

Classical or Operant Conditioning?

(<http://www.ApPsychology.net>)

In each of the following descriptions of learning situations, you are asked to identify whether classical or operant conditioning best applies. Further, you are asked to determine what learning principle(s) seem relevant.

Instructions

1. If you decide the situation seems to be an example of classical conditioning, you should label the UCS (Unconditioned stimulus), UCR (Unconditioned response), CS (conditioned stimulus), and CR (conditioned response).
2. If you decide the situation seems to be an example of operant conditioning, you should decide which of the following principles best fits:
 - A. Positive reinforcement
 - B. Negative reinforcement
 - C. Positive punishment
 - D. Negative punishment

Scene I

A very bright (mildly painful) light is turned on a rat. The rat has learned that he can turn off the light by pressing a lever on the other side of his cage. As soon as the light comes on, the rat runs across the room and presses the lever.

- A. Can the behaviour of pressing the lever be explained best through classical conditioning or operant conditioning? Explain.
Answer: Operant Conditioning because the rat voluntarily learns to control the light and is not an automatic reflex. (The key word here is "learned").
- B. If you chose classical, follow part 1 of the instructions; if you chose operant, follow part 2.
Answer: Operant – B. negative reinforcement because by the response removes the stimulus (the painful light).

Scene II

When a mother strokes her infant's skin, the stroking creates pleasure responses in the baby. After this goes on for many days, the baby begins to show pleasure responses simply at the sight of the mother (before even being touched).

- A. Does classical conditioning or operant conditioning best apply? Explain.
Answer: Classical Conditioning because the baby involuntarily shows pleasure at the sight of the mother.
- B. If you chose classical, follow part 1 of the instructions; if you chose operant, follow part 2.
Answer: Classical – UCS: stroking of the infant's skin. UCR: pleasure response from infant. CS : sight of mother. CR: pleasure responses from infant.

Scene III

A patient in a mental hospital is very disruptive at mealtimes. She grabs food from the plates of those sitting near her and tries to cram the food in her mouth. Because this behaviour of stealing food is very undesirable, a plan is developed whereby every time the patient steals food from other plates, she is immediately taken to a room without food.

- A. Is the mental health staff attempting to change the behaviour of stealing through classical or operant conditioning? Explain.
Answer: Operant Conditioning because the staff is trying to get her to learn to stop stealing food from others.
- B. If you chose classical, follow part 1 of the instructions; if you chose operant, follow part 2.
Answer: Operant – D. Negative punishment (Punishment to omit the unwanted behaviour of stealing food).

Scene IV

Johnny has gotten into a habit of yelling "Bye, Mom" and then slamming the door very loudly in his hurry to leave for school in the morning. The door slam causes his mother to flinch. After several days of procedure, Johnny's mother begins to flinch at the sound of her son's words, "Bye, Mom."

- A. Can the behaviour of flinching be explained best through classical or operant conditioning? Explain.

Answer: Classical Conditioning because flinching by the mother is an automatic response (it is not Operant because she did not do it voluntarily, just a “reaction”)

- B. If you chose classical, follow part 1 of the instructions; if you chose operant, follow part 2.

Answer: Classical. UCS: slamming the door. UCR: mother flinching. CS: sound of “Bye, Mom.” CR: mother flinching.

Scene V

Imagine you have a friend who keeps the temperature in her home so high that each occasion on which you visit her you find yourself perspiring. The last time you visited her, you noticed that you began to perspire and became uncomfortable as soon as you saw her house (before you even got inside).

- A. Can the behaviour of perspiring be explained best through classical or operant conditioning? Explain.

Answer: Classical Conditioning because perspiration is an involuntary response and is not “learned.”

- B. If you chose classical, follow part 1 of the instructions; if you chose operant, follow part 2.

Answer: Classical. UCS: high temperatures UCR: perspiration. CS: sight of her house. CR: perspiration.

Scene VI

Fred leaves his clothes and toys all over his room. It seems that the only time he cleans up his room is when his mother yells at him. When she yells at him, Fred picks up his clothes and puts away his toys.

- A. Can the behaviour of Fred picking up his clothes and putting away toys be explained best through classical or operant conditioning? Explain.

Answer: Operant Conditioning because Fred “learns” to put his clothes and toys away in order to stop being yelled at.

- B. If you chose classical, follow part 1 of the instructions; if you chose operant, follow part 2.

Answer: Operant – B. Negative reinforcement because Fred is trying to “cancel”/stop the unwanted yelling from his mother.

Scene VII

Mr. and Mrs. Jones are having a heated argument that both are finding very unpleasant. Mr. Jones gets up and leaves the room, closing the door behind him. This has the effect of terminating the argument. From then on, every time Mrs. Jones raises her voice, Mr. Jones leaves the room.

- A. Does the behaviour Mr. Jones leaving the room seems more likely to have been conditioned through classical or operant conditioning? Explain.

Answer: Operant Conditioning because the ending of the argument by the closing of the door is voluntarily done by Mr. and Mrs. Jones as Mrs. Jones could still continue to yell at him past the door and thus, never ending the argument.

- B. If you chose classical, follow part 1 of the instructions; if you chose operant, follow part 2.

Answer: Operant – B. Negative reinforcement because the response (closing the door) removes the aversive stimulus (the argument).

Scene VIII

A husband who usually ignores his wife still likes to think of himself as an understanding man. So, whenever his wife complains that her heart condition (which has no medical cause) is giving her pain, he becomes attentive and tries to comfort her. This responsiveness doesn’t seem to help much; her reports of heart trouble just increase.

- A. Does classical or operant conditioning best explain why the wife reports having more heart trouble than ever? Explain.

Answer: Operant Conditioning because the wife “learns” that the husband will give her attention and care whenever she “feels” pain in her heart. In the belief that she does not actually have a heart problem, she is portraying so in order to get the “effect” she wants.

- B. If you chose classical, follow part 1 of the instructions; if you chose operant, follow part 2.

Answer: Operant – A. Positive reinforcement because she is trying to increase the response (husband comforting her) by presenting the stimulus (complaint of having heart pain by wife).