**Behavioral Interventions**

**Extinction**

**Extinction: Introduction**

What comes to mind when you hear "extinction?" Most people think of dinosaurs that have long since disappeared. In essence, this is what the principal of extinction hopes to achieve with unwanted behavior.

"Just ignore him and he will stop...he’s only doing it for attention". This suggestion is one parents and teachers often hear in regard to a behavior in which an individual is acting out or upset.

This lesson describes another method of a number of behaviorally based methods that might be used to make a change in someone's behavior

**EXTINCTION: What is it?**

Extinction is one of many basic behavioral principals of applied behavior analysis that may be used to reduce or eliminate an unwanted behavior. Extinction reduces behavior by abruptly withdrawing or terminating the positive reinforcer that maintains an inappropriate target behavior. This abrupt withdrawal results in the stopping or extinction of behavior.

Extinction procedures have been used to decrease the occurrence of a variety of problem behaviors, including disruptive behavior, tantrums, swearing, whining, and aggressive, self-injurious behavior.

Extinction is most often used in conjunction with reinforcing other more appropriate behaviors. Combining procedures this way appears to speed extinction. When attention is given to appropriate or desired behavior, the individual learns that the teacher or parent's attention is still available, but selectively available. It is not the individual being ignored, but the behavior.

**Extinction– When should I use an extinction procedure?**

**These are questions for parents and teachers to ask before deciding to use extinction to reduce or stop a behavior:**

1. Can the behavior be tolerated temporarily based on its description and how often it occurs? (Think about swearing, talking out in class, hitting others-can you tolerate it for awhile?)

2. Can it be tolerated if it increases? (Again, think of some of the above mentioned behaviors!)

3. Will others imitate the behavior?

4. Have reinforcers been identified? Reinforcers are those people, items or activities that produce a positive effect on behavior and increase a desired behavior or decrease an undesirable behavior.

5. Can these reinforcers be withheld?

6. Have alternative behaviors been identified as ones that would receive reinforcement?

The use of the Motivational Assessment Scale (Durand, V.M) can be very helpful in determining why an individual may be engaging in a behavior and if extinction is truly the most effective way in dealing with it. This scale helps individuals look at a behavior and determine if the behavior is occurring because of sensory issues, communication difficulties, avoidance behaviors or attention seeking. Let's look at a couple of scenarios for examples of when and how extinction might or might not be used.

Scene 1: Max is 5 years old and extremely limited in his expressive verbal skills. When at the playground with his mother, another child takes one of his toy cars. His mother had been talking with another parent and did not notice. Max begins to yell and scream, but his mother, after determining that he did not appear to be hurt, ignores him and continues talking. Max not only continues with the yelling and screaming, he escalates to hitting. At this point his mother recognizes that ignoring will not help. Max is having a meltdown due to his communication difficulty. Attempting to use extinction with this type of problem will likely result in a more aggressive and frustrated child. When looking at WHY Max got upset, it is because of his lack of communication and his inability to verbalize that someone took his toy.

Scene 2: Lacey is in middle school. In her literature class, which she enjoys, she is often out of seat, waving her hands wildly to get her teacher's attention as she calls to her. Her teacher decides to implement an extinction program to decrease the out of seat behavior. She is careful to observe when Lacey is seated at her desk and working and requesting attention. She responds immediately when Lacey's hand goes up and she is seated at her desk. If the teacher is busy with another student and Lacey gets out of her seat, calls loudly and waves her hands, the teacher ignores her. She does, however, watch for the moment that Lacey sits at her desk and is quiet for a brief time, and immediately reinforces Lacey by attending to her at that time. In this case, the well-planned extinction program should result in the desired behavior over a period of time. The teacher recognizes that Lacey's behavior will increase in loudness and persistence initially until Lacey makes the connection between getting attention for in-seat behavior and being ignored for out of seat behavior.

As with any behavior program, individuals should be educated and trained in the methods they use, and they should monitor and analyze why a program is not working before discontinuing it.

**Advantages and Disadvantages of Extinction**

**Advantages of extinction**

* It may produce a long-term effect
* It may be relatively simple (provided consistency and persistency are a given)
* It should eliminate a non-desired behavior
* It is considered a relatively nonaversive procedure

**Disadvantages of extinction**

* Initially, the undesired behavior is likely to increase
* Follow-through of the procedure requires consistency and persistence by all involved with the individual
* The time involved in the procedure requires a commitment
* The individual may become aggressive in an attempt to obtain attention
* The schedule of reinforcement may determine how long it will take to extinguish a behavior

**Some behaviors cannot be ignored so extinction would not be the best choice of intervention**

**Problems and Considerations with Extinction:**

Delayed reaction: once a procedure has been put into place (such as ignoring a person whenever they start to tantrum) it may take considerable time to see a reduction in the tantrum. This is called "resistance to extinction" and is especially noticeable when a behavior that has gone on for quite some time is suddenly not given attention, or ignored.

Increased rate: The saying "It’s going to get a lot worse before it gets better" describes this well. When an extinction program plan is put into effect, parents and teachers should expect to see an increase in the tantrums, hitting, or other behavior that is being ignored. Typically, when parents and teachers decide to ignore the behavior, the individual begins to increase the intensity and length of the behavior that used to get attention. Now, he must try harder to get attention. If the parent or teacher eventually do give attention, the behavior may remain at the increased level of intensity. This is known as an "extinction burst." It is critical that once parents and teachers decide to ignore a behavior to extinguish it, that they truly continue ignoring it, in spite of the stepped-up response of the individual.

Controlling attention: Saying "I’m ignoring you. I'm not paying any attention to you" in actuality is giving attention. It takes practice to truly ignore and helps to have something else to focus on, such as attending to someone who is doing something positive, focusing eyes and body on something else, or physically moving away.

Extinction-induced aggression. "You think you’re ignoring me? Watch this!" A pattern of escalation and aggression often occurs early in the extinction program. Where the individual had previously yelled and cried until he received the desired goal, he now kicks it up a notch and adds slamming the door, pounding on the floor and maybe even hitting the adult.

Spontaneous recovery: After a behavior has seemingly been extinguished or stopped for a time, the teacher or parent may be surprised to see the child or individual repeating the behavior they thought was gone. In essence, the child is really checking to see if the same rule applies after a period of time, or in a new environment. "Hmmm-at home I know if I throw myself on the floor and cry, I don’t get my ice cream treat, but I wonder if that will work in the grocery store?" It is critical that teachers and parents keep the same rule in effect if they wish to keep the behavior from starting up again. The child will quickly learn to resort to tantrums again if he gets a response to them. If he is ignored in the new setting just as he was at home, he will learn that the same rule applies.

Imitation or reinforcement by others. Because most people are involved in living and learning situations in which other people are around them, they are influenced by those people in those situations. In the classroom, an individual may continue a behavior because his classmates laugh each time he burps, even though the teacher ignores it. At home, the child may continue to tantrum because a sibling attends to him while the parents ignore him. When an extinction procedure is put into place, it is important to consider who else will be in contact with the individual and how they will influence the individual. In the classroom, the teacher may attend to students who are "on task" and reinforce them for positive behavior, while ignoring the student who is burping. At home, parents may guide the sibling to another activity and interact with him while the child who is tantruming is ignored.

Limited generalization: this means that the behavior that is being ignored in one classroom may occur more often when the child goes to another classroom where the teacher does not ignore the behaviors all the time. It does not automatically generalize to all settings and situations.

**Summary**

In summary, a number of considerations need to be reviewed before deciding to implement an extinction program. Some research indicates that when the extinction process is used by itself, it is unlikely to result in constructive learning. Combining procedures, such as using extinction along with reinforcing a positive behavior, is most effective.

**Quiz**

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1. What is the behavior procedure called that withholds a reinforcer that has been maintaing or attending to that behavior?

A. Negative reinforcement

B. Punishment

C. Extinction

2. Mrs. Trimble, who teaches a class of 5th graders, was instructed to try an extinction procedure with Mica, who frequently talked out of turn and interrupted the teacher when the teacher spoke to the class. 2 days into the procedure, Mrs. Trimble announces that the program not only is NOT working, but Mica's talking and interrupting have *increased*! What would your encouraging response to Mrs. Trimble emphasize?

A. The behavior gets worse before it gets better  
B. It must be consistent to be successful  
C. The results are not always quick-hang in there!  
D. All of the above

3. Which behaviors might be successfully eliminated with the use of an extinction procedure?

A. swearing  
B. starting fires  
C. hitting people

4. In an extinction program, one person can destroy the success of the process by attending to the negative or undesired behavior just once.

True  
False

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**References**

Alberto, P.A. & Troutman, A.C. (1999). *Applied behavior analysis for teachers* (5th ed.) Upper Saddle River, NJ: Prentice Hall.

Braithwaite, K.L. & Richdale, A.L. (2000) *Functional communication training to replace challenging behaviors across two behavioral outcomes*. Journal of Behavior Interventions, 15, 21-36.

Durand, V.M. (1988). *The Motivation Assessment Scale*. Topeka, KS: Monaco.

Fox, R.M. (1982) *Decreasing behaviors of persons with severe retardation and autism*. Champain, IL: Research Press

Kaplan, J.S. (1995). *Beyond behavior modification: A cognitive-behavioral approach to behavior management in the school* (3rd ed.). Austin, TX: Pro-Ed.

Kaplan, J.S. (1996) *Kid mod: Empowering children and youth through instruction in the use of reinforcement principles*. Austin, TX: Pro-Ed.