Psychology chapter eight flashcards



Define learning, and identify two forms of learning. Learning is a relatively permanent change in an organism's behavior due to experience. In associative learning, we learn to associate, we learn to associate two stimuli (as in classical conditioning) or a response and its consequences (as in operant conditioning). In observational learning, we learn by watching others' experiences and examples. Define classical conditioning and behaviorism, and describe the basic components of classical conditioning. Classical conditioning is a type of learning in which an organism comes to associate stimuli. Pavlov's work on classicalism comes to associate stimuli. Pavlov's work on classical conditioning laid the foundation for behaviorism, the view that psychology should be an objective science that studies behavior without reference to mental processes. In classical behavior without reference to mental processes. In classical conditioning, a UR is an event that occurs naturally (such as salivation), in response to some stimulus. A US is something that naturally and automatically (without learning) triggers the unlearned response (as food in the mouth triggers salivation). A CS in classical conditioning is an originally neutral stimulus (such as a bell) that, through learning, comes to be associated with some unlearned response (salivating). A CR is the learned response (salivating) to the originally neutral but now conditioned stimulus. ONPSYCHOLOGY CHAPTER EIGHT FLASHCARDS SPECIFICALLY FOR YOUFOR ONLY\$13. 90/PAGEOrder NowDescribe the timing requirements for the initial learning of a stimulusresponse relationship. Classical conditioning occurs most readily when a CS is presented just before (ideally, about a half-second before) a US, preparing the organism for the upcoming event. This finding supports the view that classical conditioning is biologically adaptive. Summarize the processes of

extinction, spontaneous recovery, generalization, and discrimination. In classical conditioning, extinction is diminished responding when the CS is no longer signals an impending US. Spontaneous recovery is the appearance of a formerly extinguished response, following a rest period. Generalization is the tendency to respond to stimuli that are similar to a CS. Discrimination is the learned ability to distinguish between a CS and the other irrelevant stimuli. Discuss the survival value of generalization and discrimination. Generalization (our tendency to respond to stimuli similar to a CS) has survival value because it lets us extend a learned response to other stimuli in a given category- as in fleeing from all dangerous animals. Discrimination (our learned ability to distinguish between a CS and other irrelevant stimuli) also has survival value because it lets us limit our learned responses to appropriate stimuli- as in fleeing from a rampaging lion but not from a playful kitten. Discuss the importance of cognitive processes in classical learning. The early behaviorists' optimism that learning principles would generalize from one response to another and from one species to another has given way to the understanding that conditioning principles are influenced by our thoughts, perceptions, and expectations. In classical conditioning, humans and other animals learn when to "expect" a US, and their awareness of the link between stimuli and responses can weaken associations. Describe some of the ways that biological predispositions can affect learning by classical conditioning. Early behaviorists believed that any natural response could be conditioned to any neutral stimulus in any living organism. Learning theorists have abandoned this belief. Each species is biologically prepared to learn associations - such as humans' fear of spiders and snakes, or rats' aversion to tastes associated with nausea - that enhance

its survival. Outside the laboratory, a CS tends to have a natural association with the US it predicts. Summarize Pavlov's contribution to our understanding of learning. Paylov taught us that significant psychological phenomena can be studied objectively, and that conditioning principles have important applications, such as by suggesting how some fears are learned and can be treated. He also demonstrated that principles of learning apply across species, although later research modified this finding somewhat by showing that in many species cognition and biological predispositions place some limits of associative learning. Describe some uses of classical conditioning to improve human health and well-being. Classical conditioning techniques are used in treatment programs for those recovering from alcohol and other drug abuse and to condition more appropriate responses in therapy for emotional disorders. The body's immune system also appears to respond to classical conditioning. Identify the two major characteristics that distinguish classical conditioning from operant conditioning. In classical conditioning, the organism forms associations between behaviors it does not control; this form of conditioning involves respondent behavior (automatic responses to some stimulus). In operant conditioning, the organism learns associations between its own behavior and resulting events; this form of conditioning involves operant behavior (behavior that operates on the environment, producing consequences). State Thorndike's law of effect, and explain its connection to Skinner's research on operant conditioning. Thorndike's law of effect asserts that rewarded behavior is likely to recur. Using this as his starting point, Skinner devoted his life to exploring the principles and conditions of learning through operant conditioning. Describe the shaping procedure, and explain how it can increase our understanding of

what animals and babies can discriminate. In shaping, we use reinforcers to guide a person's or an animal's behavior toward a desired goal. Building on existing behaviors, we reward successive approximations to some desired behavior. Because nonverbal animals and babies can respond only to what they perceive, their reactions demonstrate which events they can discriminate. Compare positive and negative reinforcement, and give one example each of a primary reinforcer, a conditioned reinforcer, an immediate reinforcer, and a delayed reinforcer. Positive reinforcement adds something desirable to increase the frequency of a behavior. Negative reinforcement removes something undesirable to increase the frequency of a behavior. Primary reinforcers (such as receiving food when hungry or having nausea end during an illness) are innately satisfying- no learning is required. Conditioned (or secondary) reinforcers (such as cash) are satisfying because we have learned to associate them with more basic rewards (such as the food or medicine we buy with them). Immediate reinforcers (such as the nicotine addict's cigarette) offer immediate payback; delayed reinforcers (such as a weekly paycheck) require the ability to delay gratification. Discuss the strengths and weaknesses of continuous and partial (intermittent) reinforcement schedules, and identify four schedules of partial reinforcement. In continuous reinforcement (reinforcing desired responses every time they occur), learning is rapid, but so is extinction if rewards cease. Continuous reinforcement is preferable until a behavior is learned. In partial reinforcement (reinforcing responses only part of the time), initial learning is slower, but the behavior is much more resistant to extinction. Reinforcement schedules may vary according to the number of responses rewarded or the time gap between responses. Fixed-ratio schedules offer

rewards after a set number of responses; variable-ratio schedules, after an unpredictable number. Fixed-interval schedules offer rewards after set time periods; variable-interval schedules, after unpredictable time periods. Discuss the ways negative punishment, positive punishment, and negative reinforcement differ, and list some draw-backs of punishment as a behaviorcontrol technique. Both positive punishment (administering an undesirable consequence, such as spanking) and negative punishment (withdrawing something desirable, such as taking away a favorite toy) attempt to decrease the frequency of a behavior (a child's disobedience). Negative reinforcement (such as taking aspirin) removes something undesirable (such as a headache) to increase the frequency of a behavior. Punishment's undesirable side effects may include suppressing rather than changing unwanted behaviors, teaching aggression, creating fear, and encouraging discrimination (so that the undesirable behavior appears when the punisher is not present), and fostering depression and feelings of helplessness. Explain how latent learning and the effect of external rewards demonstrate that cognitive's processing is an important part of learning. Latent learning, as shown in rats' learning of cognitive maps of children's delayed imitation of others' behavior, indicates that we can learn from experience, without apparent reinforcement. An external reward's ability to undermine our interest and pleasure in an activity weakens the idea that behaviors that are rewarded will increase in frequency. Explain how biological predispositions place limits on what can be achieved through operant conditioning. Biological constraints predispose organisms to learn associations that are naturally adaptive. Training that attempts to override these tendencies will probably not endure because the animals will revert to their biologically

predisposed patterns. Describe the controversy over Skinner's views of human behavior. Many psychologists criticized Skinner for underestimating the importance of cognition and biological constraints on learning. They also engaged in a vigorous intellectual debate with him over the nature of human freedom and the strategies and ethics of managing people. Describe some ways to apply operant conditioning principles at school, in sports, and work, and at home. In school, teachers can use shaping techniques to guide students' behaviors. Interactive software and Web sites can provide immediate feedback to students. In sports, coaches can build players' skills and self-confidence by rewarding small improvements. At work, managers can boost productivity and morale by rewarding well-defined and achievable behaviors. At home, we can control our energy usage by comparing recent consumption with past consumption. Parents can reward behaviors they consider desirable, but not those that are undesirable. Individually, we can reinforce our own desired behaviors and extinguish and extinguish undesirable ones by stating our goals, monitoring the frequency of desired behaviors, and cutting back on incentives as behaviors become habitual. Identify the major similarities and differences between classical and operant conditioning. Classical and operant conditioning are similar in being forms of associative learning. Both also involve acquisition, extinction, spontaneous recovery, generalization, and discrimination. And both are influenced- and sometimes constrained- by cognitive processes and biological predispositions. These two forms of learning differ in an important way. In classical conditioning, an organism associates different stimuli that it does not control and responds automatically (respondent behaviors). In operant conditioning, an organism associates its own behaviors with their

consequences. Describe the process of observational learning, and explain the importance of the discovery of mirror neurons. In observational learning, we observe and imitate others. Mirror neurons, located in the brain's frontal lobes, demonstrate a neural basis for observational learning. They fire when we perform certain actions (such as responding to pain or moving our mouth to form words), or when we observe someone else performing those actions. Describe Bandura's findings on what determines whether we will imitate a model. Bandura and others demonstrated that we are likely to imitate actions that go unpunished. And we tend to imitate models we perceive as similar to us, successful, or admirable. Discuss the impact of prosocial modeling. Research shows that children tend to imitate what a model does and says, whether the behavior is prosocial (positive, constructive, and helpful) or antisocial. If a model's actions and words are inconsistent, children may imitate the hypocrisy they observe. Explain why correlations cannot prove that watching violent TV causes violent behavior, and cite some experimental evidence that helps demonstrate a cause-effect link. Correlations show relationships, but not the direction of influence. Correlational studies show that violence viewing and violent behavior are linked, but they do not prove that watching violent TV causes children to become violent. Children who behave violently may enjoy watching violence on TV, or some third factor may cause children both to behave violently and to prefer watching violent programs. To prove cause and effect, researchers have designed experiments in which some participants view violence and others do not. Later, given an opportunity to express violence (in rough play or verbal responses to videos), the people who viewed violence tend to be

more aggressive and less sympathetic. Two factors- imitation and desensitization- seem to contribute to the violence effect.