

Chapter 1

What is Psychology?

Definition: *the scientific study of behavior and mental processes.*

Our text: *the scientific study of mind and behavior*

Psychology is a science and uses the scientific method in order to learn and understand. Psychology is **empirical means** (knowledge acquired by means of observation or experimentation)

Not intuition or because an authority figure says it is so.

Scientific Method: hypothesis/question → measure, observe/collect data

A hypothesis must be testable, measurable.

Is this hypothesis testable: Is homosexuality wrong?



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- Some ask: What sets psychology apart from other disciplines? Some say it isn't the content.
- a) "I want to help people" but many professions help people.
- b. But many of these disciplines don't use the scientific method

The “content” in Psychology is very broad.

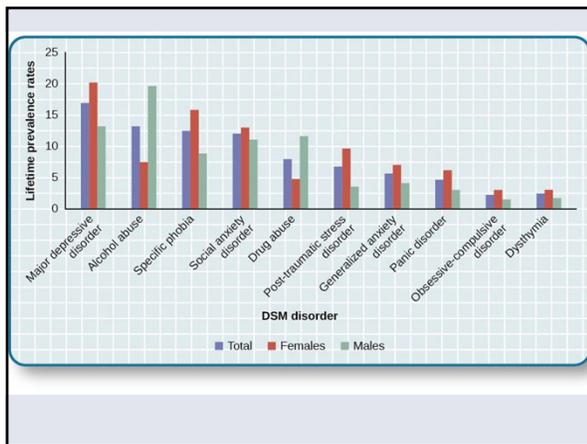
- Open doc to see the many divisions of the APA



From text p. 7

- Benefits of an education in psy “prepare students to critically evaluate the various sources of information they encounter”.

When we talk about gun control, the president says it is a mental health issue. People who are mentally ill shouldn't have guns. But in our chapter on Disorders, you'll learn that if someone is mentally ill, then they must have one of 600 disorders. So I would ask the president: Which of these disorders did the El Paso shooter have? We'll also learn that over half of us will have a mental disorder in our lifetimes.



From Wikipedia

- Previous widely cited large-scale surveys in the US were the Epidemiological Catchment Area (ECA) survey and subsequent National Comorbidity Survey (NCS).[11] The NCS was replicated and updated between 2000 and 2003 and indicated that, of those groups of disorders assessed, nearly half of Americans (46.4%) reported meeting criteria at some point in their life for either a DSM-IV anxiety disorder (28.8%), mood disorder (20.8%), impulse-control disorder (24.8%) or substance use disorders (14.6%). Half of all lifetime cases had started by age 14 and three quarters by age 24
- However, these are widely believed to be underestimates, due to poor diagnosis (especially in countries without affordable access to mental health services) and low reporting rates, in part because of the predominant use of self-report data, rather than semi-structured instruments such as the [Structured Clinical Interview for DSM-IV \(SCID\)](#); [actual lifetime prevalence rates for mental disorders are estimated to be between 65% and 85%](#)

Critical Thinking

- Critical thinking - making reasoned judgments about claims. Don't believe without it.
- Some Basic Criteria:
 1. **There are very few "truths" that do not need to be subjected to testing.(controlled drinking)**
 2. **What would it take to show the belief is false?**
 - Need to falsify (confirmation bias in ch 2)
 3. **All evidence is not equal in quality. Who are the people making claims? Could they have a bias?**
 4. **Just because someone is considered to be an authority or to have a lot of expertise does not make everything that person claims automatically true.**
 5. **Critical thinking requires an open mind. What if some treatments are found to cause harm? What if your beliefs aren't supported by science? (an adopted child of 2 gay men isn't a mental health risk).**

<https://www.splcenter.org/fighting-hate/intelligence-report/2011/10-anti-gay-myths-debunked>

If you do go a medical doctor you want him/her be scientific in diagnosis/treatment. You should demand the same in a psychologist. Some Treatments that aren't supported by science could potentially be harmful.

TABLE 1
Provisional List of Potentially Harmful Therapies

Intervention	Potential harm	Primary source of evidence
Critical incident stress debriefing	Level I (probably harmful for some individuals) Heightened risk for posttraumatic stress symptoms	RCTs
Scared Straight interventions	Exacerbation of conduct problems	RCTs
Facilitated communication	False accusations of child abuse against family members	Low base rate events in replicated case reports
Attachment therapies (e.g., rebirthing)	Death and serious injury to children	Low base rate events in replicated case reports
Recovered-memory techniques	Production of false memories of trauma	Low base rate events in replicated case reports
DBT-oriented therapy	Induction of "alter" personalities	Low base rate events in replicated case reports
Grief counseling for individuals with normal bereavement reactions	Increases in depressive symptoms	Meta-analysis
Expressive-experiential therapies	Exacerbation of painful emotions	RCTs
Boot-camp interventions for conduct disorder	Exacerbation of conduct problems	Meta-analysis
DARE programs	Increased intake of alcohol and other substances (e.g., cigarettes)	RCTs
	Level II (possibly harmful for some individuals)	
Peer-group interventions for conduct disorder	Exacerbation of conduct problems	Quasi-experimental studies
Relaxation treatments for panic-prone patients	Induction of panic attacks	Replicated single-case designs

Note. RCTs = randomized controlled trials; DBT = dissociative identity disorder; DARE = drug abuse and resistance education.

Our Text says this of critical thinking



1. Be skeptical
2. Recognize internal biases
 - a. Hindsight bias (chapter 7, confirmation bias (chapter 2 study guide #34 & Chapter 7)
3. Use logical thinking
4. Ask appropriate questions
5. Make observations
6. Be Humble: Your views may turn out to be wrong.

What's the difference between a theory and a hypothesis?

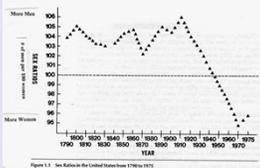


Figure 1.7 Sex Ratio in the United States from 1700 to 1975

- **Hypothesis** – the predicted outcome of an experiment or an educated guess about the relationship between variables
- **Theory** – a system of ideas that explain how facts or experimental outcomes are related.

• **Example:** A social exchange theory can explain the relationship between the stock market and hemlines. It can also explain the sex ratio and teen pregnancy.

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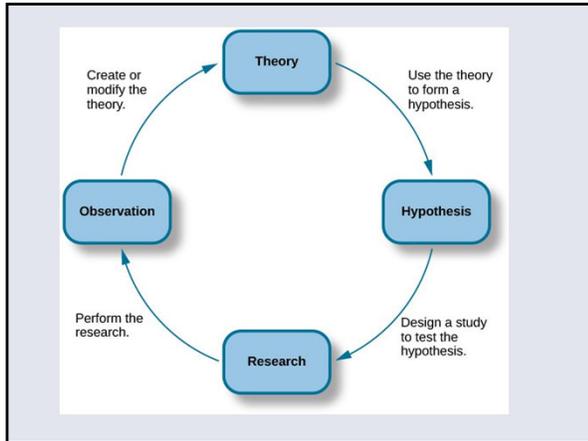



Social Exchange Theory: 1) sex is a commodity and subject to laws of supply and demand. 2) women provide the supply of sex and men provide the demand (women don't pay for sex). 3) women are motivated to restrict the supply (price is higher – they get more)

Does this theory account for facts/predict?

1. hemlines and GDP
2. sex ratio

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Pseudopsychologies

- Pseudopsychologies - systems of explaining human behavior that are not based on or consistent with scientific evidence.
 - Numerology, Astrology
 - Phrenology – reading bumps on the skull.
 - Palmistry – reading palms.
 - Graphology – analysis of personality through handwriting.



Without critical thinking and a reliance on science, maybe we will believe

- magnets improve your health
- teaching “abstinence only” reduce STDs and teen pregnancies?
- teaching grade school kids how to resist peer pressure and how bad drugs are will protect them from future drug abuse (DARE)?
- “hysteria” is caused by a wandering womb?(see next slide)

History of Psychology

- 1879 – first psychological lab – Wilhelm Wundt (center)
- 2 early schools of thought
 - Structuralists – used introspection to investigate basic elements of experience
 - Functionalists – asked what are the functions of behavior



Neither survived intact today, but functionalism's influence is felt especially in Evolutionary Psy

How reliable is our access to "internal world"

- Depression Inventory Question "I am sad all the time".
 - Event sampling reveals those people are not sad at more than half the sampled events.
- Subjects memorize word pairs. One group gets "ocean-moon". Both groups later asked for favorite detergent. Ocean-moon group more frequently have "tide" as fav detergent. Yet when asked why, they gave many reasons but not that they were primed.
- Consumer study on stocking preference. Right one of 4 was favored 4:1. When asked why they chose that one, no one identified the position effect.

The Psychoanalytic Perspective

- ♦ Emphasizes roles of:
 - Unconscious processes
 - Unresolved past conflicts



Key word: Unconscious

Sigmund Freud

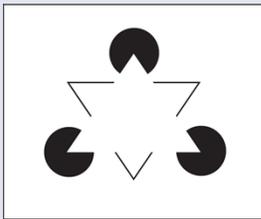
Psychoanalytic Perspective (late 1800's)

- Sigmund Freud is the man
 - Role of unconscious
 - Seen in slips of the tongue and dreams
 - Influence of sexual and aggressive instincts
 - He was a cousin of Darwin
 - He was the father of Psychoanalysis
 - Emotional problems stem from unconscious conflicts
 - Catharsis – a releasing of emotional energy

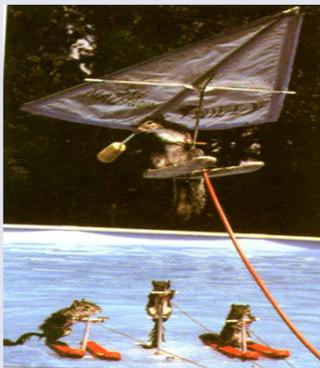


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Gestalt Movement

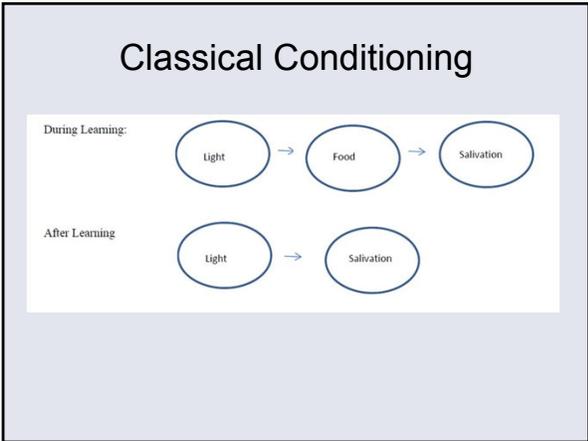


- ♦ What do you see?
- ♦ **Key Phrase: The whole is greater than the sum of its parts.**
- ♦ You can't study psychological events by breaking them into their "elements".



The Behavioral (Learning) Perspective

- ♦ Focuses on the role of the external environment in shaping and governing behavior
 - ♦ Pavlov found that he can “teach” dogs to salivate to many different stimuli in the environment. Called Classical Conditioning.
- ♦ For Skinner and Watson emphasis is placed on the effects of rewards and punishments. i.e. the consequences of a behavior influence the frequency of the behavior. Called Operant Conditioning
- ♦ Started in 1900ish and is still very powerful today



Behaviorism

- **Behaviorism** - the science of behavior that focuses on observable behavior only.
 - Must be directly seen and measured.
 - Watson believed that phobias were learned.
 - Case of “Little Albert” – taught to fear a white rat.
- **Key Words: Reinforcement, Punishment, Observable behavior, Classical Conditioning**

Humanistic Movement (1950s)

- Reaction against earlier negative views of man – called the 3rd force in psychology
- Believed behavior is not ***determined***
- Emphasized:
 - Free Will
 - Potential for Growth
 - Dysfunction occurs only when the growth process is thwarted
 - Freedom
 - Choice
 - Personal Responsibility



Carl Rogers

Key words: Free Will, Personal Responsibility.

MAJOR PERSPECTIVES OF PSYCHOLOGY

- **Cognitive psychology**
 - Researched memory which provided catalyst for cognitive revolution
 - Mind is like a computer.
 - Examines mental processes that direct behavior, focusing on concepts such as thinking, memory, and judgments
 - ABC Model

Key words: thoughts, judgements, memory

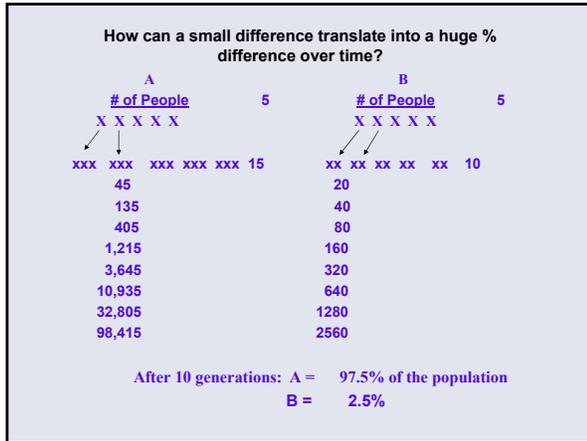
Cognitive neuroscience

- Explores physiological explanations for mental processes and connections between behavior and the human nervous system
 - Using brain scanning technologies we can tell people's preferences.
 - Behavioral treatment for phobia: those who are helped show brain changes.

An Evolutionary Perspective on Sexuality and Mate Selection

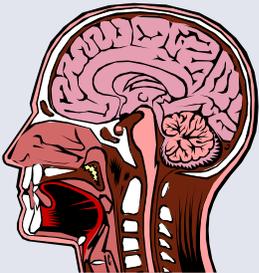
- Natural Selection
 - When through random variability, an organism possesses a trait that leads to greater survival and more offspring, that trait flourishes.
- Sexual Selection
 - Men and Women exert a mating preference, and if a trait is preferred and leads to more offspring, that trait flourishes.
 - Example: Why do male peacocks have such big tails?
Answer: Because hens prefer males with big tails



- Behaviors and preferences have evolved because it served our ancestors well.
- Even:
- Men give women more sperm as the chances of extra pair copulation increase. (sperm competition)
 - other mammals too
 - Why do the females of some species eat the male during copulation?
 - Why do males of some species kill all the babies of the females when they take over the group?

The Biological Perspective



- ♦ Emphasizes roles of:
 - Brain processes
 - Biochemical processes
 - Genetic factors
 - Twin Study
- Is a particular behavior biologically based?
 - See diffs very young
 - Stable over time
 - Ex. S. Seeking
 - Doesn't vary across cultures (sex drive)

Other types of psychologists

- S & P
- Personality
 - Study what makes us unique
 - Study how personality develops or study how to measure (traits). Text mentions Big 5.
- Social - milgram's study
- I/O
- Health psychology
 - How psychological factors affect physical health (like stress).
- Sports/Exercise psychology
- Forensic
