

Chapter 6

1. Identify two ways in which instincts are different from reflexes.

Answer:

Reflexes are a motor or neural reaction to a specific stimulus in the environment. Instincts are innate behaviors that are triggered by a broader range of events. Reflexes are simpler than instincts; instincts involve the organism as a whole while reflexes do not.

A reflex is an unintentional behavior of the body to stimuli. Instinct is a behavioral trait of all living things (reflexes cannot be controlled, instinct can be controlled).

Instinct is conscious. It is something we are drawn to do by desire. For example, if we are hungry then we are likely to seek food by instinct. Sex is the same way. Most of us are drawn to have sex by instinct as a way that is pleasing to us, but biologically it is usually described as a way to help continue the species. Just the will to live is an instinct. Instincts can malfunction, or be overwritten more easily than reflexes.

Reflex is a reaction to a stimulus that is subconscious. Desire to have sex is instinct. It bothers us 24/7. Sexual response is a reflex, it happens without thought.

Instinct is a desire to act in a certain way as a reaction or action on your part and is unique to every human being.

Reflex is your instantaneous response or reaction to stimuli (actions that happen in fraction of seconds) nothing related to your desires.

4. Name and explain the four means of modifying behavior discussed in operant conditioning.

Answer:

The four means of modifying behavior are negative reinforcement, positive reinforcement, negative punishment, and positive punishment. In Operant Conditioning, "Positive" is considered adding and "Negative" is subtracting or taking away. "Reinforcement" is pretty straight forward and means trying to increase the frequency of a desired behavior. Lastly, "Punishment" is a consequence that is aimed at decreasing the likelihood of a behavior happening again in the future.

Positive Reinforcement is essentially adding something to the equation to encourage the subject to repeat a desired behavior. Examples rewarding an employee with a bonus for a job well done.

Negative means taking away or removing something, it does not mean that you correct the dog using a negative or aversive stimuli

Positive Punishment is often confused with Negative Reinforcement. Positive Punishment involves adding a stimulus to stop an unwanted behavior.

Negative Punishment should be a breeze. We take away something to get a behavior to stop. your teenager comes home late so you take the car away (Negative) to stop them from coming home late next time (Punishment).

5. Identify and describe the two kinds of responses and two kinds of stimuli that are key to classical conditioning.

Answer

Classical conditioning is an associative type of learning. This type of learning occurs by creating associations between stimuli and involuntary, automatic responses. Classical conditioning occurs when the organism is exposed to an unconditioned and a neutral stimulus at the same time. An unconditioned stimulus naturally causes an unconditioned response, and a neutral stimulus does not cause any particular reaction. However, after a few repetitions, the neutral stimulus begins to elicit a conditioned response and then becomes a conditioned stimulus.

10. Define latent learning and provide a real-life example.

Answer

In psychology, latent learning refers to knowledge that only becomes clear when a person has an incentive to display it. For example, a child might learn how to complete a math problem in class, but this learning is not immediately apparent.

Latent learning is learning that occurs, but may not be evident until there is a reason to demonstrate it. For example, I read my son the same bedtime story every night. When we are stuck at a doctor's office without the book, I realize I have memorized the story without knowing it and can recite it for him without having the book in front of me.

11. Explain the difference between a fixed interval reinforcement schedule and a fixed ratio reinforcement schedule. Explain the difference between a variable interval reinforcement schedule and a variable ratio reinforcement schedule.

When something is 'fixed,' it means it is consistent and evenly spaced. A fixed ratio is when something occurs after a certain number of occurrences, for example, at a restaurant giving the

10th meal free. A fixed interval is when something happens after a specific amount of time. For example, a monthly meeting every first Wednesday.

A fixed interval is a set amount of time between occurrences of something like a reward, result, or review. Some examples of a fixed interval schedule are a monthly review at work, a teacher giving a reward for good behavior each class, and a weekly paycheck.

When using a fixed interval reinforcement schedule, behavior is rewarded after a set amount of time. When using a fixed ratio reinforcement schedule, a predetermined number of responses must occur before a behavior is rewarded. The difference is when the reward occurs: after a specific time period versus after a certain number of responses.

12. What did the results of the Little Albert experiment indicate about human response?

John Watson, the father of behaviorism, conducted one of the most famous and unethical experiments in history. The "Little Albert" experiment, was based on the principle of classical conditioning.

Watson wanted to condition a phobia in a 9-month-old child, by following the steps of Pavlov's experiments on dogs. He paired a white rat with a loud noise until little Albert began fearing the rat by itself. The experiment continued until, due to stimulus generalization, he started fearing all furry animals and objects, including a researcher dressed as Santa Claus. The experiment didn't end well for little Albert, as his fears were never unconditioned.

Chapter 7

31. Describe the field of cognitive psychology.

As a one branch of psychology, cognitive psychology focuses on the cognition of the individual. It refers to studying attention, memory, learning, decision-making, forgetting, and language acquisition. By studying these activities in people, cognitive psychology tries to improve them.

32. List the stages of language and communication development in order of age of acquisition that occur between birth and 18-months old.

The first stage of language and communication development is reflexive communication, which occurs between 0 and 3 months of age. Reflexive communication that includes an interest in others occurs between 3 and 8 months old. The next stage involves intentional communication that happens between 8 and 13 months old. The last stage includes first spoken words, which occurs between 12 and 18 months old.

33. List and describe three problem-solving strategies.

34. Describe Raymond Cattell's theory of intelligence.

The theory of intelligence that divided intelligence into two components:

Fluid Intelligence: it is basic intelligence and to basic processes of reasoning and other mental activities that depend only minimally on prior and basic learning (such as formal and informal education) and acculturation.

Crystallized intelligence is the result and continuity of Fluid intelligence and refers to learned procedures and knowledge. It reflects the effects of experience and acculturation characterized as acquired knowledge and the ability to retrieve it. When you learn, remember, and recall information, you are using crystallized intelligence.

Fluid and crystallized intelligence are equally important. They serve different functions and perform specialized roles that suit particular situations involving mental exercises. Their key differences are in these areas:

- 1- Type of information:** Fluid intelligence involves the utilization of new knowledge without relying on experience and accumulated knowledge, while crystallized intelligence makes use of stored knowledge. This means that a person with high fluid intelligence may be able to understand a new concept more quickly than someone with high crystallized intelligence.
- 2- Memory:** Fluid intelligence uses the brain's short-term memory, while crystallized intelligence uses long-term memory. This explains why a person with high fluid intelligence may find it difficult to remember things from the past, while a person with high crystallized intelligence may excel at tasks that require rote memorization.
- 3- Relationship with age:** While fluid intelligence usually peaks early in life, research found that some aspects of this intelligence peak at around 40 years old and then decline

during late adulthood. Crystallized intelligence generally increases with age, peaks later in life, and then starts to decline at 60 or 70.

- 4- Function: Fluid intelligence includes working memory, processing and reasoning speed, cognitive control, complex skills, creativity, and attention tasks. Crystallized intelligence includes wisdom and involves practical, factual, general, and specialized knowledge.
- 5- Application: People use their fluid intelligence when facing situations that require creating strategies and solving problems. Examples of the use of crystallized intelligence include vocabulary exams, remembering history, and recalling formulae to solve mathematical problems.

35. What is an IQ? Explain.

IQ is the abbreviation of Intelligence Quotient and describes a score earned on a test designed to measure intelligence

In general, an IQ score is defined with a median and mean of 100. Scores above 130 are labeled as above average or "very superior," while scores under 70 would be considered below average or labeled as "borderline impaired." Most people have an average IQ between 85 and 115.

IQ was originally computed by taking the ratio of mental age to chronological (physical) age and multiplying by 100. Thus, if a 10-year-old child had a mental age of 12 (that is, performed on the test at the level of an average 12-year-old), the child was assigned an IQ of $12/10 \times 100$, or 120.

43. Compare and contrast interpersonal and intrapersonal intelligence.

Interpersonal intelligence reflects an ability to recognize and understand other people's moods, desires, motivations, and intentions. Intrapersonal intelligence refers to people's ability to recognize and assess those same characteristics within themselves.

Interpersonal intelligence refers to the ability to understand social situations and the behavior of other people, whereas intrapersonal intelligence refers to the ability to understand one's own behavior, thoughts, and feelings.

Though one type of intelligence can be dominant in an individual, it does not mean that other types do not exist in him. According to Gardner, any types of intelligences can be developed.

Interpersonal intelligence is the ability to understand the people around you. It is critical for developing and maintaining relationships with others. Intrapersonal intelligence is how well you

understand yourself, your strengths, and your limitations. It's easy to remember the differences between the two intelligences if you focus on their prefixes. The prefix 'inter-' means 'between,' as in between you and other people. The prefix 'intra-' means 'within,' so intrapersonal intelligence refers to your understanding of yourself.

44. Compare and contrast divergent thinking with convergent thinking.

Convergent thinking is the process of finding concrete and familiar solutions to problems. Divergent thinking is the creative process of generating original ideas and new possibilities. Complexity, curiosity, elaboration, flexibility, fluency, imagination, originality and risk taking are specifications of this kind of thinking. While Convergent thinking is a problem-solving technique involving the bringing together different ideas from different participants or fields to determine a single best solution to a lucidly defined problem.

Convergent and divergent thinking are similar in that both thinking strategies are used to determine solutions to problems. Not just that but both strategies are directed at determining the best solutions. It is frequently seen that problems are solved through a blend of convergent and divergent thinking.

Convergent thinking increases performance speed. It helps to narrow problems down into smaller, more manageable chunks. Efficiency is especially important when you're under pressure and deadlines are involved; it can prevent decision overload.

Divergent thinking increases flexibility, looking at a problem from many angles gets your mind working in full gear. It helps you consider all possible options (even if they seem completely unlikely). Divergence also encourages flexibility and out-of-the-box thinking. And because the thought process is less limited, it produces stronger creative concepts than convergent thinking would on its own.

Some other similarities and differences are here:

Mood: convergent and divergent thinking affect mood in converse ways.

Creative Ability: The convergent thinkers are more creative than divergent.

Intellectual ability: divergent thinkers have more word fluency than with higher anxiety rate.

Personality -Divergent thinkers are more extraversion and have openness. Openness analyzes intellectual curiosity, artistic interest, originality, liberal attitudes, and imagination.

46. Compare and contrast learning disabilities and intellectual disabilities.

Learning disabilities are specific neurological problems within the brain and are separate from intelligence. Intellectual disabilities are pervasive and related to intelligence.