# UNIVERSITY OF LOUISVILLE®

# KENTUCKY AUTISM TRAINING CENTER

Basics of Positive Reinforcement

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## During this webinar you will learn:

- The basics of reinforcement
- How to incorporate reinforcement throughout the day
- How to tell if what you are doing is working
- Learn that sometimes Time Out is actually a form of reinforcement and what to do if this is the case!





#### What is Reinforcement?

A stimulus change immediately follows a response and increases the future frequency of that type of behavior in similar conditions.





### Reinforcement

Most important and widely applied principle of behavior analysis.

Fundamental building block for the selection of operant behavior.

\*Reinforcement theory states that reinforced behavior will be repeated and behavior that is not reinforced is less likely to be repeated.





#### **Positive Reinforcement**

<u>Positive reinforcement</u> – when a response is followed immediately by the *presentation of a stimulus*, and as a result similar responses occur more frequently.

(Cooper and Heron, 2007)





### Positive Reinforcement Negative Reinforcement

Stimulus change = adding something (reinforcer)

Stimulus change = taking something away (aversive)





#### **Positive Reinforcement**

- 1 of 24 evidence based practices identified by National Professional Development Center (NPDC) on ASD
- Research supports use in all children and youth with ASD
  - Regardless of cognitive level
  - Expressive communication abilities





#### **Positive Reinforcement**

- Effective intervention for individuals ages 3 22 years
- Can be used in a variety of settings
  - Classroom
  - Home
  - Community
  - Clinic-based settings
  - One-to-one teaching



# Examples of Positive Reinforcement

	Stimulus	Response	Positive Reinforcement	Effect
Example 1	A baby is hungry	Baby cries	Mom gives baby a bottle	Increased likelihood that the baby will cry next time he is hungry
Example 2	Bella is told she can get a candy for getting into car seat	Bella gets into car seat	Dad gives Bella a candy and says 'Now that we are buckled in we are ready to go'	Increased likelihood that Bella will get into car seat
Example 3		Sean completes his homework	He is allowed to play outside until dinner	Increased probability that Sean will complete his homework



# **Types of Reinforcers**

Class Category Examples

Primary Reinforcers 1. Edible Reinforcers Foods, liquids, such as pieces of cracker, sips of juice, pudding

2.Sensory Reinforcers Exposure to controlled visual, auditory, tactile, olfactory, or kinesthetic experience: face stroked with furry puppet, listening to music through headphones



# **Types of Reinforcers**

Class Secondary Reinforcers Rein	Category 3.Tangible (material) nforcers	pos	<b>Examples</b> Certificates, badges, stickers, rock star ters, balloons
	4. (a)Privilege Reinforce	rs	Hall monitor, team captain, line leader
to	(b)Activity Reinforcers		Play activities, special projects, access media
	5.Generalized Reinforce		Tokens, points, credits
	6.Social Reinforcers	and	Expressions, proximity, contact, words phrases, feedback, seating

arrangements



## **Pairing Primary and Secondary Reinforcers**

Initially, secondary reinforcers may not have any value

- this may need to be learned
- Pair primary with secondary reinforcers then fade use of primary reinforcers
  - While sitting quietly on the floor during circle time, Seth is given tiny pieces of cracker and provided with a pat on the back, sticker, high five, smile from teacher, or a thumbs up ---- eventually, Seth will only get secondary reinforcers for sitting during circle time



#### How to choose reinforcers

- Ask the child
- Observe child
- Provide choice
- Present a menu
- Ask the parent
- Asks others who interact with child
  - Peers
  - Adults





# Now that you know some potential reinforcers, what else do you need to know?

- Deprivation a condition in which the student has not had access to a potential reinforcer
- Satiation a condition that occurs when there no longer is a state of deprivation





#### How to avoid satiation...

- 1. Allow student to choose reinforcers and provide choices during instruction instead of before it (Graff & Libby, 1999)
- 2. For food or liquids provide a very small amount
- 3. Increase the number of demands/responses needed to access reinforcers
- 4. At the first sign of satiation change it up!!!!



# **Token Economy**

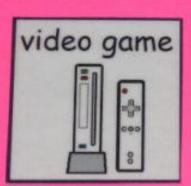
A system of generalized learned reinforcers in which an individual receives those generalized reinforcers and can save them to exchange later for a variety of backup reinforcers





















# **Negative Reinforcement**

Negative reinforcement – the occurrence of a response produces the removal, termination, reduction, or postponement of a stimulus, which leads to an increase in the future occurrence of that response.

(Cooper and Heron, 2007)





### Positive Reinforcement Negative Reinforcement

Stimulus change = adding something (reinforcer)

Stimulus change = taking something away (aversive)



# Examples of Negative Reinforcement

	Stimulus	Response	Negative Reinforcement	Effect
Example 1	A baby cries	Mom gives baby a bottle	Baby stops crying	Increased probability that Mom will give baby a bottle when he cries
Example 2	Wet hands	Rub hands on towel	Hands are dry	Increased probability that when your hands are wet that you will dry them with a towel
Example 3	Alarm buzzing	Get up & turn off alarm	Buzzing stops	Increased likelihood that next time the alarm goes off you will get up and turn it off
Example 4	Beeping noise when you don't have on seatbelt	Buckle seatbelt	Beeping noise stops	Increased likelihood that you will quickly buckle your seatbelt



- Set up activity schedules
- Provide prompts as needed to ensure steps are completed
- Provide behavior specific praise throughout the day
- Provide access to secondary reinforcers for completion of difficult and/or complex tasks



# **Activity Schedule**

- Set up activity schedules
  - Picture
  - Text
  - Object
  - Video
  - Audio





# **Prompt**

- Provide prompts as needed to ensure steps are completed
  - Physical
  - Modeling
  - Gestures

- Visual
- Verbal

\*\*\*\* Have a plan for fading prompts \*\*\*\*



# **Behavior Specific Praise**

- Provide behavior specific praise throughout the morning
  - I like the way you brushed your teeth vs.
     Good Job
  - You did a great job picking out your clothes today vs. Thank You

TRY to use Behavior Specific Praise following each request that you make – if you ask your child to wash his hands – follow that up with 'Awesome, clean hands will keep you healthy'



## Reinforcers

- Provide access to secondary reinforcers for completion of difficult and/or complex tasks
  - Pair tangibles with verbal praise
    - As rate of other types of reinforcement is faded, verbal can remain and then fade as socially appropriate

Contingently reinforce – 'If \_\_\_\_ Then \_\_\_\_'
Differentially reinforce – 1 lego block for taking off jacket and hanging it up 3 lego blocks for walking down hallway to lunchroom appriopriatly





# Learn that sometimes Time Out is actually a form of reinforcement and what to do if this is the case!





## Reinforcement or Punishment

Reinforcement	Punishment	
Increases likelihood of behavior occurring again	Decreases likelihood of behavior occurring again	

Was the video and example of reinforcement or punishment???



### Now what?

Time Out should be time out from reinforcing activities.

- If chasing is reinforcing when in time out,
   NO chasing occurs
- If attention is reinforcing when in time out,
   NO attention is given verbal or otherwise
- If being alone is reinforcing when in time out, should not include isolation



# Reinforcement Yes or No

When Bobby completes his math worksheet he is able to play on computer for 5 minutes. The next time he has a math worksheet he completes it without prompting.

When Lizzy brings her mom a diaper for the baby, her mom says 'Thank you Lizzy and Brian says thank you too!' and gives her a kiss. The next time Lizzy is asked to get a diaper, she does so quickly.

When Brian greets his grandma, she gives him a kiss – leaving lipstick on his cheek and gives him a tight hug. The next time Brian enters the room he avoids his grandma and doesn't say Hi.



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# Questions???

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