

Punishments and Rewards

To Change Behavior

Behavior Definitions

Positive = Add Something

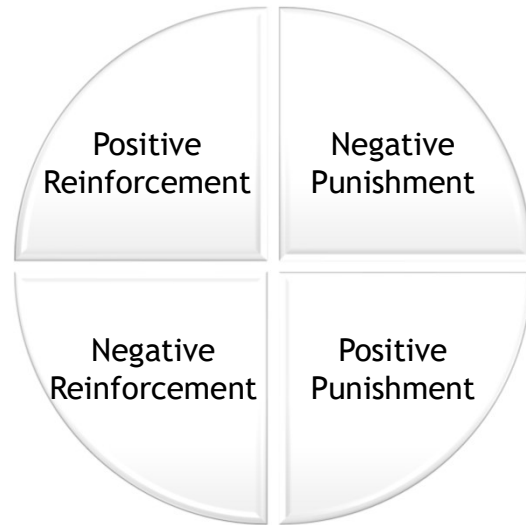
Negative = Remove Something

Reinforcement = Strengthen or Encourage

Punishment = Stop or discourage

From behavioral science, the definitions of these terms let us break down the behavior and our possible response so we can be more effective and more specific in our responses.

Attempting to change a behavior

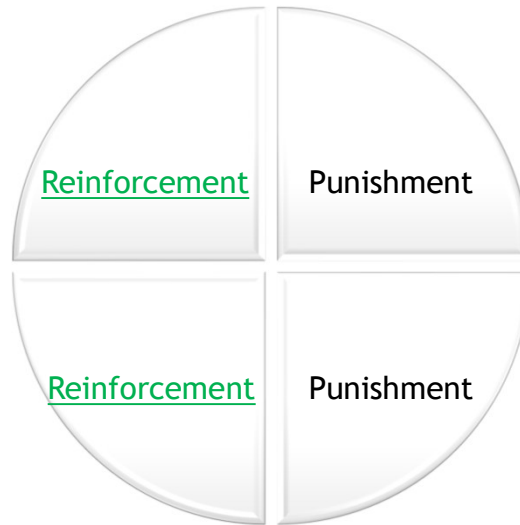


Combining these terms into a little matrix gives us four possible options to respond to a behavior we'd like to change.

Identify a Behavior – Do we want more or less of it?



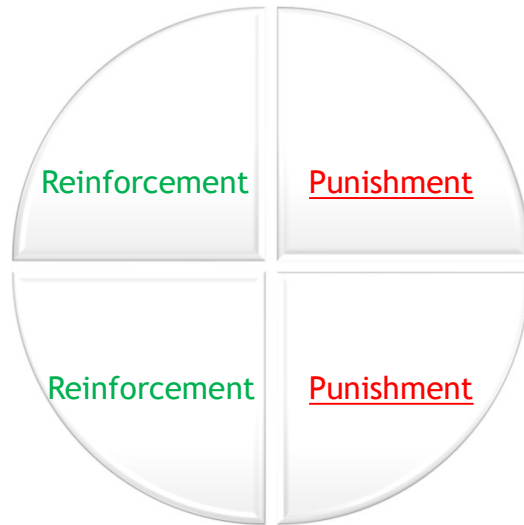
We want to see more of this!



First we need to identify a behavior and to decide if we want to increase how often we see that behavior or decrease how often we see that behavior.

If we'd like to see more of that behavior, we need to reinforce that behavior. Make it stronger.

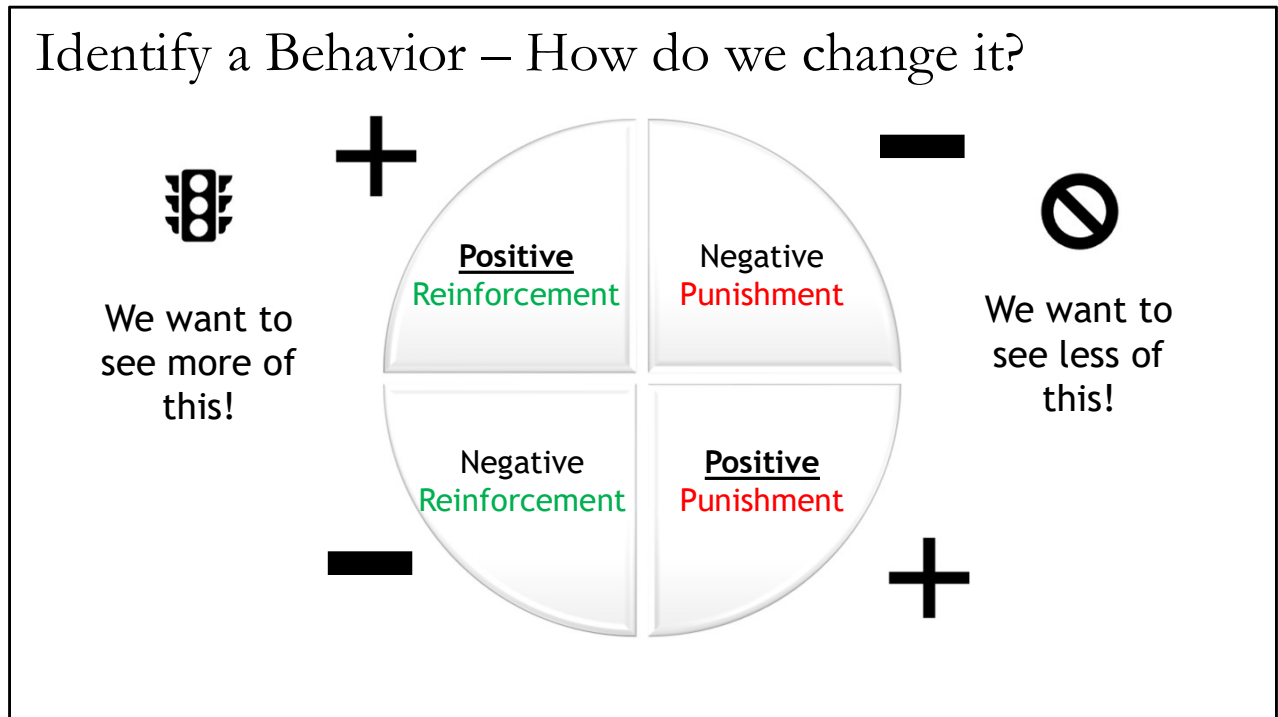
Identify a Behavior – Do we want more or less of it?



We want to
see less of
this!

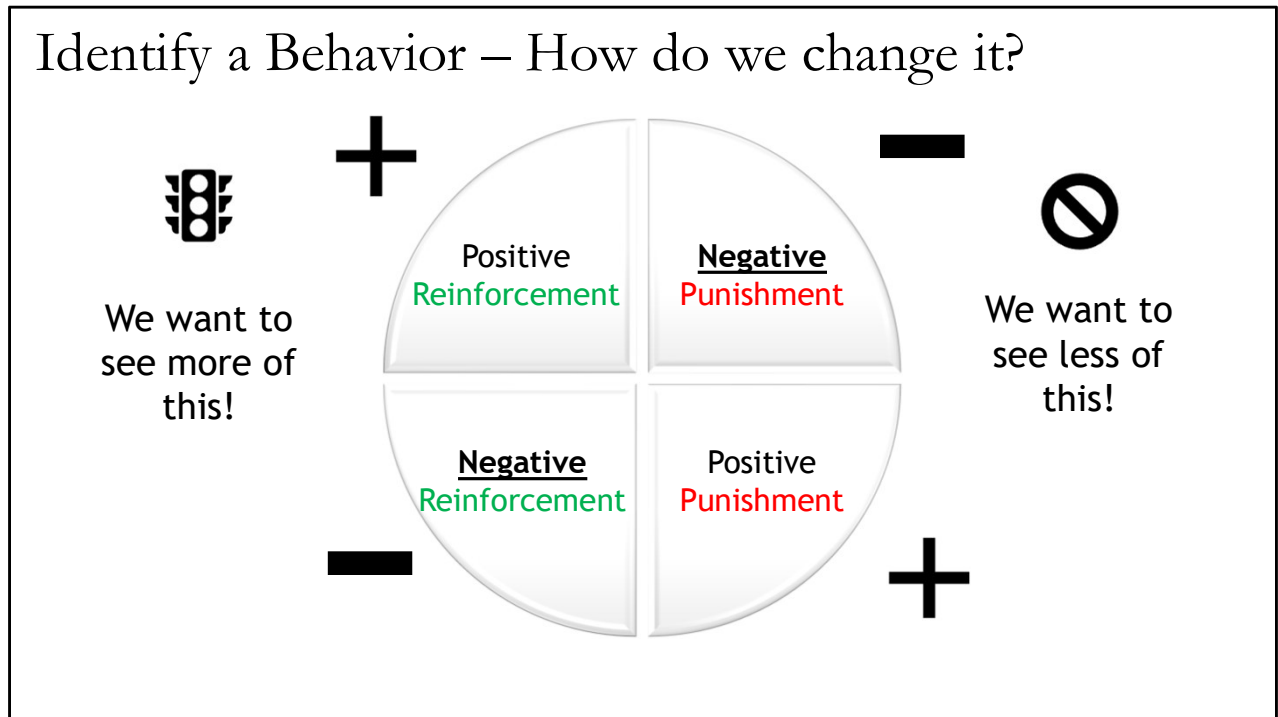
If we'd like to see less of that behavior, we need to punish that behavior. Attempt to decrease how often it occurs.

Identify a Behavior – How do we change it?



Then if we are adding something (whether to reinforce or to punish) that is positive.

Identify a Behavior – How do we change it?



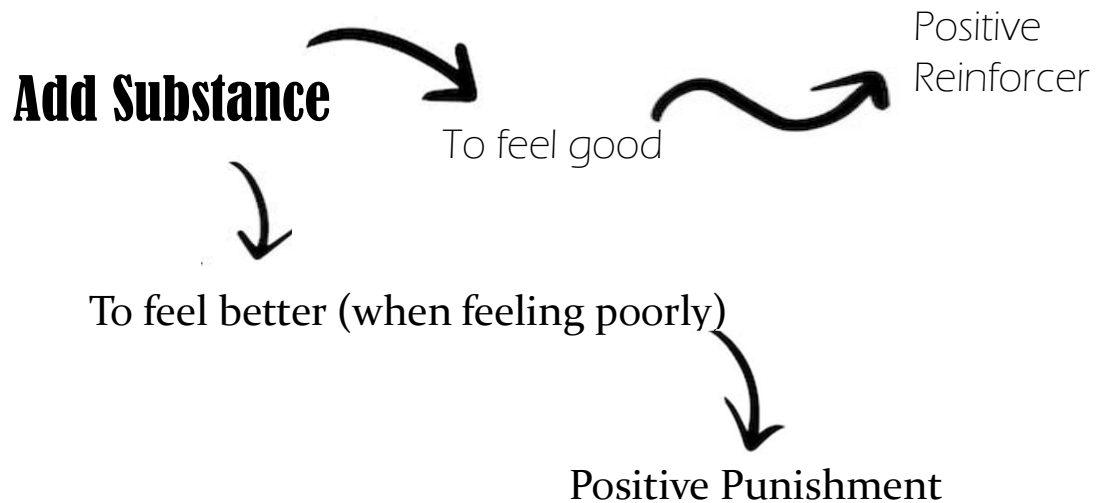
If we are Taking away something (whether to reinforce or to punish) that is a negative.

Psychoactive Drugs and the Reward Pathway



When we are talking about substance use there is a fairly straightforward positive reinforcement

Psychoactive Drugs and the Reward Pathway



But there is also a positive punishment that occurs internally fairly quickly, once symptoms of withdrawal kind in. So we add a substance to reduce the thing we want to stop (the cravings, pain, shakes, whatever)

So in order to stop that substance use, we have to overcome these internal rewards that are already in place.

Behavioral Definitions (an example)

Positive = Add Something (a substance like nicotine)

~~Negative = Remove Something~~

So lets do a full example of this using, nicotine, because its fairly common to want to quit smoking, but it often requires an external boost

Behavioral Definitions (starting smoking)

Positive = Add Something (nicotine)

Negative = Remove Something

Reinforcement = Strengthen or Encourage
(good feelings or sensations)

~~Punishment = Stop or discourage~~

When someone first starts to smoke, they likely started it to get a nicotine buzz, to keep busy or if you were young, your reinforcer likely was to fit in, to look cool, get attention, or being rebellious

Behavioral Definitions (as smoking continues)

Positive = Add Something (nicotine)

Negative = Remove Something

Reinforcement = Strengthen or Encourage
(good feelings or sensations)

Punishment = Stop or discourage (the cravings)

Then eventually as it becomes a habit, that nicotine becomes both a positive reinforcer and a positive punishment. We are adding something to encourage good feelings, and to **avoid** bad feelings at the same time – this really gets those brain pathways excited. As the reward pathway gets more stable, it becomes easier and easier to make the same associations. Over time, it can become the main way we deal with bad feelings. Nicotine to stop a craving, to stop anxiety, to avoid boredom or isolation. Eventually it doesn't really matter if we have any of that positive reinforcer anymore, because we're locked in to the positive punishment cycle.

Behavioral Definitions (quitting smoking)

~~Positive = Add Something~~

Negative = Remove Something (stop smoking)

Reinforcement = Strengthen or Encourage
(good feelings or sensations)
(immediate bad feelings or sensations)

So internally, in order to change that behavioral mechanism that is now locked in, we have to think about what happens to that person internally as they remove smoking from their body

There is an easy negative reinforcement here: to notice how good it feels, somatically, in your body, to not be a smoker. How good it feels to be around your kids and friends and family, knowing that you aren't needing a break, you're able to move more. Really leaning in to the body sensations of not smoking.

The negative reinforcement also already exists in this case, though. The body's early response to stopping causes an increase in sensations from withdrawal both physically and mentally – because the negative reinforcement naturally exists immediately, its important to remember that the cravings, grumpiness, withdrawal, is a part of the process to move forward. Eventually that reinforcement will cease, and removing smoking will also decrease the body's withdrawal symptoms. It just takes time, which is shameful & embarrassing for folks, but also an excellent opportunity for community to help us to heal from those bad feelings

Removing/Negative stimulus is complicated

Positive = Add a **REWARD**

Negative = Remove Something

Reinforcement = Strengthen or Encourage
(the behavior we want to see)

Punishment = Stop or discourage

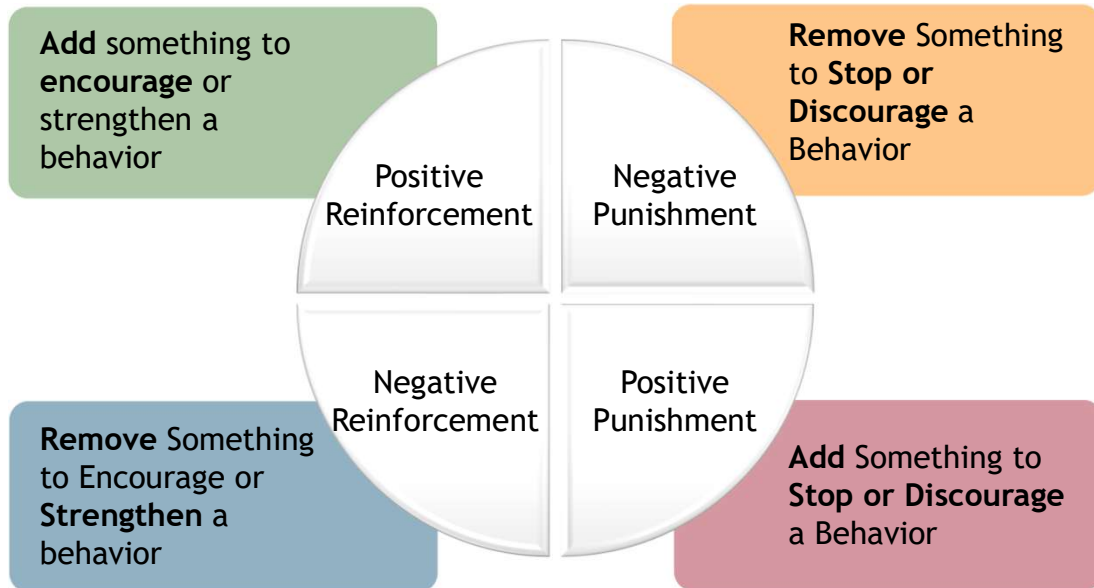
So if we wanted to really help someone to quit smoking, we might help them (or ourselves) by adding an external reward. This is the way our brains learn in general – eat something good, body feels good, get affection from a loved one, the bond increases with that loved one

In overcoming a substance with physical and emotional impacts to our body, a positive reinforcement provides an extra incentive, knowing that the physical cravings are difficult, what my body is going through is hard, and chasing those locked in brain pathways might require a little extra push.

So every day I abstain from smoking, I put a 5 in a jar, and I tuck it away. Once I get to a certain amount I get a treat, something that also reinforces, a bracelet, a new tattoo, a massage. Something that I can look at and remember how hard I worked to abstain, because that positive reinforcer will get me through some of the harder times.

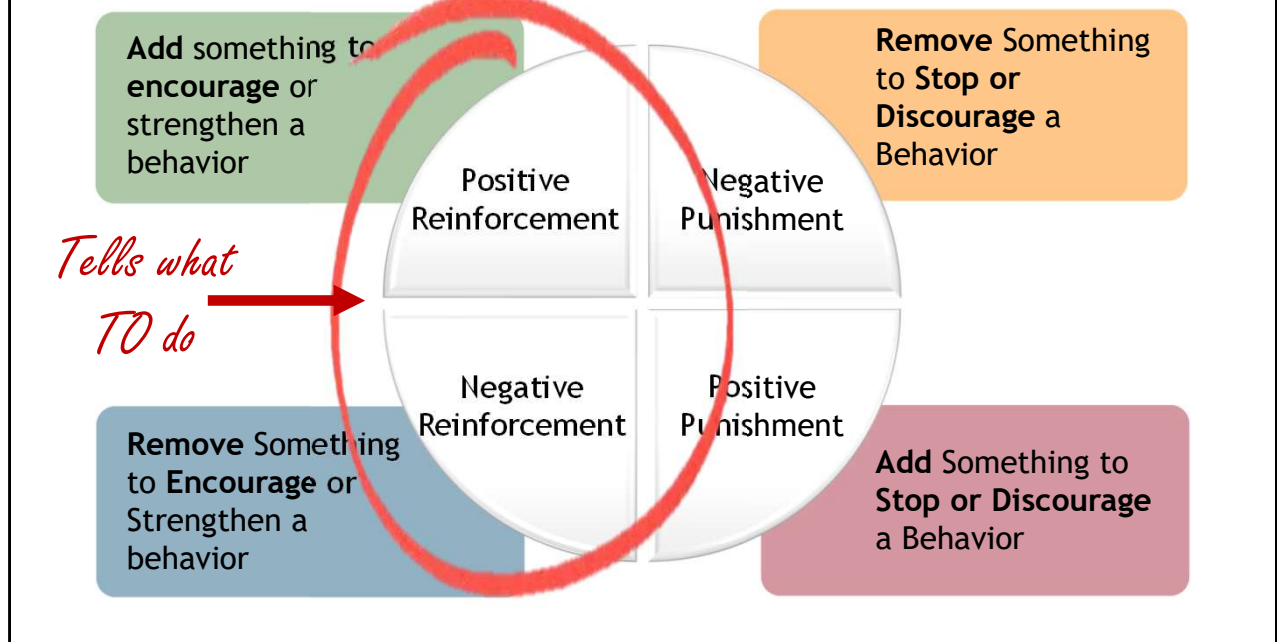
I could also choose a negative punishment, I could take away something every time I smoke. I could add a chore or a exercise, or a written journal entry (a positive punishment, but I want to be careful of this while the easiest thing to add to reduce my physical and emotional distress is that substance).

Behavioral Activation



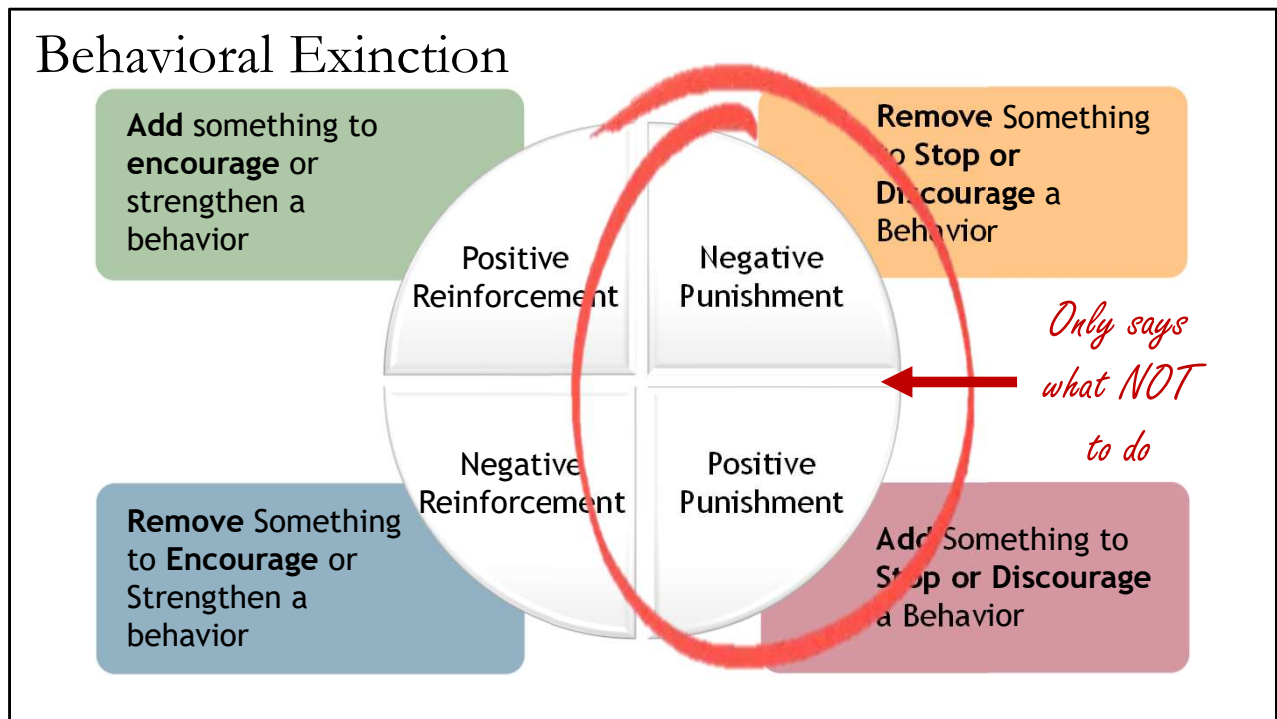
So now we can look at the matrix all together and use it to decide how we approach a therapeutic response to a behavior in one of our courts.

Behavioral Activation



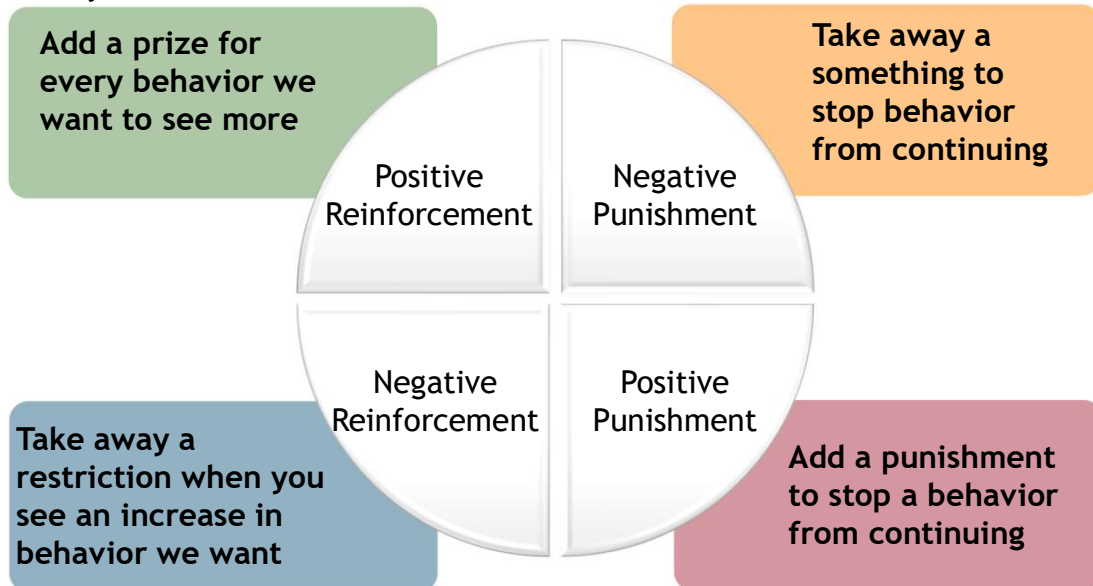
One of the primary reasons to focus on the positive and negative reinforcement sides of this matrix is just that it gives a direct instruction of what we want to see more of, what TO DO to activate that behavior

Behavioral Exinction



Even if you are perfect in stopping a behavior, you are still left with no guidance about what to do instead. There isn't any replacement for that (hopefully) extinct behavior. And that leaves room for something else to creep into the gap we are leaving behind.

Identify a Behavior – Do we want more or less of it?



A trip to the museum because of perfect attendance?

A congratulations and clapping in court?

A chip for 10 days sober?

Contingency management?

Reducing the number of required in-person court visits with each phase?

Where do journal entries fall?

