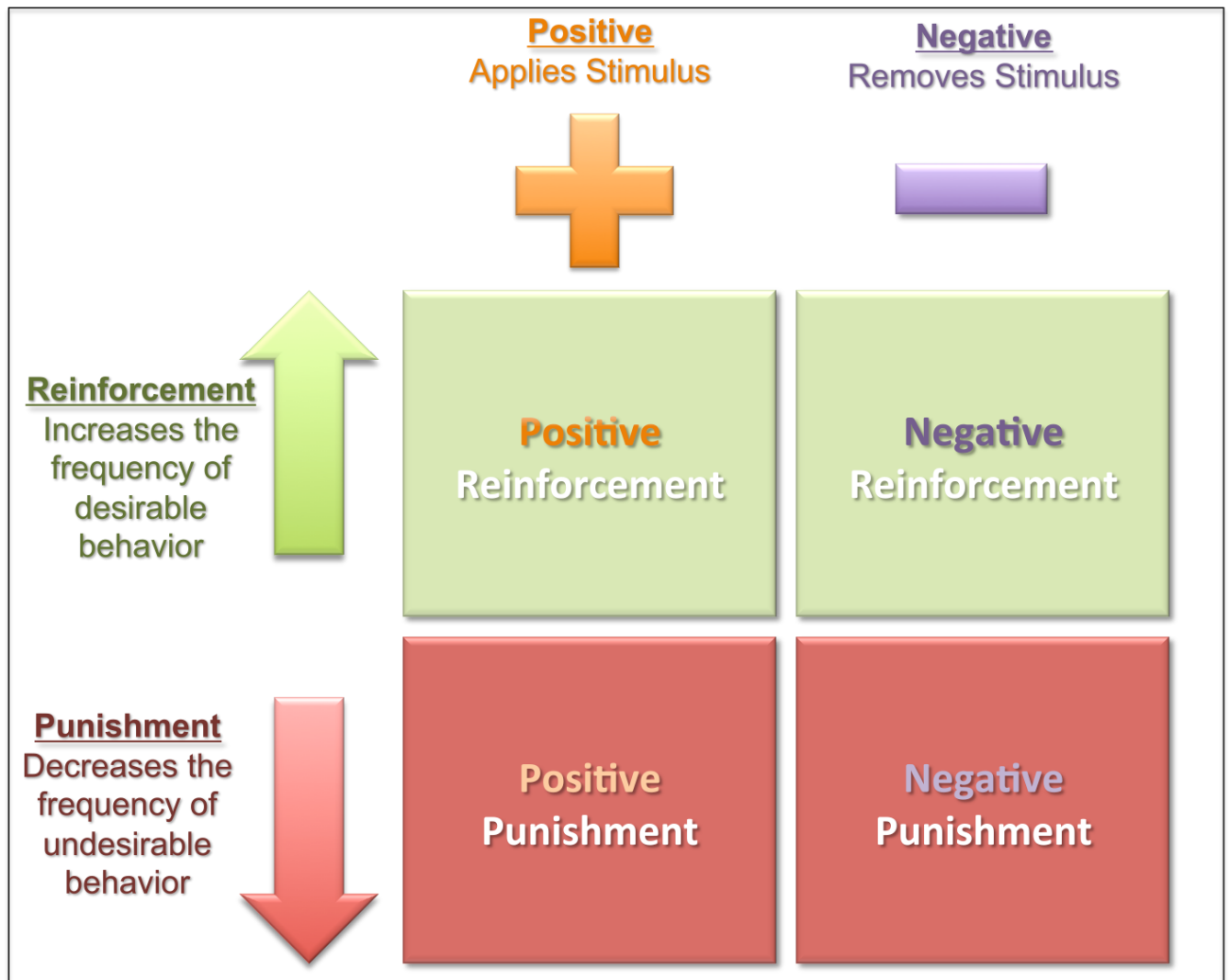


Types of Reinforcement

According to Huitt & Hummel (1997), four methods are employed in operant conditioning: positive reinforcement, negative reinforcement, positive punishment, and negative punishment. The table below is derived from the table created by Huitt & Hummel (1997):

Operant Conditioning



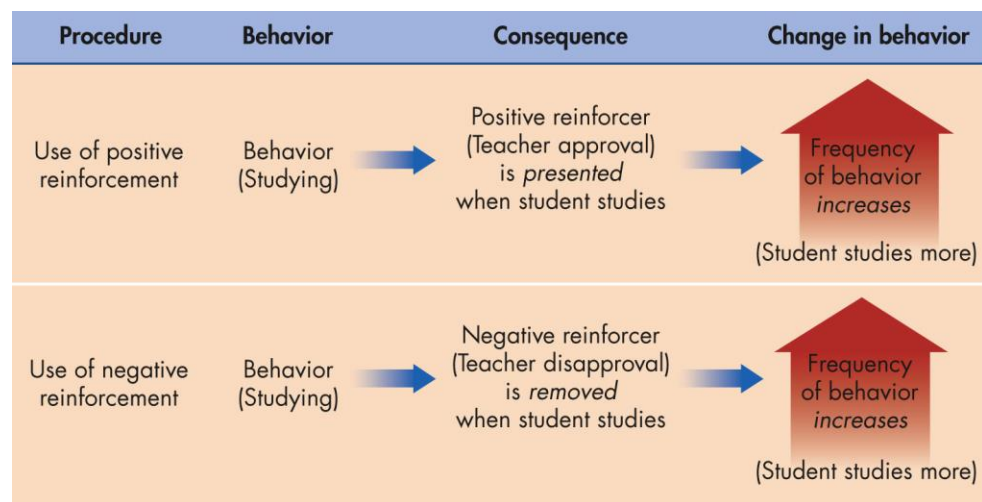
Positive and Negative Reinforcement

Reinforcement theory provides two methods of increasing desirable behaviors. One is **positive reinforcement** and the other is **negative reinforcement**.

To avoid any confusion we can think of **positive** as a plus sign (+) and **negative** as minus sign (-). In other words:

Positive Reinforcement: Give (+) what individuals **like** when they have performed the desired behavior (Griggs, 2009).

Negative Reinforcement: Remove (-) what individuals **do not like** when they have performed the desired behavior (Griggs, 2009).



In the case of negative reinforcement, it is important to remember that negative does not mean "bad", just the removal of an unpleasant stimulus. Positive and negative have similar connotations in the application of punishment.

[back to top](#)

Positive Reinforcement

Positive reinforcement is "Any pleasant or desirable consequences that follows a response and increases the possibility that the response will be repeated" (Wood, Wood, & Boyd, 2005).

Positive reinforcement uses the reward system. The reward system is a collection of brain structures which attempt to regulate and control behavior by inducing pleasurable effects. Some examples of rewards in the workplace are monetary bonuses, promotions, praise, paid holiday leave, and attention. In educational settings the rewards can include food, verbal praise, or a preferred item (such as a toy or a break on a swing). Giving rewards may not result in the desired effect or

behavior, but the reward must stimulate the person to produce the desired behavior to be positive reinforcement. This means that the reinforcement should be highly motivating to the individual. For example, in the workplace a paycheck or a bonus may be a highly motivating factor for many people, but not necessarily all.

B.F. Skinner introduced people to positive reinforcement by conducting experiments on animals, most notably his rat experiment. Skinner designed a box with a lever inside that released food when pressed. He placed a hungry rat into the box to see if the rat could figure out how to get to the food. When the rat was first placed into the box, it fumbled around until it inadvertently hit the lever and the food was produced. Through several trials, the rat learned to go straight for the lever to produce the food when it was hungry. Therefore, B.F. Skinner tested positive reinforcement, and concluded it does produce desired behaviors (McLeod, 2007).

The following clip from CBS's "The Big Bang Theory" television show displays and explains the aspects of positive reinforcement, and a quick example of positive punishment.

[back to top](#)

Negative Reinforcement

Negative reinforcement is a "psychological reinforcement by the removal of an unpleasant stimulus when a desired response occurs" (Negative Reinforcement, n.d.).



Negative reinforcement uses the reward system. A person is rewarded for desired behavior by having something unpleasant removed. This removal is the reward. For example, in the workplace a person may find it undesirable to be monitored closely. If a person is doing their job to the highest standard, they may not be monitored as closely anymore. This removal of the monitoring is the reward for consistently doing their job well. Another example of negative reinforcement could be a new employee at a fast food chain having to clean the public bathrooms as part of their job as a new hire. By performing this and other tasks well, eventually this unpleasant task could be removed as a way to keep this person interested and motivated to do well as they advance in job title and salary.

B.F. Skinner used the rat to demonstrate positive reinforcement, but he also utilized the same test to prove negative reinforcement. Skinner placed an electric current inside the box which was an unpleasant stimulus for the rat. The rat inadvertently hit the lever and learned that this turned the electric current off. Through several trials, the rat learned that if it went straight to the lever, it would turn off the current (McLeod, 2007).

[back to top](#)

Avoidance Learning

Avoidance learning acts similarly to negative reinforcement, except "the desired behavior serves to prevent the onset of a noxious stimulus, or in a variant, terminates such a stimulus that already exists" (Miner, 2007). Criticism from a supervisor could serve as a noxious stimulus. While avoidance learning can serve to be effective in some cases, positive reinforcement is often preferred (Miner, 2007). Avoidance learning can be seen in the workplace when an employee exhibits the desired behavior in an effort to avoid the consequence, such as being criticized by one's supervisor.

When looking at avoidance learning, one can easily see that the main goal is to understand what the unpleasant stimulus is and then it can be avoided. When an employee knows they will be terminated for having too many unexcused absences, they will make sure to avoid being absent without an excuse. In this scenario, when an employee brings in an excuse slip for an absence, the negative consequence is also avoided (PSU WC, L. 3, p. 4).

[back to top](#)

Reinforcement and Its Role In Undesirable Behavior: Substance and/or Alcohol Abuse



Reinforcement can also be a way to "reward" and reproduce undesirable behaviors. In looking at these two types of reinforcement in another way, "these terms refer to psychological processes that cause certain behaviors to be repeated" and is not just a system of rewards (Addiction Intervention, 2013). People who abuse alcohol and/or substances do not become addicts very quickly. Addiction usually occurs over a long period of time and after extensive abuse of their bodies. How do they get to be this way? They have reinforced their behaviors.

Positive reinforcement of substance abuse: "taking a drug or consuming alcohol brings a feeling of pleasure or euphoria, however brief" (Addiction Intervention 2013).

Negative reinforcement of substance abuse: The substance causes unwanted feelings to go away. It is a type of avoidance. "For example, some people repeatedly self-medicate with prescription drugs, alcohol or other substances because it removes unpleasant feelings of stress or anxiety" (Addiction Intervention 2013).

Treatment of this kind of abuse can involve positive and negative reinforcement.

Positive reinforcement in substance abuse treatment: "Allow the patient to encounter the stressor, or literally face their fears, and then not permit them to resort to their escape strategy – but instead find new ways to cope" (Addiction Intervention 2013).

Negative reinforcement in substance abuse treatment: The removal of a negative stimulus such as chastisement from family members would constitute as negative reinforcement. "Therapists can try eliminating the stressful situation that causes the patient to need to escape. This may mean counseling family members on how to be a positive influence on their loved ones, instead of berating them and causing more stress" (Addiction Intervention 2013).

Positive and Negative reinforcement can play a role in all behavior, not just in working environment behavior. It can replicate unwanted behavior as well as be a key in treatment of those behaviors.

[back to top](#)

Negative Punishment, Extinction, and Positive Punishment

Reinforcement theory provides two methods of eliminating undesirable behaviors. One is **negative punishment** and the other is **positive punishment**.

"Punishment creates a set of conditions which are designed to eliminate behaviour" (Burns, 1995).

Again, to avoid any confusion we can think of **positive** as a plus sign (+) and **negative** as a minus sign (-). In other words:

Positive Punishment: Give (+) individuals what they **do not like** when they have performed the undesired behavior (Griggs, 2009). Positive punishment is what we think of when we think of a "punishment".

Negative Punishment: Remove (-) what individuals **like** when they have performed the undesired behavior (Griggs, 2009).

[back to top](#)

Positive Punishment

The type of punishment most people are familiar with is positive punishment. Positive punishment is easier for people to identify because it is common in society. It is usually called “punishment” or “punishment by application” (D. Hockenbury & S. Hockenbury, 2010). Positive punishment occurs when a stimulus is presented following an undesired behavior and subsequent occurrences of the undesired behavior are reduced or eliminated (Cheney & Pierce, 2004). Using the example of a chatty co-worker, the employee could be orally reprimanded for spending too much time conversing with co-workers. It is important to realize that even though consequences such as suspension, demotions, etc. induce dislike, they do not qualify as punishments unless they lessen or eliminate the undesired behavior.



Positive punishment is effective in eliminating undesired behaviors but it does have limitations. Positive punishment has been found to be more effective when the stimulus is added immediately following the undesired behavior as opposed to applying delayed stimulus. Another factor is consistent application of a stimulus following an undesired behavior, this is more effective than occasional application of a stimulus (Cheney & Pierce, 2004). The greatest drawback is that positive punishment fails to teach desirable behaviors. Furthermore, positive punishment can produce undesirable emotional reactions such as passivity, fear, anxiety, or hostility (Skinner, 1974; as cited in Cheney & Pierce, 2004).

Punishment is seen as more acceptable than positive reinforcement because "people believe they are free to choose to behave in responsible ways to avoid punishment" (Maag, 2001). Our societal values of independence, and a tendency to view the world in terms of being punished for bad or immoral behavior tend to predispose us to treat inappropriate behaviors with punishment, rather than focusing on the value of positive reinforcement for doing the right thing.

[back to top](#)

Extinction

Extinction, on the other hand, involves withholding the pleasing stimulus that is maintaining the unwanted behavior *each time* the behavior occurs. This happens until the behavior gradually decreases to zero or the desired level (M. Sundel & S. Sundel, 2005). Using the above example of the disruptive employee, his supervisor instructs his co-workers to ignore his non work-related comments and not respond to them. The response from his co-workers is the pleasing stimulus maintaining his behavior. Without it, the employee no longer chats about non work-related business and becomes more productive as a result. It is important to remember that extinction is *not* permanent and that the behavior may return after the extinction process is complete, a process called **spontaneous recovery** (Coon, 2006).

Skinner found that non-reinforcement of behavior to achieve extinction is much less effective than reinforcement of behavior that is continuous. This is due to the fact that any intermittent reinforcement of the unwanted behavior can lead to recurrence. "This is why many of our student's undesirable behaviors are so difficult to stop. We might be able to resist a child's nagging most of the time, but if we yield every once in a while, the child will persist with it" (Crain, 2004). Often times, behavior not modified is behavior accepted.

Extinction may decrease the frequency of desirable behavior as well. If good behavior is consistently ignored, it may cease, just as in the elimination of undesirable behavior (Tosi, Mero & Rizzo, 2001). For example, an employee regularly stays late at work to assist the next shift in catching up after a very busy day. No praise or thanks is ever given to the employee by her co-workers or supervisor, so eventually she leaves work on time and stops assisting the next shift. Ignoring her good behavior caused its extinction (Tosi et al., 2001). Note that because good behavior may also be eliminated, "managers should be sensitive to the wide array of possibilities of extinction in the workplace" (p. 143).

[back to top](#)

Negative Punishment

Negative punishment involves removing a pleasing stimulus *other than* the one maintaining the behavior in order to decrease the frequency of the behavior. Normally, the behavior decreases immediately (M. Sundel & S. Sundel, 2005). An example of negative punishment might be an office worker who disrupts his co-workers by constantly chatting about non work-related subjects. His co-workers usually respond to him and are polite, which is the pleasing stimulus maintaining his disruptive behavior. His supervisor informs him that, if he remains disruptive, he will not receive his yearly pay raise. Another form of negative punishment could be the removal of his desk from his co-workers and placement in a more isolated area. The removal of the pay raise and the loss of the prime location in the office space are the negative punishment in his example because they are pleasing stimuli, but not the one directly maintaining his behavior (M. Sundel & S. Sundel,

2005). According to D. Hockenbury and S. Hockenbury (2010), negative punishment may also be referred to as **punishment by removal**.

The following clip from the movie Office Space demonstrates an example of negative punishment.

[back to top](#)

Guidelines to ensure effective workplace punishment:

Act swiftly: The closer the disciplinary action is to the actual offense, the more likely it is that the employee will associate the punishment with the offense or unwanted behavior and not the dispenser of the punishment (Robbins, Odendaal, & Roodt, 2009).

Be consistent: Punishment must be doled out consistently between employees and also *within* individuals. If an employee is punished for lateness, he or she must be punished for each late occurrence thereafter. If punishments are not consistent, rules will lose impact, there may be a decline in morale, and employees may question the competence of the dispenser of the punishment. It is reasonable, however, to consider any mitigating factors in each punishment situation, such as past history and performance. Punishment may be adjusted in those situations, provided the rationale is made abundantly clear to all concerned (Robbins et al., 2009).

Suggest alternative behaviors: It is important to clearly explain the reasons for the punishment and offer the employee alternative good behaviors. Disciplining an employee for an undesirable behavior only makes clear to him or her, what *not* to do. Suggesting alternatives will educate the employee on what is the preferred behavior and make it more likely that the behavior will be changed to one that is more desirable (Robbins et al., 2009).

Utilize the five to one rule: According to Baumeister, Bratslavsky, Finkenauer and Vohs (2001), because bad interactions are more powerful emotionally than good interactions, it is important to balance the good and bad by more frequently using positive reinforcement rather than punishment. A good ratio is five enjoyable interactions to one disagreeable interaction (Baumeister et al., 2001).

Punish in private and praise in public: Private punishment is more likely to be seen as constructive, and public punishment is more likely to cause embarrassment and negative effects if done in front of one's peers (Hellriegel & Slocum Jr., 2007).

Punish and Reward. Desirable behaviors should be rewarded and undesirable behaviors should be punished (Redmond, 2010).



[back to top](#)

Ramifications of Ineffective and Inappropriate Punishment

When punishing, it is imperative to use caution in following the rules to apply punishment effectively. The following are five dangers of punishment (Funder, 2007).

Punishment stirs emotion: The punisher may actually derive a great deal of excitement and satisfaction, thereby fueling further aggressive behaviors. In many instances, punishers can become completely blind without realizing the severity of their error in losing self-control, thereby turning the punishment into abuse. Conversely, high levels of fear, hate, desire to escape and self-contempt can arise in the punished, all causing humiliation, discomfort and pain. Many times because of this, the punished fails to learn any lesson at all from the punishment because of their need to escape and the pain involved with the specific punishing behavior.

Punishing consistently is challenging: Applying punishments effectively can be a very difficult task because the mood of the punisher changes with every circumstance, thereby leaving the possibility for inconsistency with punishments. Inconsistency is one of the main reasons why punishment can prove to be very ineffective. The same type of punishments must be adhered to on all counts. To punish one person one way and another differently will produce unproductive results, particularly in work settings.

Judging the level of severity is a difficult task: Perceptions of a person being punished can be vastly different than the person actually doing the punishing. For example, being reprimanded by your boss can be a very humiliating experience beyond what they could possibly know. Issues such as psychological distress and the breaking down of confidence levels can create ill feelings, misunderstandings and, even worse, a desire for revenge.

Punishment can be an education in power: Specifically with children, but also in work settings, punishments can cause less powerful people to want to strive to become "powerful" by observing the example they are shown in receiving punishments. For example, abused children oftentimes grow up and play out their parents same abusive behavior (Hemenway, Solnick, & Carter, 1994; Widom, 1989). In a work environment, an angered employee may attempt a mutiny on their boss to drive them out of their position.

Punishment can produce a need for concealment: Particularly in an office setting where the boss utilizes punishment frequently, employees tend to withdraw, keep silent and avoid effective communication between each other due to the need of avoiding the conflict of punishment. This causes the boss to lose sight of the dynamics of his employees and office and alienates employee from feeling safe to work and express themselves to the best of their ability.

Funder (2007) notes that rewards can have the opposite effect. A good worker will always seek to impress the boss by presenting at every opportunity their positive actions, for which the boss reciprocates. Through this communication he finds himself more in tune with the inner workings of his office. This behavior is to be noted in children as well. A child who expects reward will consistently attempt to impress their parents with their good behaviors, whereas a child who is constantly under attack and living in fear of punishment will attempt to sever communication as much as possible with the punisher. In the words of Funder, "punishment works great if you apply correctly -- but to apply it correctly, it helps to be a genius and a saint" (Funder, 2007, p.494).