Functions of Behavior
What are they?
Topography of Behavior

- **Topography**: The physical form or shape of behavior (Cooper, Heron, and Heward, 2007).

- **Topography-based definition**: defines instances of the targeted response class by the shape or form of the behavior (Copper et. al, 2007)

- **Ex: Flopping**: Any instance of the child laying, kneeling, or hunched onto the ground.

- **Ex: Kicking**: Any instance in which the child’s leg/s makes forceful contact with a body part of another person or environmental object.
Behavior can be placed into four categories:

- Direct **Access**
- Socially Mediated **Access**
- Direct **Escape**
- Socially Mediated **Escape**
Direct

- Doing something gets you something; you access reinforcement by yourself.

- **Example Direct Access:** walking to the fridge and opening it to get access to water.

- **Example Direct Escape:** Covering ears to block an aversive sound.

- Only involves the individual.
Socially Mediated

- Getting someone else to provide you with reinforcement.

  **Example Socially Mediated Access:** Asking someone else for water, “I’m thirsty. Can you bring the water; water please).

- **Example Direct Escape:** Asking someone to turn the music down when it is too loud, “Can you turn the music down; no music.”)

- Involves individual and someone else.
Access vs. Escape
(Two main functions of behavior)

- **Access behaviors**: the reinforcement operation maintaining the behavior is positive reinforcement (a behavior that gets you something)

- **Escape behaviors**: the reinforcement operation maintaining the behavior is negative reinforcement (a behavior that removes something)

*Both access behaviors and escape behaviors can either be socially mediated or direct.*
Is the behavior for **access** to something or **escape** from something?

- That should be the first question that you ask yourself when problem behavior occurs.

- Does the child want something (access) or want to get away from something (escape)?
There are four main functions to consider:

- **Access to attention?**
  - **Ex:** The child flops to the floor and begins kicking and screaming to gain access to his mother’s attention.

- **Access to tangible items?**
  - **Ex:** Child wants a toy his brother is playing with, so he flops to the floor and starts kicking and screaming.

- **Avoidance/escape from demands?**
  - **Ex:** Mother says, “It’s time to take your medicine,” and the child flops to the floor and begins kicking and screaming.

- **Automatic reinforcement?**
  - **Ex:** The child enjoys the sound of his own voice when he screams and enjoys the physical sensation when his feet make impact with objects and people.
Although the topography of the behavior (kicking and screaming) was the same in each example, the function of the behavior was completely different.

A behavior may serve one function or multiple functions.

Replacement behaviors should match the same function of the problem behavior, but the topography will likely look different and be a more socially acceptable behavior topography.
The child starts kicking and screaming, so what do I do?
- Pay close attention to what is happening right before the behavior occurs.
- Also pay close attention to how you respond to the behavior.

But how do I know which function it is?
- Did you place a demand (come here, pick it up, let’s go)?
- Has it been a while since they have gotten attention for positive behavior?
- Are they climbing the cabinets to get to food?
- Are they bored?
- Knowing the function is the key to reducing the behavior!
I’m still confused...why is the problem behavior happening?

- Which function is it?
  - Did you place a demand (come here, pick it up, let’s go)?
    - Likely avoidance or escape from that demand
  - Has it been a while since they have gotten attention for positive behavior?
    - Likely a way to solicit some attention. Good or bad attention, what’s the difference?
  - Are they climbing the cabinets to get to food?
    - Likely access to tangibles (edibles, toys, activities, people)
  - Are they bored?
    - Likely automatic positive which is self-stimulatory
Direct Access (DA)

- The behavior directly produces positive reinforcement for the individual.
  - Direct Access to **immediate sensory stimuli**
    - The problem behavior immediately produce the sensory stimulation that maintains the problem behavior.
  - Direct Access to **tangible reinforcers**
    - In a state of deprivation from a specific tangible/edible a behavior or chain of behaviors is likely to occur in order for direct access to the item.

- **Direct Access Behaviors involve only the individual and the reinforcer.**
- **A teacher or therapist is not involved.**
EXAMPLE: A child waves his fingers in front of his face when alone and when people are around. The behavior occurs at a much higher frequency when the child is alone. The child giggles and laughs while waving his fingers in front of his face. This event allows the individual access to direct reinforcement due to sensory stimulation being the direct result of the behavior (commonly referred to as stimming).
Replacement Behaviors for Direct Access

- **Direct Access to tangible reinforcer (get item yourself)**
  - Teaching a socially appropriate behavior or chain of behaviors that allows direct access to tangible reinforcers

- **Access mand option (asking for item)**
  - Teaching the individual an appropriate way to request the tangible or attention desired.

- **Omission Training option (wait for _____ without behavior)**
  - Designate a certain amount of time that the individual must go without engaging in problem behavior, once the interval has elapsed the individual accesses reinforcement if the problem behavior did not occur during the interval

- **Premack Contingency (first_____, then________)**
  - Designate certain low probability tasks that must be completed in order to access the reinforcer
Direct Access

Chain Interruption Strategy

- The behavior should be interrupted or blocked as soon as it begins to occur
- Interruption or response blocking in conjunction with differential reinforcement of the replacement behavior, will yield the best results
- It is important to interrupt or block the behavior before reinforcement or too much reinforcement is accessed, and then teach the replacement behavior and reinforce and shape that response topography
Chain Interruption Strategy
What is it?

Example:

- Child often slides a chair to the refrigerator so that he can access the box on top of the fridge containing candy.
- Once he has completed the chain of behaviors (walking to chair, pushing chair, climbing on chair, reaching for box, opening box, grabbing candy, opening candy and eating candy) it is too late!
- You have to intervene early in the chain, and teach the replacement.
- You could have them ask for candy (access mand option) or do homework first (Premack Principle).
The problem behavior accesses positive reinforcement through another individual’s behavior.

- Socially Mediated Access to **adult or staff attention**
  - Problem behavior of the individual allows access to adult or staff attention which in return maintains the behavior.

- Socially Mediated Access to **peer attention**
  - Problem behavior results in peer attention, which serves as a reinforcer and maintains the behavior.

- Socially Mediated Access to **tangible reinforcers**
  - Problem behavior results in another person providing a tangible contingent upon the behavior.
Socially Mediated Access

**EXAMPLE:** A mother is on an important phone call.

Child: “MOM!! Look at my toy.”

Mom: “Wait a minute, I’m on the phone.”

Child: “Mommy, mommy, mommy. Look.”

Mom: “I’m busy, give me a few minutes.”

Child: (flops to the floor and begins kicking his mother and screaming)

Mom: (gets off of the phone and attends to the child’s behavior). The child gets mom’s attention.
Replacement Behaviors for Socially Mediated Access

- **Direct Access to tangible reinforcer (get item yourself)**
  - Teaching a socially appropriate behavior or chain of behaviors that allows direct access to tangible reinforcers

- **Access mand option (asking for item)**
  - Teaching the individual an appropriate way to request the tangible or attention desired.

- **Omission Training option (wait for _____ without behavior)**
  - Designate a certain amount of time that the individual must go without engaging in problem behavior, once the interval has elapsed the individual accesses reinforcement if the problem behavior did not occur during the interval

- **Premack Contingency (first_____, then________)**
  - Designate certain low probability tasks that must be completed in order to access the reinforcer
Direct Escape

- An aversive event is directly terminated by behaviors in this category without the mediation of another person.

  - **Direct Escape: Unpleasant Social Situations**
    - Unpleasant social situations elicit problem behavior that directly terminates the event (i.e., running out of the room).

  - **Direct Escape: Lengthy task or instruction**
    - Value of escape becomes established due to the aversive nature of the lengthy task, and problem behaviors are maintained because they are more effective at terminating the task than appropriate behaviors.

  - **Direct Escape: Relatively difficult task or instruction**
    - Value of escape becomes established due to the difficulty of the task, and problem behaviors are maintained because they are more effective at terminating the task than appropriate behaviors.

  - **Direct Escape: Aversive physical stimuli**
    - Behaviors that directly terminate an aversive physical condition (i.e., removing clothes that are too tight).
Direct Escape

- Example: Children are seated in a small group. One child begins to cry. Another child covers his ears, and then elopes from the group into another room that is quiet but has no adult supervision.

- Eloping: Leaving an area without adult consent
- The behavior directly terminated the unpleasant social situation.
- The behavior did not involve the mediation of another individual.
Replacement Behaviors for Direct Escape

- **Alternate direct escape form (do something by yourself)**
  - directly produces escape in a safe and socially acceptable way

- **Escape Mand (ask to stop something)**
  - Teach the individual to request removal or escape in a socially appropriate manner that is mediated through another individual

- **Tolerance Training Option (tolerate for _____amount of time, then all done with _____.)**
  - Differential Negative Reinforcement of Other behavior (DNRO); set a specified time that you would like the child to remain in the aversive condition, and allow removal from the condition in the absence of target behavior occurs during that time interval.
Socially Mediated Escape

- Problem behaviors that cause the removal or termination of an aversive event or stimulation mediated by the behavior of another person.
  - **Socially Mediated Escape: Unpleasant Social Situations**
    - Unpleasant social situations elicit problem behavior that causes another person to terminate the event (i.e., the child hits the crying child next to him, and is subsequently removed from the group by an adult).
  - **Socially Mediated Escape: Lengthy task or instruction**
    - Value of escape becomes established due to the aversive nature of the lengthy task, and problem behaviors are maintained by others who remove the task after the problem behavior occurs.
  - **Socially Mediated Escape: Relatively difficult task or instruction**
    - Value of escape becomes established due to the difficulty of the task, and problem behaviors are maintained by others who terminate the difficult task following problem behavior.
  - **Socially Mediated Escape: Aversive physical stimuli**
    - Behaviors that result in another person terminating an aversive physical condition (i.e., urinating in clothes that are too tight so that caregivers change the tight clothing).
Socially Mediated Escape

Example: Children are seated in a small group. One child begins to cry. Another child hits the crying child. The individual who hit the crying child is then removed from the group by an adult, which terminates the aversive event.

- The problem behavior caused another person to terminate the unpleasant social situation.
- The behavior involved the mediation of another individual.
- The problem behavior resulted in escape.
Replacement Behaviors for Socially Mediated Escape

Alternate direct escape form (do something by yourself)
   Directly produces escape in a safe and socially acceptable way

Escape Mand (ask someone to stop something)
   Teach the individual to request removal or escape in a socially appropriate manner that is mediated through another individual

Tolerance Training Option (tolerate for ____amount of time, then all doen with ____.)
   Differential Negative Reinforcement of Other behavior (DNRO); set a specified time that you would like the child to remain in the aversive condition, and allow removal from the condition in the absence of target behavior occurs during that time interval.
Overview

- Behaviors can serve the same function but look very different.
- Behaviors may look the same but serve different functions.
- Behaviors may cause direct access or escape to positive or negative reinforcement.
- Behaviors may be socially mediated by another person who allows access to positive or negative reinforcement.
- Behavior is maintained by:
  - Access to Attention
  - Access to Tangible
  - Access to Automatic Reinforcement
  - Escape or avoidance from demands
Overview

- Behavior should be assessed by function and treated due to function.
- Behaviors are measured by topographical definitions.
- **Replacement behaviors should always serve the same function** as the target problem behavior and the response effort should be nearly equivalent.
- Extinction and a chain interruption strategy may be necessary components to successfully reducing the problem behavior and teaching a functionally equivalent replacement behavior.
Video link

- http://youtu.be/sjTWy095cX0 (copy and paste to browser window for playback)

- What do you think the function of the behavior is?
- What could the mom do differently?
Videos

What’s the function of the child’s behavior?
- http://youtu.be/WnKSAjB92Ko (copy and paste into browser for playback)

What’s the function of the child’s behavior?
- http://youtu.be/lfxRMpNBi1g (copy and paste into browser for playback)
Please Share your thoughts and questions with the group!