

**Anyone Can Punish...**  
we do it all the time

**But...**

**Can You Reinforce?**  
we do it all the time too,  
not always to best advantage...

## **Additional Title:**

**To Solve a Behavior Mystery,  
You need to think like a behavior detective**

**Today we'll take a look at the tools you need  
to be a behavior detective**

# Presenter

**David Powsner M.Ed., BCBA.**

Behavior Analyst & CEO,

**S<sup>D</sup> Associates LLC**

[www.sdplus.org](http://www.sdplus.org)

David has worked in a variety of settings (psychiatric, community mental health, education, and residential treatment) since 1971. He founded S<sup>D</sup> Associates in 1990 providing ABA assessment, direct service, consultation and training to schools, human service agencies and families throughout Vermont and adjacent New York, New Hampshire and Massachusetts.

**We are here today to talk about  
behavior...**

**Every one of us changes how we behave in  
response to events that surround us.**

**Every one of us responds to others in ways  
that change their behavior in the moment  
and in the future.**

**So first, a few assumptions...**

# **Behavior is Pragmatic**

**Whether ‘good’ or ‘bad’ behavior  
(socially desired or undesired)  
it serves a function for the individual  
and...  
it communicates, whether or not that  
communication is ‘intentional’.**

# **Behavior is Contextual**

**Where one is...**

**Who one is with...**

**What one is doing...**

**All help to define and determine  
the behavior that occurs.**

**Events that follow behavior increase  
or decrease the likelihood that the  
behavior will happen again.**

# **Repertoire Matters**

**One's 'repertoire' is one's 'collection' of learned behaviors (behaviors that have been reinforced).**

**People have categorical repertoires: communication, self-care, motor etc.**

**And specific applications: playing guitar, using an iPad etc.**

**Having a big repertoire can be very useful. It can also sometimes be problematic.**

## **So, some basics...**

**Behavioral laws exist whether or not we choose to acknowledge them or 'believe' in them, just like the law of gravity. Understanding the law of gravity, one can build an airplane, catch falling apples, and avoid jumping off cliffs.**

**Understanding behavioral law, one can change problem behaviors and teach other important behaviors.**

# Antecedents and Consequences

Behavioral laws are at work all the time, planned or unplanned, noticed or unnoticed, as in the examples given later.

By planning for and arranging or antecedents and/or consequences, we can effect socially significant change by teaching new behavior or reversing problem behavior.

By using behavioral strategies to teach people with relatively small behavioral repertoires, we can increase their independence and improve the outcome of their lives.

**Let's take a look at the sequence  
that occurs around 'lawful' behavior**

# Antecedents

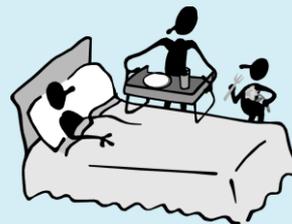
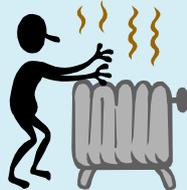
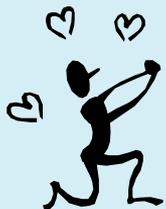
## Motivation

The chain of events starts with motivation. We are motivated 'to do' and 'not to do'.

Some motivation is 'unconditioned'.

Some is 'conditioned' or learned.

Conditioned motivation derives from previously reinforced behavior.



# Examples of Motivational States

- Hunger or Thirst
- Emotional States
- Painful or Pleasant sensations
- Fatigue
- Reactivity to particular stimuli
- Feeling too hot or cold
- Having had too much or too little of something
- Wanting to do things you do well
- Wanting to avoid things you don't do well

# **Antecedents**

## **Setting Events**

**Setting events include physical settings, activities and interactions that increase the likelihood that particular behaviors will occur.**

# Examples of Setting Events

**Places where things might happen:**  
at home, at the store, at the beach, at work,  
in your car

**Activities in progress:**  
driving in heavy traffic, experiencing math  
class, sitting at the dinner table

**Interactional variables:**  
Mom yelled at you before school, you just  
won an award, you didn't finish your  
homework.

# **Antecedents**

## **Discriminative Stimuli ( $S^D$ 's)**

### **AKA 'Triggers'**

**Objects, actions, words, people and other things in the environment or combinations of things in the environment to which one might respond with specific behavior or behaviors.**

# Examples of S<sup>Ds</sup>

## Words that people say

FIRE!; David; Thank you; Please pass the salt; Time for bed!

## Someone saying/doing something

Your boss, your best friend, your mother, your worst enemy

## Objects/Actions in the environment

Traffic lights, oven timer going off, signs and signals, police cruiser in your mirror

# Consequences

Five categorical types of consequences:

**Positive Reinforcement**

**Negative Reinforcement**

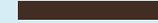
**Positive & Negative Punishment**

**Extinction**

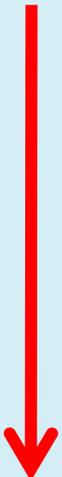
Like the term 'behavior', the term 'consequence' is value neutral.

**Consequences are NOT bad things that happen.  
Consequences ARE things that happen AFTER a  
behavior.**

**STIMULUS FOLLOWING  
BEHAVIOR**



**FUTURE BEHAVIOR**



**POSITIVE  
REINFORCEMENT**

**NEGATIVE  
REINFORCEMENT**

**POSITIVE  
PUNISHMENT**

**NEGATIVE  
PUNISHMENT**

# Positive and Negative

+



In behavioral terms,  
these words are  
“value neutral”

They do **NOT** mean  
good or bad.

-



They **DO** mean:

- Present or remove
- Insert or take away
- Add or subtract

# Reinforcement and Punishment

These terms are defined **ONLY** by their effect on behavior and what happens to that behavior later on, as a direct result.

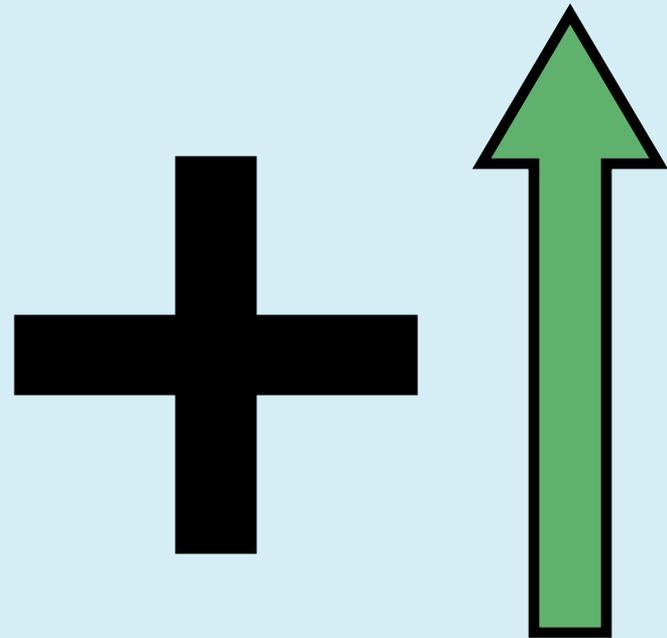
If a behavior is **REINFORCED**, some dimension of that behavior (duration, amplitude or frequency) increases or stays the same.

If a behavior is **PUNISHED**, some dimension of that behavior (duration, amplitude or frequency) decreases.

# HENCE... the following definitions

## **POSITIVE REINFORCEMENT:**

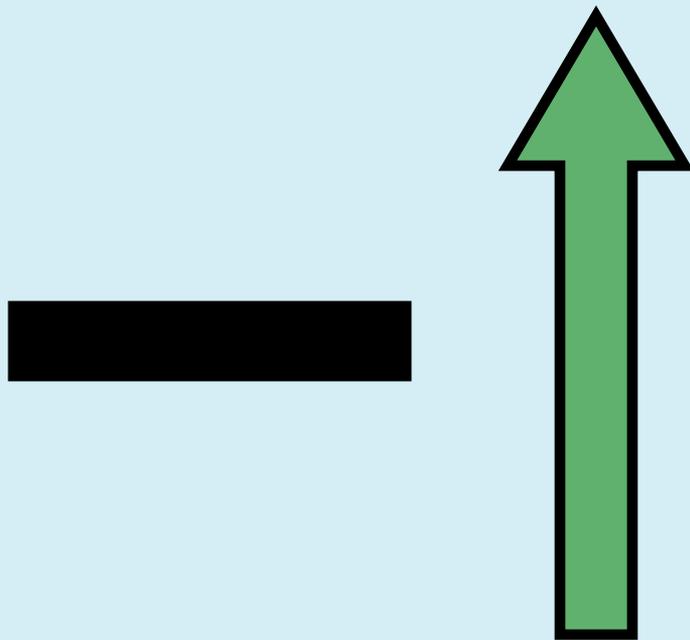
A procedure whereby the rate of a response (behavior) maintains or increases as a function of the contingent presentation of a stimulus (a positive reinforcer) following the response. Positive reinforcement builds independent behavior.



# Some examples of positive reinforcement

- Janie yells at her toddler for crying in grocery store... the toddler cries louder.
- Kathy's supervisor gives her a bonus for increasing January sales... her sales are even higher in February.
- Sam buys the scratch-off lottery ticket of his life and wins... he goes out and buys three more the next day.
- Billy's teacher reprimands him in front of the class and keeps him in for lunch recess. Billy does the same behaviors that afternoon.
- Josh calls home after drinking too much & his parents pick him up and thank him for calling... Josh calls home again the next weekend under the same circumstances.

# Negative Reinforcement



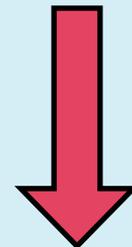
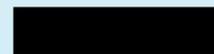
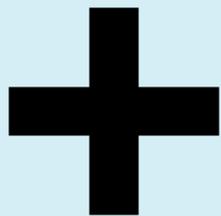
Removing an aversive stimulus as a consequence of a response resulting in the maintenance of or an increase in rate of the behavior. A behavior has been negatively reinforced if it increases or is maintained as a function of the contingent removal or reduction of a stimulus. This process is sometimes referred to as "escape conditioning".

# Examples of Negative Reinforcement

- Sue relentlessly nags Jason to take out the trash but stops after he does it... Jason takes out the trash more frequently
- Baby Julia cries incessantly unless she is being held.... Her mom holds her longer and longer each day
- Turning off the lights helps Peter's headache... he turns off the light earlier in the course of each headache
- You see a police cruiser behind you and carefully observe the speed limit. The cruiser zooms by you.
- Marissa avoids working in her flower garden for fear of deer ticks. A friend tells her about a new spray that keeps them away. Marissa uses the spray and now works in the garden every day

# Positive & Negative Punishment

A procedure in which a punisher or aversive stimulus is presented immediately following a response, resulting in a reduction in the rate of the response -  
or- A procedure in which a privilege or desired condition is removed following a response, resulting in a reduction in the rate of the response.



# Some Examples of Punishment

- Aunt Gertrude has bad breath but always kisses her niece when Jenny visits. Jenny seldom visits anymore
- Martha flies into a screaming rage when George breaks a glass. George is very careful and does not break china in the future
- Jonathon was grounded for staying out too late. After the 'grounding' period, he was never late again
- Baby Sarah threw up after her mom gave her watermelon to eat. Her mom never fed her watermelon again
- Shawn totaled his car while driving drunk. He stopped driving under the influence of alcohol

# Extinction

A procedure in which the reinforcement of a previously reinforced behavior is discontinued. Also may be used to describe the "process" by which a previously learned behavior disappears as a result of non-reinforcement.



# Some Examples of Extinction

- Johanna, on the advice of her son's pediatrician, stopped picking the baby up when he cried at bedtime... The baby cried louder than ever for three days, then started going to sleep right away when put to bed.
- When the power went off, Lee tried turning on several light switches, but finally stopped when nothing worked.
- Every time Bethany complained of a new "boo-boo", her mother ignored her. For awhile, she seemed to get hurt more often, then Bethany stopped complaining and additionally, seemed to get injured a lot less.
- Marlene would burst into tears every time Jordan yelled at her. He did it a lot. Eventually, she stopped crying when he yelled and Jordan, as a result, almost never yelled at her anymore.

# **What Does All This Have To Do With Repertoire?**

**Reinforcement builds repertoire...**

**Punishment diminishes repertoire...**

**On beyond the risks associated with the heightened emotion that frequently accompanies the use of punishment...**

**Remember that punishment decreases repertoire. The kids we are trying to help already have small repertoires, or they likely wouldn't be doing the behaviors we are concerned about.**

**There is a strong rationale for teaching 'what to do' v. 'what not to do'**

**Questions?**

**Comments?**

**Thanks for listening!**