

PSYCHOLOGY FINAL

MIDTERM ONE MOST MISSED TOPICS

Experimental designs (or experiments) permit cause-and-effect inferences!

Experiment: research design characterized by random assignment of participants to conditions and manipulation of an independent variable.

- i. **Random assignment:** randomly sorting participants into two groups.
- ii. **Experimental group:** the group of participants that receive the manipulation.
- iii. **Control group:** the group that doesn't receive the manipulation.
- iv. **Independent variable:** variable that the experimenter manipulates.
- v. **Dependent variable:** variable that the experimenter measures to see whether the manipulation has an effect.

For an experiment to be valid, the independent variable must be the **ONLY** difference between the experimental group and the control group.

Operational definition: a working definition of what a researcher is measuring.

Frontal lobe: forward part of cerebral cortex responsible for motor function, language, memory, and planning.

Motor cortex: part of frontal lobe responsible for body movement.

****Prefrontal cortex:** part of frontal lobe responsible for thinking, planning, and language.

Broca's area: language area in the prefrontal cortex that helps to control speech production.

Parietal lobe: upper middle part of the cerebral cortex lying behind the frontal lobe that is specialized for touch and perception.

Temporal lobe: lower part of cerebral cortex that plays roles in hearing, understanding, language, and memory.

Somatic nervous system: part of the nervous system that conveys information between the CNS and the body, controlling and coordinating voluntary movement.

Autonomic nervous system: part of the nervous system controlling the involuntary actions of our internal organs and glands, which (along with the limbic system) participates in emotion regulation.

****Sympathetic nervous system:** division of the autonomic nervous system engaged during a crisis or after actions requiring fight or flight.

Parasympathetic nervous system: division of the autonomic nervous system that controls rest and digestion.

Illusion: perception in which the way we perceive a stimulus doesn't match its physical reality.

****Sensation:** detection of physical energy by sense organs, which then send information to the brain.

Perception: the brain's interpretation of raw sensory inputs.

Transduction: the process of converting an external energy or substance into electrical activity within neurons.

Sense receptor: specialized cell responsible for converting external stimuli into neural activity for a specific sensory system.

Sensory adaptation: activation is greatest when a stimulus is first detected.

Psychophysics: the study of how we perceive sensory stimuli based on their physical characteristics.

Absolute threshold: lowest level of a stimulus needed for the nervous system to detect a change 50 percent of the time.

Just noticeable difference (JND): the smallest change in the intensity of a stimulus that we can detect.

Weber's Law: there is a constant proportional relationship between the JND and original stimulus intensity.

Depth perception: ability to judge distance and three-dimensional relations.

****Monocular depth cues:** stimuli that enable us to judge depth using only one eye.

Binocular depth cues: stimuli that enable us to judge depth using both eyes.

MIDTERM TWO MOST MISSED TOPICS

****Law of effect:** principle asserting that if a stimulus followed by a behavior results in a reward, the stimulus is more likely to give rise to the behavior in the future; if a behavior leads to reward, the organism will increasingly behave the same way in the future to continue getting a reward.

Insight: grasping the underlying nature of a problem; suddenly understanding a solution to a problem.

Skinner box: small animal chamber constructed by Skinner to allow sustained periods of conditioning to be administered and behaviors to be recorded unsupervised.

****Reinforcement:** outcome or consequence of a behavior that strengthens the probability of the behavior.

Types of Reinforcement: Positive vs. Negative & Reinforcement vs. Punishment

→ **Positive Reinforcement:** presentation of a stimulus that strengthens the probability of the behavior; adding a stimulus to increase a specific behavior.

→ **Negative Reinforcement:** removal of a stimulus that strengthens the probability of the behavior; removing a stimulus to increase a specific behavior.

****Punishment:** outcome or consequence of a behavior that weakens the probability of the behavior.

→ **Positive Punishment:** adding a stimulus to decrease a specific behavior.

→ **Negative Punishment:** removing a stimulus to decrease a specific behavior.

****Discriminative stimulus:** stimulus associated with the presence of reinforcement.

****Stimulus discrimination:** learning to tell the difference between two different types of stimuli.

Schedule of reinforcement: pattern of reinforcing a behavior.

Continuous reinforcement: reinforcing a behavior every time it occurs, resulting in faster learning but faster extinction than only occasional reinforcement.

Partial reinforcement: only occasional reinforcement of a behavior, resulting in slower extinction than if the behavior had been reinforced continually.

Long-term potentiation (LTP): gradual strengthening of the connections among neurons from repetitive stimulation.

****Naïve physics:** a set of beliefs possessed by infants; a basic understanding of how physical objects behave. For example, they know that objects that are unsupported should fall.

CHAPTER 13: SOCIAL PSYCHOLOGY

Social Psychology: study of how people influence others' behavior, beliefs, and attitudes—for both good and bad.

Social comparison theory: theory that we seek to evaluate our abilities and beliefs by comparing them with those of others.

Mass hysteria: outbreak of irrational behavior that is spread by social contagion.

Social facilitation: enhancement of performance brought about by the presence of others.

Attribution: process of assigning causes to behavior.

Fundamental attribution error: tendency to overestimate the impact of dispositional influences on other people's behavior.

Conformity: tendency of people to alter their behavior as a result of group pressure.

Parametric studies: studies in which an experimenter systematically manipulates the independent variable to observe its effects on the dependent variable.

Deindividuation: tendency of people to engage in uncharacteristic behavior when they are stripped of their usual identities.

Groupthink: emphasis on group unanimity at the expense of critical thinking.

Group polarization: tendency of group discussion to strengthen the dominant positions held by individual group members.

Cult: group in individuals who exhibit intense and unquestioning devotion to a single cause.

Inoculation effect: approach to convincing people to change their minds about something by first introducing reasons why the perspective might be correct and then debunking them.

Obedience: adherence to instructions from those of higher authority.