***Chapter 6 Instructions***

In this chapter, you learned about Albert Bandura’s Social Learning Theory. Consider the many different behaviors that you engage in on a daily basis and identify one or two that you think you learned through modeling. In one to two paragraphs discuss these behaviors (only discuss positive behaviors!) and how they came to be modeled.  **You will need to have your name, date, and course name and section number in the upper left hand of your paper.  The length of paper should be 300 word count and double space with title of paper at top of the body of the paper. References need to be cited in APA format on separate page.  Points will be taken off if paper does not have the required elements.**

***Ch 6 Lecture Notes: Learning***

This chapter covers the major theories of learning (Classical Conditioning, Operant

Conditioning, and Social Learning Theory).

Classical Conditioning

(CC)—This approach was developed by Ivan Pavlov. Pavlov

was not originally a psychologist—he was a physiologist who studied how dogs

digested their food. Whoa! In the course of this research he noticed that his dogs would

salivate when he entered the lab even though he had no food. He assumed that they

had “associated” him with food and that the salivation was occurring to prepare for

eating. Pavlov was intrigued by this and couldn’t leave it alone. He shifted his research

to investigating this phenomenon.

Pavlov assumed that if the animals had associated him with the sight of food he could

condition them to salivate to any stimulus, as long as it had first been paired with food.

Now, everything in the CC process has a label. Pay close attention!

FOOD ---------------------> SALIVATION

Unconditioned Unconditioned

Stimulus Response

(UCS) (UCR)

Food naturally

elicits

the salivation response. Elicit means involuntary. You do not teach

or condition an animal to salivate to food. It happens naturally—it is an inborn natural

reflex. It is unconditioned. CC takes advantage of this natural process by pairing a

Neutral Stimulus (NS) a bell, with the UCS (food). Each pairing is called a trial. So, look

at the labels below:

BELL

Neutral Stimulus

(NS)

The bell has no influence on the animal.

CC involves pairing the NS (Bell) with the UCS (Food)

NS-------------UCS------------->UCR

(BELL) (FOOD) (SALIVATION)

(Each paring of the bell and the food is called a

trial

)

After several trials one tests to see if conditioning occurred. So, the bell is presented

alone, and hooray it causes salivation!

BELL----------------->SALIVATION

(CS) (CR)

Note: The bell is now called a

Conditioned Stimulus

. The salivation is now called a

Conditioned Response

.

Pavlov also studied some other important phenomena. They are discussed below:

a) Stimulus Generalization-This occurs when the response spreads to other similar

stimuli. So. for instance, Pavlov’s dog once conditioned, may salivate to other similar

bell tones. Consider a real life human example: A child is stung by a bee. Afterwards, he

may not only fear bees but all flying insects.

b) Stimulus Discrimination-This occurs when the animal salivated to only one particular

bell tone and no other. Consider a real life human example: A man is bitten by a Golden

Retriever. He now fears Golden Retrievers but no other breed.

c) Extinction-Pavlov wanted to find out what would happen if he kept presenting the bell

(CS) without presenting the food (UCS). Over time the salivation response decreased

until it stopped. Essentially, it was “turned off” as the animal’s nervous system learned

that the bell no longer signaled food. It would be a waste of vital energy to produce

saliva for no good reason. So, it stops!

d) Spontaneous Recovery-After extinction had occurred Pavlov decided to see what

might happen if he rang the bell again. Low and behold the salivation returned. It is if

the animal never forgot it—the response was always there—it had been learned!

Now, John B. Watson, while developing

Behaviorism,

had read Pavlov’s work and was

quite impressed. Remember from Chapter 1 that Watson stated that the focus of

psychology should be on observable behavior and that everything about the human

being had been learned. He decided to use CC principles to condition a young infant

(“Little Albert”) to fear a white lab rat. Initially, Little Albert had no fear of the rat. It was

Watson’s goal to create an environmental event that would lead to the development of

fear of the rat. So, each time the rat came near, Watson would bang a loud noise

behind Albert’s head. This created a natural fear response (Albert would be startled and

cry). After a few pairings (trials) of the rat and the loud noise Watson tested to see if the

rat alone would produce fear in Albert. And, of course it did. Watson had the

environmental evidence he was looking for to support his theory of Behaviorism.

So, hear is a breakdown of the CC terminology. Initially the rat is a neutral stimulus

(NS)—it has no effect on Albert. The loud noise, however, naturally causes fear in

Albert. It is an unconditioned stimulus (UCS). The fear is an unconditioned response

(UCR). Each pairing of the rat and the loud noise is a trial. After a few trials Watson

tested to see if conditioning occurred. It did! Now, the rat is a conditioned stimulus (CS)

and the fear is a conditioned response (CR)

One more thing—stimulus generalization was noted in this study. Albert became afraid

of some other white furry things (e.g., Santa Claus mask, rabbit).

A precursor to the development of

Operant Conditioning

(see below) can be seen in

the work of

E.L. Thorndike

and his work with cats. This gentleman would place hungry

cats in “puzzle boxes” outside of which was a plate of food. The job of the cat was to

figure out how to escape via a latch system whereby upon escape he would be allowed

to eat a bite of food. The food served as a reward for the escape behavior. As soon as

the animal had its reward Thorndike would place it back in the box, start a stopwatch,

and time how long the animal took to escape the 2

nd

time, 3rd time, etc. Thorndike

noted that the escape time decreased on each successive trial indicating that learning

was taking place. Based on this research Thorndike developed the “

Law of Effect

”

which essentially states that behaviors which are followed by positive consequences

tend to be repeated.

Operant Conditioning

—B.F. Skinner

Skinner coined the term “

operant

.” It means to “operate on one’s environment”, or quite

simply, to “behave.” In this form of conditioning behaviors are

emitted

or voluntary.

Behaviors are then followed by either a reinforcement (reward) or a punishment.

Skinner conducted his research on rats and pigeons in the famous “Skinner Box” and

stated that the results gathered in his laboratory investigations applied to human beings.

Yes, he believed that humans, rats, and pigeons, all learned in the same manner. So, in

this theory behaviors are shaped/controlled via reward and punishment

Here is a breakdown on the types of reinforcement and punishment that he

investigated.

REINFORCEMENT--Reinforcement increases the chances that a

behavior will be repeated

PUNISHMENT--Punishment decreases the chances that a

behavior will be repeated

There are two types of each: Positive Reinforcement/Negative Reinforcement

Positive Punishment/Negative Punishment

REINFORCEMENT

Positive (+) Something pleasant is added to one’s life that increases the chances the

behavior will be repeated (e.g., money for a day’s work).

Negative (-) Occurs when we engage in a behavior which removes (subtracts, takes

away) something unpleasant from our life (e.g., taking 2 aspirin to get rid of a

headache—if it works we repeat the behavior in the future). So, the behavior (operant)

is aspirin taking. It removes the unpleasantness of the headache. Getting rid of the pain

reinforces aspirin taking behavior—you will do it again the next time you have a

headache! Wow!

Many students see the word “negative” here and think it’s punishment. It is not!

Remember, it’s a form of reinforcement so the likelihood of a behavior being repeated is

increased.

PUNISHMENT

Positive (+) Occurs when something unpleasant is added to our life (e.g., getting

screamed at for misbehavior).

Negative (-) Occurs when something pleasant is removed from our life (e.g., taking

away a kids I-phone for being disrespectful).

Two additional terms: Partial and continuous reinforcement. Partial reinforcement

occurs when a behavior is reinforced every once in while, not after each behavior that

has been emitted. Think about scrape off lottery tickets. You don’t win each time—that

would be continuous reinforcement and it would bankrupt the lottery! So, they let you

win every once in a while by giving you a little back. This keeps you playing!

Partial reinforcement takes 4 different forms—they are all considered “Schedules of

Reinforcement” and discussed below.

Schedules of Reinforcement-Skinner placed his animals on different schedules of

reinforcement to see their effects on behavior (e.g., bar pressing in the Skinner Box).

There are both Ratio Schedules and Interval Schedules.

Ratio Schedules-In a ratio schedule the animal only receives the reward after a certain

number of bar presses. There are 2 types:

a) Fixed Ratio—The animal must press the bar a specific number of times before a

reward is delivered. So, you could place the rat on a FR20 schedule in which, over time,

the animal would learn to press the bar 20 times in a row to get the reward.

b) Variable Ratio-In this schedule the number of bar presses is not fixed—it usually

averages out to a certain number—however the animal does not know how many

presses will produce the reward.

Interval Schedules—These are based on responding (bar pressing) at the right time in

order to get the reward. Again, there are 2 types.

a) Fixed Interval—In this schedule the animal will learn to press the bar after a specific

amount of time has passed. So, if we had a FI 30 second schedule the animal would

learn to start pressing the bar at around 28 -30 seconds. Only after the 30 second mark

does the reward become available.

b) Variable Interval-In this schedule the time varies as to when the reward becomes

available. So, the animal keeps “checking” (bar pressing) to see if they will indeed

receive the reward.

Now, your text presents the schedules with human, not animal, examples. Make sure to

read these and pay attention to which one’s result in the highest amount of responding.

It is important to note that Skinner did not believe in free will. We behave to either obtain

rewards or to avoid punishments. Thus, thoughts (cognitions) were not important to him.

Latent Learning-Read/Study in text..

Ok—the last major theory is

Social Learning Theory

. It was Proposed by

Albert

Bandura.

In this model we learn by observing others behavior. It is sometimes referred

to as

observational learning

or

modeling theory

. In this model Cognition is important!!!

This means that we “think” before we model—we decide if we will model a behavior or

not.

Here is the general rule:

We are more likely to model a behavior when the model has been reinforced for that

behavior; we are less likely to model a behavior when the model has been punished for

that behavior.

Bandura demonstrated his theory in the classic “Bo-Bo” doll study in which children

modeled an adult’s aggressive actions towards an inflatable doll.