

IX. Activity Handouts

Activity Handout 6.1

Identify the US, CS, UR, and CR

Read through the examples below and then identify the US, CS, UR, and CR in each of the examples.

1. Pamela is walking her child at the mall and a lady walks by and stops to see the baby. The lady has a shiny, noisy bangle of bracelets that are the same as the ones Pamela wears. When the lady reaches down to pat the baby on the head, the bangles make noise and the baby starts making suckling noises.

US
UR
CS
CR

2. Scott's dog waits every afternoon in the front room for Scott to come home. He knows when he hears the garage door open, Scott will come in and take him out for a walk. One evening Scott leaves to go get something at the grocery store. As he is leaving, he hits the garage door opener and the dog starts running around like crazy.

US
UR
CS
CR

3. Every other day, Tabetha's cat gets wet cat food. Tabetha uses the electric can opener to open the can of food. The cat gets so excited because she loves wet cat food. One morning, Tabetha's mother is visiting and she gets a can of tuna to make tuna salad sandwiches. As she opens the tuna can with an electric can opener, the cat is constantly rubbing on her leg and purring and meowing.

US
UR
CS
CR

4. Rachel's boyfriend always wore a certain kind of cologne that she was allergic to. When he came over she would start sneezing. A couple of weeks after they had broken up, Rachel was at the mall and ran into her boyfriend's identical twin brother. When he came up to see her and say hello she started sneezing.

US

UR

CS

CR

5. Elmer really likes to cook with onions and he puts onions into almost everything he makes. He usually starts dinner every day around 5:00 p.m. As he is cutting the onions, the grandfather clock chimes five times because it is 5:00 p.m. Elmer is also crying because cutting the onions makes his eyes water. One evening he is at a friend's house because they are going out to dinner later. He and his friend are watching TV and the clock chimes five times when it is 5:00 p.m. Elmer's eyes start to water.

US

UR

CS

CR

Activity Handout 6.3

Which Schedule Is It?

For each of the scenarios below, determine which schedule is being used, such as positive reinforcement, negative reinforcement, positive punishment, or negative punishment. Explain why you chose your answer.

1. Libby gets \$20 for every A she brings home on her report card.
Schedule:
2. For every A that Tim gets on his report card, he doesn't have to do his chores for two days.
Schedule:
3. Every time the dog rolls over he gets a doggy treat.
Schedule:
4. Jim comes home way after curfew and his parents take his car keys away for a week.
Schedule:
5. Sally talks back to her mom and she gets grounded for three weeks.
Schedule:
6. Bethany keeps her room nice and tidy and when she needs something she is easily able to find it.
Schedule:
7. Mrs. Smith's students in her kindergarten class receive a gold star every time they say "please" when asking for something.
Schedule:
8. Jeremy's ball runs out into the street and Jeremy runs out after it. There is a car coming and he almost gets hit by the car. His mother is very upset and spansks him on the bottom for running into the street.
Schedule:
9. Terri and her boyfriend get caught kissing on the front porch after she was told she wasn't allowed to kiss boys yet. Her father tells her she isn't allowed to see her boyfriend anymore.
Schedule:
10. Sara is speeding in her car on the highway because she is late for her morning class. She gets pulled over by the police and gets a \$75 fine.
Schedule:

AN OVERVIEW OF CLASSICAL AND OPERANT CONDITIONING

	Classical Conditioning	Operant Conditioning
Other names	Respondent conditioning Pavlovian conditioning	Instrumental conditioning Law of Effect (Thorndike) Skinnerian conditioning
Pioneers	Ivan Pavlov John B. Watson	Edward Thorndike B.F. Skinner
Example	Sound of bell (CS) begins to produce salivation	Baby cries and parents pick up baby
Major Terms	Unconditioned stimulus (UCS) Conditioned stimulus (CS) Unconditioned response (UCR) Conditioned response (CR) Conditioned emotional response (CER)	Reinforcers (primary and secondary) Reinforcement (positive and negative) Punishment (positive and negative) Shaping Reinforcement schedules (Continuous and partial)
Shared terms	Extinction Spontaneous recovery Generalization Discrimination	Extinction Spontaneous recovery Generalization Discrimination
Major Differences	Involuntary (subject is passive)	Voluntary (subject is active)
Behavior Order	CS comes before the UCS	Reinforcement comes after the behavior

ACTIVE LEARNING EXERCISE

1. A researcher flashes a light and then blows a puff of air in to the research participant's eye. The participant blinks. After a few trials, just the flash of light will cause the participant to blink.

UCS
UCR
NS
CS
CR

2. A researcher sounds a tone, and then places a piece of meat into the dog's mouth, causing it to salivate. Eventually, the sound of the tone alone causes the dog to salivate.

UCS
UCR
NS
CS
CR

3. Your cat comes running when she hears the electric can opener.

UCS
UCR
NS
CS
CR

4. While listening to a song on his car radio, a man accidentally bumped into a red car in front of him. Now, whenever he sees red cars, he experiences a severe anxiety attack.

UCS
UCR
NS
CS
CR

5. Carla spent many mornings in the dentist chair undergoing painful dental procedures. She had recently bought her boyfriend a new aftershave, and as the dentist was working on her teeth, she noticed that he was using the same one. Now, when she smells her boyfriend's aftershave, she feels tense and anxious.

UCS
UCR
NS
CS
CR

6. Rod was eight years old when he received an injection from the local doctor. He was feeling Ok until he saw the long needle on the syringe. As soon as he felt the long needle enter in his little butt, everything started to spin. The doctor told him he had fainted. Years later, the sight of a needle can still strike terror in him. To prevent fainting, he always lie down when getting an injection or giving blood.

UCS
UCR
NS
CS
CR

7. Michelle was in the process of receiving chemotherapy to treat breast cancer. One serious side effect of chemotherapy is severe nausea, which Michelle experienced. What Michelle was not prepared for was how other things could trigger her nausea. The odor of her dishwashing liquid, which smelled similar to the chemotherapy room made her feel nauseated.

UCS
UCR
NS
CS
CR

Reinforcement Schedules

The text indicates that in real life, continuous reinforcement is rare. Sometimes responses are reinforced, sometimes not. Among the most important schedules of partial reinforcement are the fixed ratio (FR), variable ratio (VR), fixed interval (FI), and variable interval (VI). Identify the schedule in the examples below by writing your answer—FR, VR, FI, or VI—in the spaces on the left.

- _____ 1. buying state lottery tickets and winning
- _____ 2. A hotel maid may take a 15-minute break only after having cleaned three rooms.
- _____ 3. watching and seeing shooting stars on a dark night
- _____ 4. A teenager receives an allowance every Saturday.
- _____ 5. checking the front porch for a newspaper when the delivery person is extremely unpredictable
- _____ 6. A professional baseball player gets a hit approximately every third time at bat.
- _____ 7. checking the oven to see if chocolate chip cookies are done, when baking time is known
- _____ 8. A blueberry picker receives \$1 after filling 3 pint boxes.
- _____ 9. A charitable organization makes an average of ten phone calls for every donation it receives.
- _____ 10. calling a garage mechanic to see if your car is fixed yet
- _____ 11. A student's final grade improves one level for every three book reviews submitted.
- _____ 12. going to the cafeteria to see if the next meal is available

REINFORCEMENT SCHEDULES

Identify the four major schedules of reinforcement presented in the text - fixed ratio (FR), variable ratio (VR), fixed interval (FI), and variable interval (VI).

- 1. A business that advertises that it will change your oil in 20 minutes offers you a free oil change after you have had your oil changed 5 times at their business.**
- 2. Although farmers put out about the same amount of labor each year, sometimes they sell their grain at harvest time, sometimes in January, and sometimes as late as March.**
- 3. You are fly-fishing in a great trout stream. Sometimes you catch a fish after only 4 or 5 casts; sometimes it takes 10 or 20 casts.**
- 4. A bank employee is given a bonus of a \$30 restaurant coupon for every 4 hours of overtime he volunteers to work.**
- 5. A young child demands a candy bar each time she is in the checkout line at the grocery store. Sometimes the parent gives her one and sometimes he doesn't.**
- 6. A piano teacher gives a 6-year-old student a sticker for each song he plays well.**
- 7. You are still fishing from a dock. You sit with your line in the water and wait for the fish to strike. Sometimes it takes only 20 minutes; sometimes it takes an hour or more.**
- 8. You do piece work in a factory. For every 3 sleeves you sew on garments, you get \$0.50.**
- 9. For each half day that a second grader pays attention and works well, the teacher gives her a "Good Behavior" dollar that she can trade in at the end of the week for desired objects from the store.**
- 10. A vacuum cleaner salesperson does numerous presentations in people's homes and gets paid a bonus each time he or she sells a vacuum. Sometimes the salesperson does 5 presentations before a customer buys a vacuum, sometimes 2 customers in a row purchase the product.**
- 11. Your pay check arrives on the 1st and 15th of every month.**

CONDITIONING WORKSHEET

- I. If you decide the situation seems to be an example of classical conditioning you should label the UCS, UCR, CS, and CR.
- II. If you decide the situation seems to be an example of operant conditioning, you should identify whether it is positive or negative reinforcement, or positive or negative punishment.

SITUATION 1

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. The behavior of pressing the lever is an example of _____ conditioning.
- B. If you chose classical, follow part 1 of the instructions; if you chose operant, follow part II.

SITUATION 2

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. The baby's pleasure response is an example of _____ conditioning.
- B. If you chose classical, follow part 1 of the instructions; if you chose operant, follow part II.

SITUATION 3

A patient in a hospital is very disruptive at mealtime. She grabs food from the plates of those sitting near her and tries to cram the food into her mouth. Because this behavior 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. The mental health staff is attempting to change the behavior of stealing through _____ conditioning.
- B. If you chose classical, follow part I of the instructions; if you chose operant, follow part II.

SITUATION 4

Johnny has developed the 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 the procedure, Johnny's mother begins to flinch at the sound of her son's words, "Bye, Mom."

- A. The mother's flinching behavior can be explained through _____ conditioning.
- B. If you chose classical, follow part I of the instructions; if you chose operant, follow part II.

SITUATION 5

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 were inside).

- A. Your perspiring behavior can be explained as _____ conditioning.
- B. If you chose classical, follow part I of the instructions; if you chose operant, follow part II.

SITUATION 6

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

- A. Mr. Jones stops raising his voice because of _____ conditioning.
- B. If you chose classical, follow part I of the instructions; if you chose operant, follow part II.