Many consider the first psychology experiment to be conducted by...

A. William James  
B. Aristotle  
C. William Wundt  
D. Mamie Clark

Behaviorists are primarily concerned with ________

A. understanding neuroses.  
B. studying observable behavior.  
C. predicting personality traits.  
D. recording introspective experiences.

Psychology is currently defined as...

A. the scientific study of behavior.  
B. the scientific study of behavior and mental processes.  
C. the scientific study of biological and cognitive processes.  
D. the scientific study of motives and conflicts.

Quick Recap

After watching their favorite team lose a game, Emma and her friends commented to each other about how they had always known the loss was inevitable. Psychologists call this:

A. overconfidence  
B. the false consensus effect  
C. an illusory correlation  
D. the hindsight bias

Quick Recap

Dr. Yoshimura will begin a research study about college student retention rates. What should her first step be?

A. Develop a research question  
B. Collect data from college students  
C. Derive a hypothesis  
D. Propose a theory about retention

Quick Recap

Which statement is a theory?

A. Teen girls who play on one team sport will score higher on a self-esteem scale than girls who do not play sports.  
B. Are team sports beneficial for teenage girls’ self-esteem?  
C. Teen girls who participate in sports have high self-esteem.  
D. Do girls or boys benefit more from team sports?
Quick Recap

- The Hindsight Bias is the ________

A. “I-am-special” effect
B. “I-could-have-told-you-that” effect
C. tendency to look to the past rather than to the future
D. tendency to only look for confirming, rather than disconfirming, evidence.

Naturalistic observations are conducted in order to:

- A. describe behavior.
- B. explain behavior.
- C. predict behavior.
- D. control behavior.

A significant disadvantage of the correlational approach is that it:

- A. Does not provide evidence of cause and effect.
- B. Cannot be used to examine relationships between variables that exist naturally.
- C. Does not aid in the process of prediction.
- D. Does not provide information about how two variables are related.

Which of the following correlation coefficients indicates the strongest relationship between variables?

- A. $r = +0.05$
- B. $r = -0.25$
- C. $r = +0.75$
- D. $r = -0.95$

Name that Methodology

- Professor X notices that chimpanzees in the wild form gangs.
  (Naturalistic observation)

- 20 students who were provided a speed reading course got better grades than 21 students who did not take speed reading
  (Experiment)

Name that Methodology

- People who smoke are more likely to get lung cancer.
  (Correlational)

- A researcher asks for a loan from 10 people while dressed as a homeless person, then asks for a loan from 10 other while dressed as a business woman.
  (Experimental)
Name that Methodology

• Two deaf students are taught to speak based on how Helen Keller learned to speak. (Case study)

• After asking 100 people it is concluded that most people are religious. (Survey)

Quick Recap

• A researcher is interested in the effectiveness of various treatment options for agoraphobia (fear of being in public places). She randomly assigns 20 clients with agoraphobia to two groups: exposure therapy or cognitive-behavioral therapy. After six weeks of treatment, the researcher measures agoraphobia symptom severity. In this study, the dependent variable is:
  • A. Treatment option
  • B. Symptom Severity
  • C. Exposure or cognitive-behavioral therapy
  • D. Fear of snakes

Quick Recap

• A visit to a phrenologist would have resulted in an analysis of the person’s:
  • A. heart beats.
  • B. skull bumps.
  • C. neurotransmitter function.
  • D. endocrine system.

Quick Recap

• ___ wrap(s) many axons, insulating them, and speeding their impulses.
  • A. Sodium ions
  • B. Myelin
  • C. Glial cells
  • D. Potassium ions

Quick Recap

• The brief electrical impulse transmitted along the axon is called the:
  • A. action potential.
  • B. stimulus threshold.
  • C. electrical cascade.
  • D. sodium pump.

Quick Recap

• Antidepressants such as Prozac target which neurotransmitter?
  • A. serotonin
  • B. glutamate
  • C. dopamine
  • D. acetylcholine
Quick Recap

- Name the methodology:
  - Dr. Esparza notices that teachers provide more helpful feedback to boys than girls during class.

  - A) Survey
  - B) Experiment
  - C) Naturalistic Observation
  - D) Case study

Quick Recap

- In order to assess the influence of self-esteem on interpersonal attraction, researchers either insulted or complimented college students about their physical appearance just before they went on a blind date. In this research, the dependent variable consisted of:
  - A. Insults or compliments
  - B. Physical appearance
  - C. Interpersonal attraction
  - D. Feelings of self-esteem

Quick Recap

- As Allison reaches for a box in her garage, out jumps a big spider. Her heart immediately begins to race as she withdraws her hand, but soon she realizes that the spider is harmless, and she begins to calm down. Which part of her nervous system is responsible for bringing her back to a normal state of arousal?
  - A. sympathetic nervous system
  - B. somatic nervous system
  - C. parasympathetic nervous system
  - D. skeletal nervous system

Quick Recap

- Which statement about testosterone is true?
  - A. Testosterone is only secreted in males.
  - B. Testosterone causes aggressive behavior.
  - C. Testosterone is a neurotransmitter that affects reproduction.
  - D. Testosterone is correlated with prosocial behavior, adventurousness, and friendliness.
Quick Recap

• Which is NOT one of Ekman’s 6 universal expressions?
  – A. Guilt
  – B. Fear
  – C. Sadness
  – D. Happiness

Quick Recap

• Culture affects
  – A. the physiology of emotion.
  – B. individuals’ ability to recognize emotions.
  – C. behavioral expression of emotions.
  – D. none of the above.

Quick Recap

• When June sleeps, she knits her brows together. She reports feeling grumpier in the morning than she does in the afternoon. This supports the
  – A. James-Lange theory of emotion
  – B. Facial feedback hypothesis
  – C. Universal expressions
  – D. Botox theory

Quick Recap

• After suffering an accidental brain injury, Kira has difficulty walking in a smooth and coordinated manner. It is most probable that she has suffered damage to her:
  • A. medulla oblongata.
  • B. reticular formation.
  • C. cerebellum.
  • D. corpus callosum.

Quick Recap

• Which structure serves as the brain’s sensory switchboard, routing incoming sensory information to appropriate cortical regions?
  – A. Brain stem
  – B. Thalamus
  – C. Prefrontal cortex
  – D. Midbrain

Quick Recap

• Naz had a tumor in his right frontal lobe, and when it was excised, he incurred damage to his healthy frontal lobe tissue. Which is NOT an expected effect of Naz’s damage?
  – A. Changes in personality
  – B. Changes in motoric ability
  – C. Difficulties inhibiting behavior
  – D. Increased aggression
Quick Recap

• If Dr. Barnes wanted to cause a cat to take on an attack posture, which of the cat’s brain structures should she electrically stimulate?
  - A. amygdala
  - B. hypothalamus
  - C. hippocampus
  - D. cerebellum

• After a sky-diving accident, Laurie was unable to make sense of other people’s speech. It is likely that her cortex was damaged in:
  - A. the sensory area.
  - B. Broca’s area.
  - C. the angular gyrus.
  - D. Wernicke’s area.

Quick Recap

• Maurice experiences partial blindness in his right eye after he sustained a closed head injury. Which brain structure may be damaged?
  - A. Parietal lobe
  - B. Thalamus
  - C. Temporal lobe
  - D. Occipital lobe

• Dr. Aguirre’s patient is unable to produce speech; however, she is able to understand what others say to her. This is an example of
  - A. Nominal dysphasia
  - B. Brain damage
  - C. Broca’s aphasia
  - D. Wernicke’s aphasia

Critical Thinking Summary

• What is research?
  - Purpose of research
• Bias in research
  - Hindight Bias
  - Confirmation Bias
  - False Uniqueness
• Critical thinking as a way to avoid bias in research

Summary so far...

• Scientific method
• Theory vs. Hypothesis
  - Operational definitions
Summary so far...

- Introduction to neuropsychology
  - What is neuropsychology?
  - History of neuropsychology (Phrenology)

- Studying the brain: methodology
  - Case studies (Phineas Gage)
  - Invasive methods: Lesion studies, electrical stimulation
  - Non-invasive methods: EEG, MEG, fMRI, CT, PET

- Brain communication: Nervous system

Summary

- The neuron
  - Structures
  - Neural communication

- Neurotransmitters
- Hormones

Emotion: Summary

- Intro to emotion
- Theories of emotion
  - James-Lange Theory
  - Cannon-Bard Theory
  - Two-Factor Theory
- Physiology of emotion
  - Nervous system
  - Lie Detection
    - Polygraph
    - People
- Expressing emotions behaviorally
  - Emblematic Expressions
- Universally Emotions
  - Ekman’s research
    - 6 basic emotions
    - Microexpressions
  - Izard’s research
    - 10 basic emotions
    - Facial Feedback Hypothesis

Brain Structures: Summary

- Hindbrain
  - Cerebellum
  - Brainstem
    - Medulla, Thalamus, Reticular Formation
- Midbrain
- Forebrain
  - Frontal Lobe
  - Parietal Lobe
  - Occipital Lobe
  - Temporal Lobe
Outline

- Introduction to neuropsychology
- Studying the brain: methodology
- Brain communication: Nervous system
- Brain organization: Structures
  - Hindbrain, Midbrain, Forebrain
- Brain and Language
  - Broca’s Area, Wernicke’s Area
- Limbic System
  - Amygdala, Hypothalamus, Hippocampus

Sleep: Summary

- Circadian rhythm
- Five stages of sleep
- Content and 3 theories of dreaming