



Operant Conditioning

Operant conditioning: A type of learning in which behavior is strengthened if followed by a reinforcer or diminished if followed by a punisher (page 290).

These consequences are called reinforcements and punishments.

<p><u>Reinforcements</u></p> <p>A consequence that follows a behavior that makes that behavior more likely to occur in the future.</p> <p>Behaviors that are <u>reinforced</u> are <u>more</u> likely to occur.</p>	 <p>Response becomes more likely</p>
<p><u>Punishments</u></p> <p>A consequence that follows a behavior that makes that behavior less likely to occur in the future.</p> <p>Behaviors that are <u>punished</u> are <u>less</u> likely to occur.</p>	 <p>"No!"</p> <p>Response becomes less likely</p>

Reinforcements and punishments are defined by the effect they produce.

- Money is not a reinforcement if it doesn't increase behavior.
- Spankings are not punishments if they don't modify behavior (in some cases they are reinforcements because they increase the likelihood of behavior).

Reinforcements and Punishments

POSITIVE REINFORCEMENT

Behavior is followed by a desirable event or state.



\$10 for an A makes it more likely a student will earn more As.

NEGATIVE REINFORCEMENT

Behavior ends an undesirable event or state.



Taking aspirin relieves headaches and makes it more likely that aspirin will be taken in the future.

TWO FORMS OF PUNISHMENT

Behavior is followed by an undesirable event.



A toddler burned by a hot stove will be less likely to touch the stove again.

Behavior ends a desirable event or state.



A boy who loses his TV privileges for pulling his sister's hair will be less likely to pull her hair again.

Descriptions of Reinforcement and Punishment

- Behaviors that are reinforced are more likely to be repeated.
- Behaviors that are punished are more likely to be reduced.

		<i>the CONSEQUENCE</i>	
		Adds (+)	Removes (-)
<u>BEHAVIOR that</u>	Increases	<p><u>Positive reinforcement</u> occurs when a behavior is strengthened by the subsequent addition of a (pleasant) consequence.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> • <u>Yelling at a clerk</u> gets them <i>to give you a refund</i> • Giving <i>dog biscuits</i> for <u>doing a trick</u> 	<p><u>Negative reinforcement:</u> A behavior is strengthened by the subsequent removal (or avoidance) of a (unpleasant) consequence.</p> <p><u>Example:</u></p> <ul style="list-style-type: none"> • <u>Smoking</u> to <i>relieve anxiety</i> • <u>Skipping class</u> to <i>avoid a bully</i>
	Decreases	<p><u>Positive punishment (aversive punishment):</u> A behavior is weakened by the subsequent addition of a (aversive) consequence.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> • <u>Spanking</u> a dog for <u>getting into the garbage</u> • <u>Scolding</u> a coworker for <u>making a mistake</u> 	<p><u>Negative punishment (punishment by removal or response cost):</u> A behavior is weakened by the subsequent removal of a (desired) consequence.</p> <p><u>Examples:</u></p> <ul style="list-style-type: none"> • <u>Time-out</u>, or the <i>loss of privileges</i> (driver's license, video game, sitting out a hockey game, etc.) for <u>misbehaving</u>

Examples of Negative Reinforcement

Negative reinforcement: A situation in which a response is followed by the *removal, avoidance, or escape* of a punishing stimulus, that increases the likelihood that the response will be *repeated* in similar situations.

1. Jane stops telling her husband how she feels to avoid getting yelled at by him.
2. Smoking to relieve anxiety.
3. Smoking helps a person avoid the withdrawal symptoms of nicotine.
4. Using caller ID or the answering machine to answer the phone and avoid telemarketers.
5. Giving into your dog that barks at the dinner table until fed.
6. Small doses of alcohol can initially make people feel good, relaxed and sociable. When alcohol is eliminated from the body, these feelings can be replaced with drowsiness. To avoid these withdrawal effects, people may be motivated to drink more to maintain this initial pleasant buzz.
7. Giving into an argument.
8. Saying "uncle" to stop being beaten.
9. Following prison rules to be released from confinement.
10. Feigning a stomachache to avoid school.
11. Skipping class because you don't like it.
12. Putting on a seatbelt to stop an irritating buzz.
13. Turning down the volume of a very loud radio.
14. I never call home to talk to my parents because mother always seems to have something bad to say to me.
15. Avoiding spiders or snakes because you don't like them.

Other examples

- Hurrying home in the winter to get out of the cold.
- Fanning yourself off to escape the heat.
- Leaving a movie theater if the movie is bad.
- Putting up an umbrella to escape the rain.
- Taking aspirin to relieve a headache.
- Averting your eyes from images you don't like (e.g. Nazi death camps, starving children, scary movies, etc.)

Using Operant Conditioning to Explain Behavior



Daughter

Behavior:
Screaming tantrum

Consequence:
Receiving a candy bar

Result:
More tantrums in
the future

Mother

Behavior:
Give candy

Consequence:
Screaming tantrum ends

Result:
More candy buying
in the future

Operant Conditioning

**THE ONLY
PEOPLE WHO
ARE MAD AT
YOU FOR
SPEAKING THE
TRUTH ARE
THOSE PEOPLE
WHO ARE
LIVING A LIE.**

**KEEP SPEAKING
THE TRUTH.**

What is the behavior?

What is the consequence?

Tao Te Ching (81)

True words are not beautiful;
Beautiful words are not true.

A good man does not argue;
He who argues is not a good man.

A wise man has no extensive knowledge.
He who has extensive knowledge is not a wise man

The more he gives to others, the more he possess of his
own

The Way of the sage is to act, but not compete

Tao Te Ching (81)

True words are not beautiful

Behavior	Consequence	Effect on Behavior	
Telling people things that are psychological threatening them or are unpleasant to hear	A person could yell at them, ignore them, fire them, withhold promotions, affection, etc.	It makes it less likely a person is going to tell someone unpleasant news or information	Punishment

Beautiful words are not true

Behavior	Consequence	Effect on Behavior	
Saying what people want to hear	People complement you	You are more likely to say what people want to hear	Positive reinforcement

Operant Conditioning

In the Spring of 2013, Lindsay Lohan was in a drug rehabilitation facility and complained to her friends that she did not like it because they would not allow her to take her Adderall.



They won't let me have my Adderall

Possible response A	Possible Response B
You are such a good person that you should have your Adderall. The rehabilitation facility is such a horrible place.	Lindsay, you have some problems with drugs and alcohol. Maybe you should spend some time without them.
Reinforcing consequence or punishing consequence?	Reinforcing consequence or punishing consequence?
Effect on behavior?	Effect on behavior?

What are other bad behaviors we reinforce?
What are good behaviors we fail to reinforce?

Superstitious Behavior



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What are other examples of superstitious behavior?
What were the reinforcers?

Problems with Punishment by Application

A common argumentation fallacy called *false dilemma* would be the belief that if you don't spank a child, you let your children have their own way all the time. You can still set limits, have structure and discipline the family.

The well-known behaviorist B.F. Skinner was strongly opposed to the use of punishments because of several drawbacks.

- Punishments do not promote appropriate or desired behavior to take the place of inappropriate behavior.
- Punishments can make the person who has been punished feel anxious, fearful, resentful and angry.
- The effects of punishments on behavior tend to be temporary.

In addition to these problems, punishments have other problems and dangers associated with them. To effectively use punishments:

- they need to immediately follow the response and,
- they need to be applied consistently.

Examples of the Drawbacks of Punishments

1. Getting a ticket for speeding.
2. Getting yelled at for carrying a microscope with one hand.

Other examples:

- The IRS use punishments and penalties for filing your taxes late. I think that this helps foster a negative image of the IRS and they should reinforce people for paying their taxes early.
- Although it is debatable, U.S. economic sanctions rarely shapes the behavior of other nations. It creates negative feelings towards the U.S. and has unintended consequences of hurting the civilians and not the government of those nations.

Despite the problems with punishments, parents, employers, leaders, nations, etc. frequently use punishments.

- Why do you think so?
- What are specific issues where punishments are used, and the specific problems that are created?
- What are the alternatives?

What are examples where punishments are being used by parents, employers, leaders, nations, etc. to shape behavior and appear to be ineffective and/or has some of the drawbacks of the use of punishments?

What are examples where reinforcements could be used in substitution or in conjunction with punishments to shape behavior?

For example,

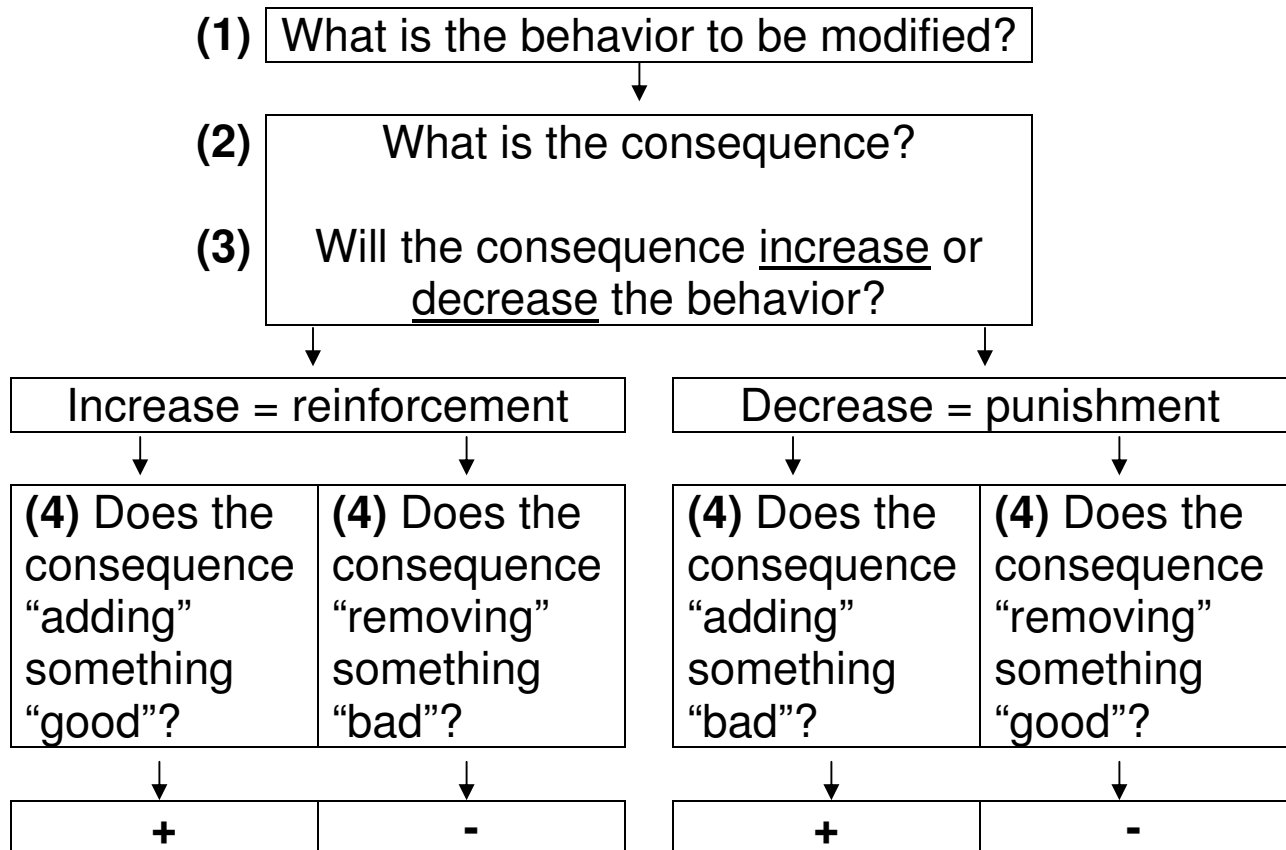
- There was a police program that reinforced people for wearing seatbelts instead of not wearing them.
- There was a program in Eugene that rewarding clerks/stores for carding people, rather than punishing them for selling to minors and not carding.

Identify the following examples as being:

- (a) positively reinforced
 - (b) negatively reinforced
 - (c) positive punished (aversive punishment)
 - (d) negative punished (punishment by removal)
-

To identify what type of reinforcement or punishment it is, you should break it down into sub-problems.

Ask yourself four questions:



To identify what type of reinforcement or punishment it is, you should break it down into sub-problems.

Examples:

- A teacher praises the student for turning their homework on time.
- A teacher stops criticizing the student for their late work when the student turns in their homework on time.

Behavior	Consequence	Future Behavior
Student turns in their homework on time.	The teacher praises the student	The student increasingly turns in homework on time
Student turns in their homework on time.	The teacher stops criticizing the student	The student increasingly turns in homework on time

- The teacher verbally reprimands a student for interrupting the teacher.
- The teacher takes away recess privileges for interrupting the teacher.

Behavior	Consequence	Future Behavior
The student interrupts the teacher	The teacher verbally reprimands the student	The student stops interrupting the teacher
The student interrupts the teacher	The teacher takes away recess privileges	The student stops interrupting the teacher.