

INTRODUCTION TO PSYCHOLOGY

Psychology 101

East-West University/Fall 2022

Defining Psychology

- A science
- Scientific study of behavior and mental processes
- Behavior
- Mental processes
- Critical thinking
- Empirical method (Any procedure for conducting an investigation that relies upon experimentation and systematic observation rather than theoretical speculation)

Critical Thinking

- Thinking deeply and actively
- Asking questions
- Evaluating the evidence
- Characteristics of critical thinking
 - Curiosity
 - Skepticism
 - Objectivity

Counterintuitive

- Intuition
 - The ability to understand something immediately, without the need for conscious reasoning
- Contradiction to intuitive thinking

History of Psychology

- Wundt: Structuralism “Water is H₂O”
- James: Functionalism “Water is...”
- Darwin: Natural selection
- Freud: Three parts of personality /psychodynamic theory

Contemporary Approaches to Psychology

- Biological
- Behavioral
- Psychodynamic
- Humanistic
- Cognitive
- Evolutionary
- Sociocultural

Biological

- Emphasizes the body (esp. the brain and nervous system)
- Neuroscience
- “What area of the brain is involved in fear responses?”

Behavioral (B.F. Skinner)

- Focuses on the scientific study on *observable* behavior
- *Instrumental conditioning*

Psychodynamic (Freud)

- Focuses on:
 1. Unconscious thought
 2. Conflict between biological demands and society's demands
 3. Early childhood experiences

Humanistic (Carl Rogers)

- Rejected psychodynamic approaches for focusing on negative, unhealthy aspects of human nature
- Emphasizes:
 - A client's positive qualities (strengths)
 - The capacity for positive growth (potential)
 - Freedom to choose one's destiny
- Rogers:
 - Unconditional positive regard
 - Warmth
 - Genuineness

Cognitive (Aaron Beck)

- Emphasized the mental processes of knowing
 - Directing our attention
 - Perceiving
 - Remembering
 - Thinking
 - Solving problems
 - Views mind as active problem-solving system

Evolutionary

- Uses adaptation, reproduction, natural selection as basis for explaining human behavior
- A psychologist can disagree with the evolutionary approach but still believe in evolutionary theory

Sociocultural

- Examines the influences of social and cultural factors

The Scientific Method

1. Observing some phenomenon
2. Formulating hypotheses and prediction
3. Testing through empirical research
4. Drawing conclusions
5. Evaluating conclusions

Observing some phenomenon

- Variable (anything that changes)
- Theory (an idea of collection of ideas that attempts to explain an observation)
- Falsifiable

Formulating hypotheses and predictions

- Hypothesis (A testable prediction that derives logically from a theory)

Testing through empirical research

- Operational definition (one for each variable)
 - Kindness
 - Strength
- Data analysis
 - Uses mathematical operations (statistics) to determine what the numbers mean in an experiment

Drawing conclusions

- Based on analysis of data
- Reliability
 - Dependability
 - Consistency
 - Can a result be reproduced?
- Validity
 - Accuracy of a measure
 - Does the experiment measure what it's supposed to?

Evaluating conclusions

- An on-going process

Types of psychological research

- Descriptive
 - Observation
 - Better if more than one person observes
 - Surveys
 - Standard list of questions/*items*
 - Can only be used to describe what people think
 - Clear and understandable for all *subjects*
 - Interviews
 - May not be as structured as surveys

Types of psychological research

- Case studies
 - Single individual
 - Specific group
 - Family unit
 - What is learned may not apply to others
 - When multiple case studies are published , knowledge in an area is advanced

Types of psychological research

- Correlational

- Measures how two variables change together
- Correlation $\neq$ causation
- Third variable (confound) problem
- Correlational coefficient
 - (-1.0 to +1.0)
 - 0 = no relationship between the two variables
- Longitudinal designs
 - Observing and measuring the same variable periodically over time

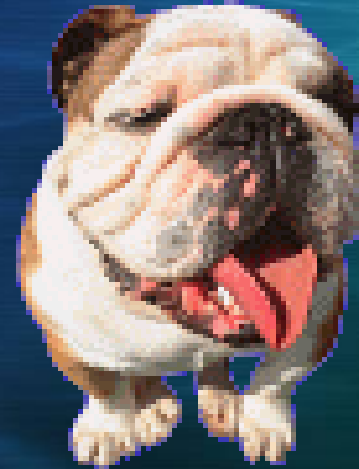
Types of psychological research

- Experimental
 - Experiment (a scientific procedure undertaken to make a discovery, test a hypothesis, or demonstrate a known fact.)
 - Experimenter manipulates one or more variables that are believed to influence some other variable
 - Random assignment
 - Independent variable
 - Dependent variable
 - Experimental group
 - Control group

Independent and dependent variables

- Independent (IV): Causes something to happen
- Dependent (DV): The variable that shows the effect of changing the IV
- Pavlov's dog

Triggers and Cravings

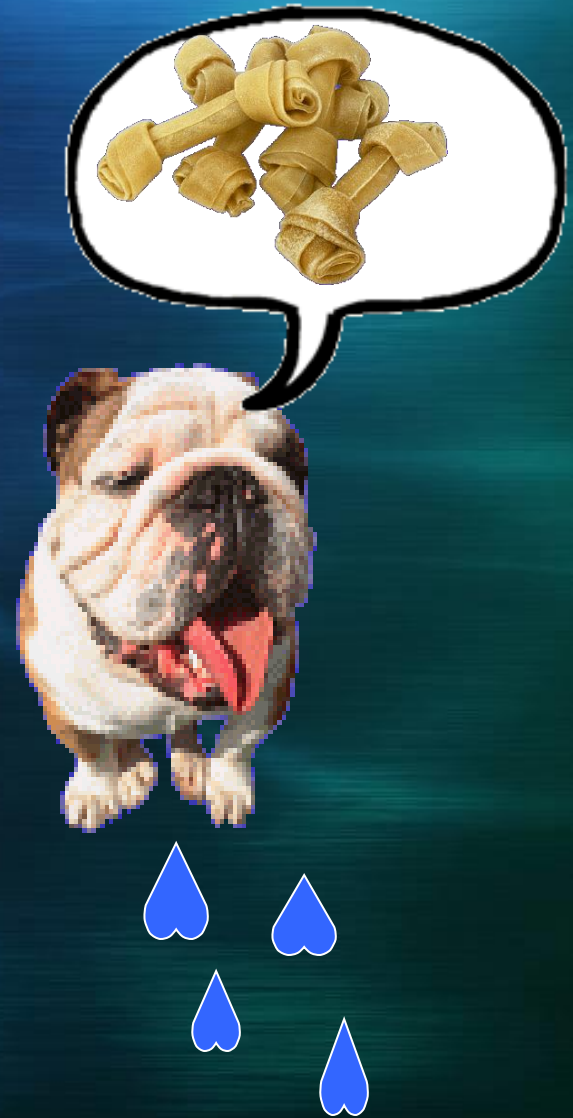


Pavlov's Dog: Exposure to Food
produces salivation

Triggers and Cravings

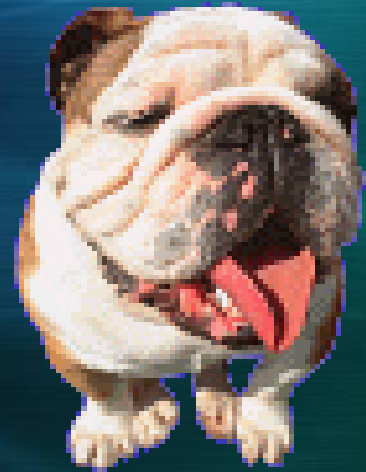


Pavlov's Dog: Producing a
conditioned response



Pavlov's Dog: Pavlov's Dog:
Producing a conditioned response

Triggers and Cravings



Pavlov's Dog: Extinction

Independent and dependent variables

- Independent (IV): Causes something to happen
- Dependent (DV): The variable that shows the effect of changing the IV
- Pavlov's dog
 - IV = food/bell
 - DV: salivation

Types of psychological research

- Experimental
 - Experiment (a scientific procedure undertaken to make a discovery, test a hypothesis, or demonstrate a known fact.)
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 - Random assignment
 - (Independent variable)
 - (Dependent variable)
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Types of psychological research

- Control group
 - Within participant design
 - Quasi-experimental design
 - (Neither provide the strong results that causal connections that come from experiments)

Research Concerns

- Experimenter bias
- Demand characteristics
- Participant bias
- Placebo effect
- Double-blind research

Research samples and settings

- Population
- Sample
- Random sample
- Laboratory setting
- Naturalistic setting

Research ethics

- IRB (Institutional Review Board)
- Informed consent
- Protection from harm
- Confidentiality
- Debriefing
- Deception
- Sub-human animals

When reading research

- Avoid overgeneralization based on little information
- Distinguish between group results and individual needs
- Look for answers beyond a single study
- Avoid attributing causes where none have been found
- Consider the source