

Operant Conditioning: Reinforcement and Punishment

by Sophia Tutorial



WHAT'S COVERED

This tutorial expands upon Skinner's original ideas about operant conditioning, focusing on reinforcement and punishment. You will learn about:

1. Positive and Negative Reinforcement
2. Punishment
3. Issues with Punishment

1. Positive and Negative Reinforcement

You may recall that operant conditioning is when learning occurs through the association of consequences to behaviors. Operant conditioning is concerned with what happens after and as a result of a person's actions, that makes it more or less likely for them to repeat that action later.

Reinforcement is anything that follows a behavior and makes it more likely for a response to be repeated.

Reinforcement is grouped into two different categories: **positive reinforcement** and **negative reinforcement**. It is important not to think of “positive” and “negative” as good and bad. Rather, these terms refer to the effects or the consequences that change behaviors; thus, one isn't better than the other.

Positive reinforcement is anything that is presented or given to the subject that makes it more likely for the response to be repeated.

➦ **EXAMPLE** Examples of positive reinforcement would include such things as candy, stickers, a high five, or even verbal praise, given to a child after they do a good job on a math test, for instance. In turn, the child is more likely to perform well in math later, because they received that positive reinforcement.

In contrast, negative reinforcement is anything that is taken away from a subject that makes it more likely for a response to be repeated. Remember, reinforcement is all about making it *more* likely for something to occur; therefore, negative reinforcement is generally taking away something that is unpleasant to compel someone to want to perform an action more.

➦ **EXAMPLE** Suppose there is an annoying sound in your room, and it can be turned off by pushing a button. The negative reinforcement is the annoying sound, which makes you more likely to perform the behavior of pushing the button. Similarly, you may perform a chore so that you don't get grounded. Or, if you're grounded, you can avoid that grounding, or that negative reinforcement, by doing the chore. In either case, you're more likely to do what you're supposed to be doing.



TERM TO KNOW

Positive Reinforcement

Any consequence that is given to the subject that increases the likelihood of repeating the behavior

Negative Reinforcement

Any consequence that is taken from the subject that increases the likelihood of repeating the behavior

2. Punishment

Punishment or **punishers** follows a response and makes it less likely for a behavior to be repeated.

In other words, punishments are trying to suppress a behavior. There has been much research, particularly in the field of childhood development and education, that has shown how effective punishment is.

Under punishment, there is also positive and negative reinforcement:

- Positive reinforcement of punishment is something that you give to a person that makes it less likely for the behavior to occur, such as a loud noise or an electric shock.
- Negative reinforcement of punishment is something you take away that makes it less likely for something to occur, like taking away a toy after a child does something bad. This might make it less likely for the child to repeat that bad behavior.

Punishment, as well as negative reinforcement, is what is known as an aversive consequence. This means that it is something following an action that is painful or uncomfortable, that somebody doesn't like.

The difference between these two types of aversive consequences is that negative reinforcement makes it *more* likely for a behavior to repeat, whereas punishment makes it *less* likely for the behavior to repeat. Both of these concepts deal with unpleasant things, but the consequences, or results, are different.



TERMS TO KNOW

Punishment

A consequence that decreases the likelihood of repeat behavior

Punisher

Same as punishment

3. Issues with Punishment

Punishment can be more powerful than reinforcement, especially in the short term. It is possible to change

somebody's behavior rather quickly as a result of punishment, but it can have some negative or unwanted results.

For instance, when you're using punishment, you don't teach a person to be positive, or to learn pro-social kinds of behaviors. Generally, you're simply teaching them either escape learning or avoidance learning, which are ways to end an **aversive stimulus** quickly.

Escape learning is learning to respond in a way that ends an aversive stimulus quickly, by trying to get away from the aversive stimulus. **Avoidance learning**, similarly, is learning to respond in a way that postpones or prevents an aversive stimulus from happening.

Instead of learning to deal with problems, like bullying, for example, a child instead learns to escape or avoid. This, in turn, rewards them with some relief so that they feel better about the situation. This makes them more likely to escape or avoid again. Therefore, punishment isn't necessarily teaching somebody in the best possible way.

There are a few other notable issues or problems with punishment:

- Punishment tends to increase aggression in people and makes them more likely to react violently towards others. Because punishment deals with aversive consequences, or things a person doesn't like, people tend to react a lot stronger. Thus, the important thing regarding punishment is that it needs to be used in the best possible way. In particular, the punishment should be equal or appropriate to the behavior it is responding to, not disproportionately harsh.
- Punishment needs to follow the behavior immediately so that there's a short amount of time in between the two events.
- Punishment needs to be followed or combined with reinforcement as well, so that there is a positive aspect that goes along with the child's learning, and not constant punishment.



TERM TO KNOW

Aversive Stimulus

Unpleasant event in the environment

Escape Learning

Learning whose goal is to get away from the stimulus as soon as possible; "yes, dear"

Avoidance Learning

Learning whose goal is to avoid the stimulus



SUMMARY

Positive and negative reinforcement deals with rewards and **punishment**, both of which can be positive and negative. Positive and negative does not mean good and bad, but rather refers to adding or taking away stimuli. Positive and negative reinforcement are both about reducing or suppressing behaviors.

There are potential **issues with punishment**, however, in that it can teach escape learning and avoidance learning, instead of teaching a person to be positive or to learn pro-social kinds of

behaviors.

Good luck!

Source: THIS WORK IS ADAPTED FROM SOPHIA AUTHOR ERICK TAGGART.



TERMS TO KNOW

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Avoidance Learning

Learning whose goal is to avoid the stimulus.

Escape Learning

Learning whose goal is to get away from the stimulus as soon as possible; "yes, dear".

Negative Reinforcement

Any consequence that is taken from the subject that increases the likelihood of repeating the behavior.

Positive Reinforcement

Any consequence that is given to the subject that increases the likelihood of repeating the behavior.

Punisher

Same as punishment.

Punishment

A consequence that decreases the likelihood of repeat behavior.