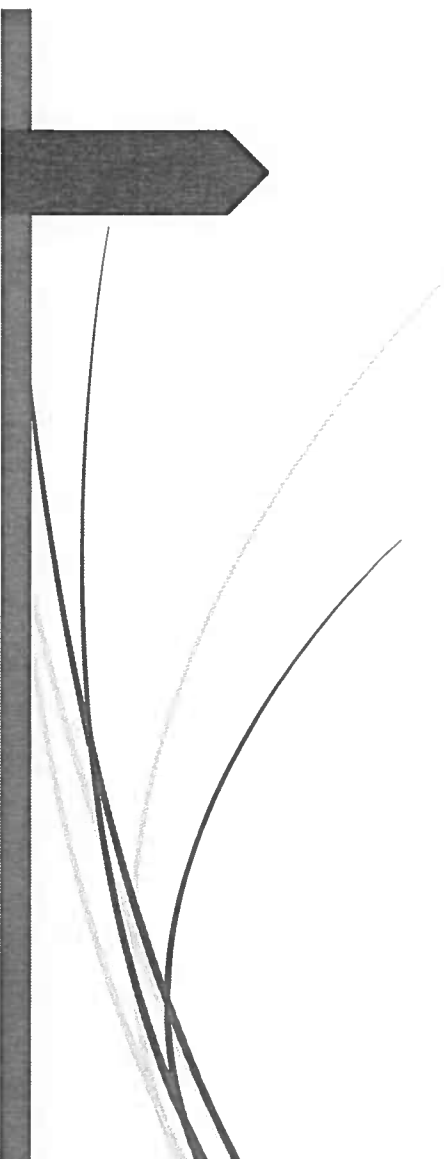
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# Review

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- Questions?
- Need any clarification from last week?
- Now is the time to discuss the various discussion questions. What is your opinion on the matter?
- Now we can have a quick review from last week.



## Chapter 3 – Themes

- There are three themes we will look at:
  - Nature versus Nurture – How does our genetic inheritance (our nature) interact with our experiences (our nurture) to influence our development?
  - Continuity and stages – What parts of development are gradual and continuous, like riding an escalator? What parts change abruptly in separate stages, like climbing rungs on a ladder?
  - Stability and change – which of our traits persist through life? What changes as we age?



# Fetal Alcohol Syndrome

- ▶ This is seen by marked lifelong physical and mental abnormalities
  - ▶ During the time the mother was pregnant, she consumed alcohol during the first eight weeks, and this is a vulnerable time for the development of the baby. Once they reach the later stages of prenatal development they will have greater chances of survivability if they encounter teratogens during this time.



# Piaget's Stages of Cognitive Development

- ▶ The first is Sensorimotor: Experiencing the world through sense and actions
  - ▶ The age range where this occurs is between birth to two years of age. Infants also begin to develop stranger anxiety
- ▶ The next is Preoperational: Representing things with words and images; using intuitive rather than logical reasoning.
  - ▶ The age range is typically between two and seven, and they have a hard time taking another person's point of view. This is called Egocentrism.



## Attachment Style

- ▶ Attachment begins when they are infants, this is a powerful survival impulse which keeps their infants close to their caregivers.
- ▶ Mary Ainsworth observed mothers and their infants at six months. She later observed them when they were one years old.
  - ▶ She observed that 60% of the infants display secure attachment. While the rest either suffer from an insecure attachment, which is marked by anxiety or avoidance of trusting relationships.

# Chapter 8

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- This chapter covers thinking, language and intelligence
- Psychologists who study cognition focus on the mental activities associated with thinking, knowing, and communicating information.
  - After reading through the chapter did you have any questions?



# Vocab terms

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- Concepts – mental groupings of similar objects, events, ideas, and people.
  - As we age we group like things into our thinking. Ex., when we are little we figure out that our pet dog is called “dog” so based on what we know everything else has to be a dog right?
- Algorithms – step by step procedures that guarantee a solution. But following the steps in an algorithm takes time and effort.
- Heuristics – simpler thinking strategies
- Insight – an abrupt, true – seeming, and often satisfying solution.

## Vocab terms cont.

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- Confirmation bias – that is the tendency to seek evidence for our ideas
- Fixation – the inability to see a problem from a new perspective
  - Ex., this is seen in every single person. (duh)
- Availability heuristic – judging the likelihood of an event based on its availability in memory. (if you continue to do the same thing over and over you'll be able to judge what will occur. Albert Einstein called this insanity)

# Video on Confirmation Bias

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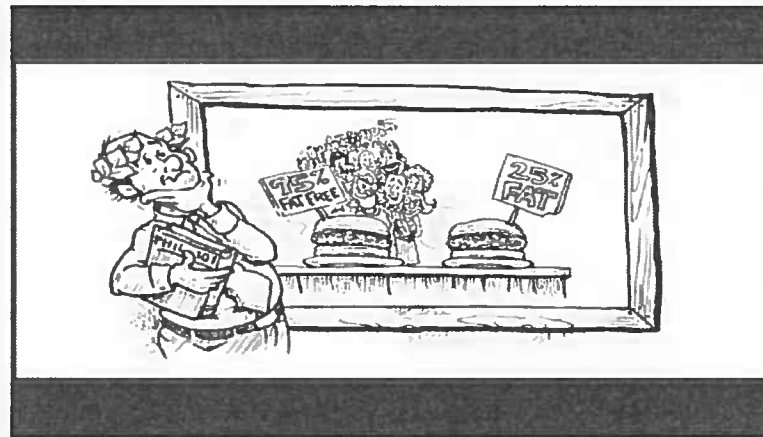
# End of Vocab

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- Overconfidence – the tendency to be more confident than correct
- Belief Perseverance – clinging to beliefs and ignoring evidence that proves they are wrong
- Framing – the way an issue is posed; framing can significantly affect decisions and judgments

# Framing Video

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# Matchstick Problem

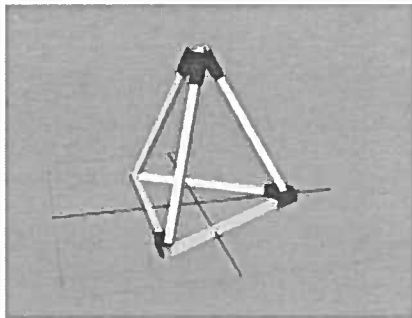
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- Arrange the six matchsticks at your table into four equilateral triangles.
- You will have 10 minutes to work on this challenge.
- Solution is on next slide.

# Solution

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- Where you fixated on two dimensional solutions?



# Language

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- Receptive language – Children’s language development moves from simplicity to complexity. (can read lips) They learn how to speak the same words by reading lips
- Productive stage – before nurture molds their speech, nature allows a wide range of possible sounds in the babbling stage around four months. (attempting to say mom or dad)



## Language cont.

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- The one word stage – happens around one year old.
- Two word stage occurs around 18 months
  - At this time they begin to use telegraphic speech (send money, need snack)

# Question Time!

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- What was Noam Chomsky's explanation of language development?
- Why is it so difficult to learn a new language in adulthood?

# Thinking without Language

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- Mental practice relies on thinking in images.
- Ex., Liu Chi Kung was imprisoned during China's cultural revolution. After his release, which was seven years without touching a piano, critics judged his playing to be better than ever, and they wondered how he continued to develop.
  - He responded, "I did practice every day. I rehearsed every piece I had ever played, note by note, in my mind"

# Mental Practice

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- Another example, is that when ballet dancers watched ballet videos, fMRI scans showed that they are dancing along in their brain.
- There was a study done which noticed that when students conducted mental practice a week prior to a midterm that those who didn't scored lower and those who did scored higher.
  - The second group conducted daily simulation where they imagined themselves looking at notes and reading over things. (They also tended to decline outings during the week of or prior to the test taking place so that they can study)

# Intelligence

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- There are two theories of intelligence.
  - Spearman – believed that we have one general intelligence (g) He went on to say that while we may excel in one area we would only score above average in another. (ex., those who score high in verbal ability, score above average in other areas like spatial or reasoning ability)
- Gardner's viewed intelligence as multiple abilities that would come in different packages.

# Sternberg's Three Intelligences

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- Analytical intelligence (school smarts: traditional academic problem solving)
- Creative intelligence (trailblazing smarts: the ability to generate novel ideas)
- Practical intelligence (street smarts: skill at handling everyday tasks)

# Question!

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- How do Gardner's and Sternberg's theories of multiple intelligences differ?
- Discuss

# Emotional Intelligence

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- Emotional intelligence has four attributes or abilities – perceiving emotions, understanding emotions, managing emotions, and using emotions
- Emotionally intelligent individuals are socially aware and self-aware. They know when to approach people or solve a work related issue. Thus, life is for them, and their marriages are more stable. How do emotionally intelligent people succeed academically?



# Crystallized and Fluid Intelligence

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- Crystallized intelligence – our accumulated knowledge, as reflected in vocabulary and word-power tests.
- Fluid Intelligence our ability to reason speedily and abstractly, as when solving unfamiliar logic problems – decreases as we age.

How does this decrease as we age? Do cognitive diseases (like dementia) affect it more and cause a rapid decrease?

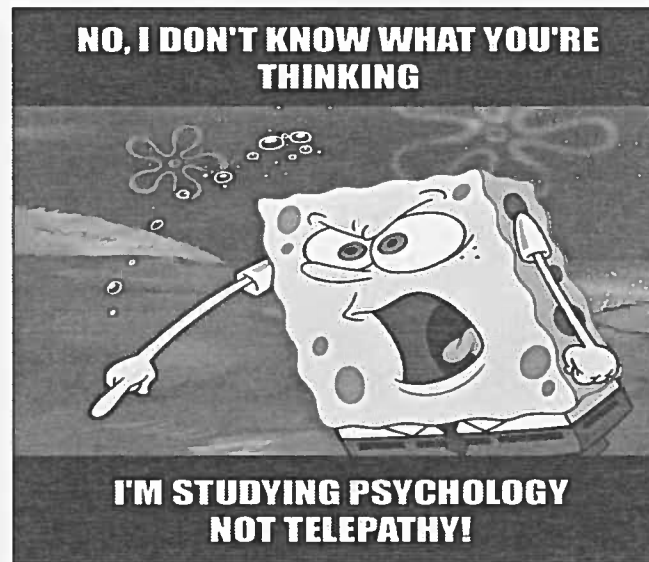
# Stereotype threat

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- Expectations and attitudes can influence our perceptions and behaviors.
  - It is a self-confirming concern that we will be judged based on a negative stereotype.
- Is this visible in society? Do people have this fear or do people project this fear onto other ethnicities?

The end

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Discussion questions – and a reflective question. All papers unless specified are in MLA format.

**Reflective essay** – For this assignment you go to canvas, look at the reading assignment, and do a reflective essay on your thinking style. This is one of the options, or you can work on one of the three discussion questions.

**Discussion question #1** – Use table 8.1 in your paper writing. Don't write it down etc or draw it just use the information within it. Describe the cognitive processes and strategies. Then explain how this is seen in your life. How do you use these strategies? At minimum write a page and a half to two and a half pages.

**Discussion question #2** – What is intelligence? Define it and what are the arguments for it? Any against it? Are there other intelligences? How does emotional intelligence differ from the typical thought of "intelligence?" **USE Sternberg's three intelligence theories in your explanation.**

Page length – 2-3 pages.

**Discussion question #3** – What is emotional intelligence? Define. Is it more important than IQ?

What is IQ? What determines someone being "smart?" Is EI or IQ more important. **USE the book to cite in addition to two to three sources. Visit the librarian to ask for assistance in researching.** Page length – 2-4 pages. **THIS is in APA format. APA FORMAT is required.**

**Come to the library and visit a tutor (such as myself) if you require assistance for using APA formatting.**