**PS360: Applied Behavior Analysis I**

**Discussion Board Lecture: Unit 4**

**Introduction to Unit 4: Conditioned Reinforcement and Conditioned Punishment**

Welcome, students! This lecture will focus on conditioning stimuli through the process of pairing. We will discuss:

* + Neutral Stimuli
	+ Conditioned and Unconditioned Stimuli
	+ Conditioned and Unconditioned Aversive Stimuli
	+ The Pairing Procedure
	+ Generalized Conditioned Reinforcers
	+ Token Economy

Let’s begin!

Our focus in Unit 4 is on conditioned stimuli and conditioned aversive stimuli. Flashing back to our lecture on primary – or unlearned – reinforcers, we know that primary reinforcers are stimuli that are necessary for survival.

**But, how do so many other things in our world become reinforcing to us as well – things that aren’t necessary to survival?**

To understand that, it may be helpful to review Classical – or Respondent – Conditioning.

You have learned that an unconditioned (primary or unlearned) stimulus (US) can evoke an unconditioned response (UR) that is physiological – or reflexive.

When a neutral stimulus (NS) that does not evoke the UR is paired with the US repeatedly, the NS will be transformed into a conditioned stimulus (CS) that has the power to evoke the same response as did the US. That response evoked by the CS is referred to as a “conditioned response” (CR). This is the foundation of Classical – or Respondent – Conditioning.

**But, what does all of this have to do with primary – or unlearned - reinforcers – and conditioned – or learned – reinforcers?**

***Pairing*** can transform neutral stimuli into conditioned reinforcers by repeatedly pairing the neutral stimuli with primary reinforcers or other conditioned reinforcers (Malott & Shane, 2016).

This process, while very similar to Classical Conditioning, differs from Classical Conditioning in that the transformed neutral stimulus into a conditioned reinforcer acts to maintain behavioral responses rather than ***evoke*** physiological responses (reflexive responses).

Many reinforcers that we contact every day are not necessary to survival, but they may have been paired with reinforcers in the past that are necessary to survival.

* For example, pairing social praise with an edible, such as a client’s favorite candy or salty snack, can transform the social praise into a conditioned reinforcer. Each time the client responds correctly to a question, the social praise is given at the same time, or just before, the edible is presented. This pairing increases the reinforcing value of social praise.
* A behavior analyst can often make herself a conditioned reinforcer for the client by pairing her visit in the home with something the child already enjoys. This pairing can be facilitated by the behavior analyst always bringing a new video game to the session to be used as a reinforcer for compliance. Over a very little time, the client associates the behavior analyst with video games that he/she has little access to except when the analyst visits. At first, the analyst is a bringer of the games. Later, he/she is associated with feelings of enjoyment derived from playing the games.

In the example of pairing social praise with an edible, we see the transformation of social praise into a conditioned reinforcer by pairing it with an unconditioned reinforcer.

In the second example, the behavior analyst/video game pairing, we see how pairing a neutral stimulus with an existing conditioned reinforcer transforms the neutral stimulus into another conditioned reinforcer.

**Through this process of pairing, we can create many socially appropriate reinforcers in order to teach, increase, and maintain socially significant behaviors.**

**Pairing is an important behavioral strategy!**

A conditioned aversive stimulus can be created by pairing a neutral stimulus with an unlearned (unconditioned) aversive stimulus, such as a spanking, or another conditioned aversive stimulus, such as a frown.

* For example, pain serves as an unconditioned aversive stimulus. By repeatedly pairing a lecture from a parent (neutral stimulus) with a spanking (unconditioned aversive stimulus), the lecture becomes a conditioned aversive stimulus.
	+ Now, you can repeatedly pair the frown (conditioned aversive stimulus) with a stance in which the parent holds himself rigid with hands on hips and the rigid stance soon becomes a conditioned aversive stimulus.
* The effects of pairing, either to create conditioned reinforcers or conditioned aversive stimuli, only maintain their strength if the pairing is repeated intermittently. If the conditioned reinforcer or aversive stimuli is presented multiple times without a repeat pairing, the power of the conditioned reinforcer and aversive stimuli will diminish.
* We cannot discuss conditioned reinforcers without discussing generalized conditioned reinforcers and their use in token economies.
	+ Generalized conditioned reinforcers are just that, conditioned reinforcers. These are stimuli that were once neutral but gained status as reinforcers through association with unconditioned reinforcers or other conditioned reinforcers. What makes these conditioned reinforcers “generalized” is their association with a wide variety of back-up reinforcers. In the token economy, the token is a generalized conditioned reinforcer because it (or they) can be exchanged for back-up reinforcers. Money is a generalized conditioned reinforcer.

Thank you for viewing your Unit 4 Lecture!

**References**

Malott, R. W., & Shane, J. T. (2016). *Principles of behavior* (7th ed.).

 New York, NY: Routledge.