PY 101 – 012

Friday, January 15, 2016

Week 1, Day 2 Notes

Development & Adaptive Process

Quizlet on this lecture's vocab - <https://quizlet.com/_1yzlmn>

Office hours will be from 1:30 to 2PM on Fridays

Why study psychology?

It's personally relevant.

It's relevant to everyone

You have a psychological experience and so does everyone around you

Application in Real Life:

* Understanding why someone acts a certain way
* Predicting how a person will act

Psychology is a study of the mind, brain, and behavior

* Mind = perception and experience
* Brain = Biological components of the mind
* Behavior = observable actions

Goal: Understand mental activity, social interactions, and how people acquire behavior.

Other real life application

* Some people devote their lives to studying the mind, brain, and behavior

* Many professions benefit from it
  + Doctors
    - Have to be able to empathize with patients
  + Lawyers
  + Engineers
    - Ergonomics
    - Design things that are intuitive
  + Advertisers
    - Make people want to buy your stuff

Isn't it just common sense?

Ex: Imagine you meet a new person while holding a beverage

What effect do you think the temperature of the beverage would have on your impression of that person

If someone drinks a cold drink, will you perceive them as a cold person?

Studies show that if you drink a warm coffee as opposed to a warm coffee makes people perceive you as a "warmer" person.

Imagine that you're walking down a crowded street and see a nearby person collapse

How would you react?

Studies show that as the number of people around you increases, the likelihood of someone helping decreases.

Called the "bystander effect"

Humans are "intuitive psychologists"

Can all psychological phenomena be predicted intuitively?

No

Need a systematic way to reach conclusions

Does listening to Mozart make you smarter?

A review of studies testing the Mozart effect showed that listening to Mozart is unlikely to increase intelligence.

How did this frenzy occur?

A misunderstanding of causality

The critical thinking process:

1. Ask questions
2. Define the problem
3. Examine the evidence
4. Address assumptions and biases
5. Avoid emotional reasoning
   1. You can't really change someone's mind about emotional stuff
      1. Religion
      2. Sports
      3. Characters
6. Don't oversimplify
7. Tolerate uncertainty
8. Consider alternative interpretations
   1. Purposefully examine contradictory opinions

Scientific Foundations of Psychology

* Psychology originated in philosophy
* Chinese and Muslim philosophers and scientists speculated about human behavior
* In 19th century Europe, psychology emerged as a scientific discipline
* Development of **schools of thought**

The Mind/Body Problem

* Are the mind and body separate and distinct?
  + Are they related?
* Early scholars: The mind is entirely separate from and in control of the body
* 1500s: Leonardo da Vinci challenged this question
  + He dissected cadavers
* 1600s: Cartesian dualism suggests that they are separate things, but influence each other.

Origins of Experimental Psychology

**Wilheim Wundt**: father of psychology

* 1879 - established first lab
* Wanted to measure conscious experiences
* Developed introspection
  + Systematic examination of subjective mental experiences that requires people to inspect and report examinations of an apple

Functionalism

William James: physiologist, philosopher

Argued the mind consisted of a stream of consciousness that could not be frozen in time, broken down, and analyzed

Functionalism: what do your thoughts do

House analogy

You can't look at the bricks to examine what a house is

Gestalt Psychology

* Founded by Max Wertheimer in 1912
* Gestalt theory: The whole of conscious experience is different from the sum of its parts
  + The perception of objects is subjective
  + Things don't have to be connected to be one.

Freud and the Unconscious

Sigmund Freud: Much of human behavior is determined by mental processes operating below the level of conscious awareness.

Biggest contribution is the notion of the **unconscious** mind

**Psychoanalysis** - tries to bring unconscious mind to awareness

Behaviorism

* **John B. Watson** - challenged psychology's focus on conscious and unconscious mental processes
  + Developed **behaviorism** - focus on how observable environmental stimuli affect behavioral responses
  + Believes all behaviors are learned
* **B. F. Skinner** took up the mantle of behaviorism
  + Ex. Giving a dog treats or punishment to train them is in this realm.

Cognitive Psychology

* Studies showed that the simple laws of behaviorism could not explain all learning
  + You don't have to be rewarded or punished in order to learn something
* **George A. Miller** - (1957) launches cognitive revolution
* **Cognitive psychology** - study of how people think, learn, and remember
* Computers led to *information processing* theories
  + If-then etc.
* 1980s - Cognitive psychologists joined forces with neuroscientists, computer scientists, and philosophers

Social Psychology

Mid 20th century - increased interest in understanding how behavior is affected in the presence of others

**Social psychology** - focuses on the power of situation

Nazi Germany - Why did everyone go along with it?

How are people shaped by the presence of others?

Science Informs Psychological Therapy

**Carl Rogers** and  **Abraham Maslow** pioneered a humanistic approach to the treatment of psychological disorders

Behaviorism gave rise to therapies designed to modify behavior

**Aron T. Beck** developed cognitive therapies to correct faulty thoughts/beliefs

Developed drugs for treating conditions

Biology in Psychology

Increasing our understanding of biological processes

We know more about brain chemistry

There is more than 100's of processes

Neuroscience

Localization of function: Some brain areas are important for specific feelings, thoughts, and actions

Evolution in Psychology

Modern evolutionary theory has only recently begun to inform psychology

The human mind has been shaped by evolution

The **brain** adapts biologically

Changes related to survival and reproduction

The mind adapts

Are our processes adaptive?

The human brain is good at interacting with other people.

We can detect if people is lying

We have social code

Recognizing emotions of other people

Adaptive mechanisms enhance chances of survival

Be able to tell if a person is hostile

Visual cliff

There is a piece of glass over what seems like a cliff. Put a mother of an infant on one side and ask the infant to go to the mother and it won't because fear is programmed into the mind.

Many of our current behaviors reflect our evolutionary heritage, some of which may now be maladaptive.

Sugar used to be scarce, but now it's not, so now we have obesity

Some behaviors do not reflect our evolutionary heritage

Our fondness of technology

Vocab

|  |  |
| --- | --- |
| Personally relevant and relevant to everyone | Why study psychology? |
| Psychological science | Study of mind, brain, and behavior (mind = perceptual experiences, brain = biological processes in the brain, behavior = observable actions |
| Goal of psychology | Understand mental activity, social interactions, and how people acquire behavior |
| Critical thinking | Systematic evaluation of information to reach reasonable conclusions |
| Schools of thought | A particular way of thinking on a subject |
| Mind/body problem | Problem which asks "Are the mind and body separate and distinct?" |
| Wilhelm Wundt | Father of psychology (established the first psychology laboratory in 1879 and wanted to measure conscious experiences. Developed introspection)  achine generated alternative text: |
| Introspection | Systematic examination of subjective mental experiences that requires people to inspect and report on the content of their thoughts |
| William James | Argued the mind consisted of a stream of consciousness that could not be frozen in time, broken down, and analyzed  achine generated alternative text: |
| Functionalism | The idea that psychologists should examine the functions served by the mind |
| Gestalt theory | The whole of conscious experience is different from the sum of its parts (You can't understand the whole brain just by examining it piece by piece) |
| Sigmund Feud | Established the idea that much of human behavior is determined by mental processes operating below the level of awareness (introduced notion of unconscious)  achine generated alternative text: |
| Unconscious | The mental forces that we are unaware of that can produce psychological discomforts/disorders |
| psychoanalysis | Psychotherapeutic treatment which tries to bring the unconscious mind into the conscious mind (developed by Freud) |
| John B. Watson | challenged psychology's focus on conscious and unconscious mental processes  achine generated alternative text: |
| Behaviorism | focuses on how observable environmental stimuli affect behavioral responses |
| * 1. F. Skinner | Focused on behaviorism. Said no mental processes were of scientific value in explaining behavior and that all behavior is shaped by consequences of previous behavior. |
| George A. Miller | Launched cognitive revolution. Focused on mathematical, computational, and psychological aspects of mental processes |
| Cognitive revolution | Name for an intellectual movement in 1950s that began the creation of cognitive sciences |
| Cognitive psychology | Study of how people think, learn, and remember |
| Cognitive neuroscience | Academic field concerned with the scientific study of biological substrates underlying cognition |
| Social psychology | Focuses on the power of situation and on the way people are shaped through their interaction with others |
| Carl Rodgers and Abraham Maslow | pioneered a humanistic approach to the treatment of psychological disorders |
| Aaron T. Beck | Developed cognitive therapies to correct faulty thoughts/beliefs |
| Localization of functions | Some brain areas are important for specific feelings, thoughts, and actions |
| Brain | Adapts biologically and changes in relation to survival and reproduction |
| Mind | Adapts to cultural influences |
|  |  |