

CONDITIONED REINFORCEMENT

What It Is and How We Use It

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What We Are Familiar With

Conditioned Reinforcers

- Puzzles
- Blocks
- Books
- Toys
- Faces
- Voices

Conditioning

- Pair Test
 - Puzzles, blocks, etc.
- Conjugate
 - Faces and Voices

What We Are Going to Learn

- What is conditioning?
- Different types of conditioning
- Review of Procedures

Introduction

- Within behavior analysis, conditioning is one of, if not the most important procedures we use
- Without conditioning, there is NO LEARNING
- We are familiar with the “Expansion of Community of Reinforcers”, but that is only part of the equation

Definition of Conditioning

- When the reinforcing or punishing value of a stimulus is altered due to the presence of the stimulus at the same or similar time to a stimulus with an established value
- ???????

Let's Unpack That...

- When the reinforcing or punishing value of a stimulus
 - A stimulus may be a reinforcer, a punisher, or neutral
- is altered
 - This stimulus will become either a reinforcer or a punisher (or more of what it already is)
- due to the presence of the stimulus at the same or similar time
 - Directly before or simultaneously presented
- to a stimulus with an established value
 - Presented with a stimulus that already has a reinforcing or punishing qualities

No Really.....

- I listen to a song (Stimulus)
- I don't care about the song (established as neutral)
- I listen to the song with a good friend (stimulus presented simultaneously with reinforcing stimulus)
- I listen to the song on my own (stimulus has been conditioned)

So

- Anytime two stimuli are presented simultaneously, or in close proximity to each other, there is an opportunity for conditioning
- The smaller the community of reinforcers, the more likely something is going to be conditioned if presented with another reinforcer (but will take longer)
- The larger the community of reinforcers, the less likely something new will be conditioned (much already has a value), but the less time it will take

Two Types of Conditioning

- Respondent Conditioning
 - Pavlov's Dogs
 - Pair-Test
 - Conjugate Reinforcement
- Operant Conditioning
 - Learn units and learning
- Each type of conditioning is based on similar principles, but the procedures look different
- It is key to see that based on this idea, **EVERYTHING WE DO IS CONDITIONING**

Operant Conditioning

- When a behavior is followed by a reinforcer and, over time, the behavior occurs in the absence of the reinforcer
- The behavior has either
 - Become a reinforcer in and of itself
 - Allowed the behavior to come in contact with other reinforcers that maintain the behavior
- In the first case, the behavior has become a conditioned reinforcer

Operant Conditioning

- Example

- Charlie is doing math fluency. Charlie observes others doing math fluency, contacts praise for completing math timings, gets to go play when he has completed math fluency
- Over time, Charlie asks if he can take math fluency sheets home to complete on his own. He comes in the next day, doesn't say anything about it, but you find them completed

Operant Conditioning

- Charlie has had math fluency conditioned by:
 - Observation (peers)
 - Praise
 - Prosthetic reinforcement (going to play)
- The value of those three reinforcers is transferring to math fluency
- Asking for math fluency for home is evidence that it might be a conditioned reinforcer
- Because he doesn't seek out praise, peers, play or anything else but has completed the work, you can see it has been conditioned

Operant Conditioning

- Many of the skills we teach through learn units, we teach with the intention of having them come in contact with other reinforcers that are going to maintain the behavior
- Some of the skills we teach, we want to be reinforcers in and of themselves.
- These skills are skills that we are conditioning through operant conditioning with the use of the learn unit

Respondent Conditioning

- This is what we more readily think of when we think of conditioning
- Pavlov's Dogs
 - Bell (NS) – No response
 - Bell with Food (US) – salivation (UR)
 - Bell (CS) – salivation (CR)
- In this case the “value” of food (meaning the effect of food) is being transferred to the bell
- This example is a little different because it is conditioning an antecedent, not a reinforcer

Respondent Conditioning

Pair-Test

- As the behavior occurs (UCR), we present reinforcement (CS)
- If the behavior does not occur we correct the behavior and remove the CS
- After a certain amount of pairing, we test to see if the property of the CS has transferred to the UCR

Conjugate

- As the behavior occurs (UCR) we present reinforcement
- If the behavior does not occur, we remove reinforcement
- Once the behavior occurs continuously, we say the behavior has been conditioned

Procedures – The Learn Unit

- Key to the learn unit in conditioning is the consequence
 - Presenting reinforcement quickly and accurately after the presence of a target behavior
 - Making sure you are not presenting reinforcement for undesired behaviors (incorrect responses)
- It is still important to remember that in operant conditioning and learn units, the behavior and reinforcer are only being conditioned in the presence of a particular antecedent
- In other words, no antecedent, no behavior no matter how strongly it has been conditioned

Procedures – Pair Test

- The key to the pair-test is the pair interval
- 2-3 instances of reinforcement per pair interval
 - This stays the same the longer the pair interval gets
- Making sure that the target behavior is occurring continuously
 - NO STEREOTYPY!!!!
- Not presenting reinforcement during the test interval