

# Using an Interdisciplinary Approach to Managing Challenging Behaviors Exhibited by Individuals with Autism

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## **Objectives:**

- Understand how setting events and antecedents can trigger challenging behaviors
- Determine if a challenging behavior is a "teachable moment"
- Maintain instructional control during meltdown moments
- Balance de-escalation techniques with extinction and reinforcement procedures
- Adapt an interdisciplinary approach to behavior including speech/language, occupational therapy, and more
- Time will be provided for Question & Answer

## The story of our student:

Matthew is at school during an afternoon group academic session. He has been presented with his visual schedule and it includes an activity on the smart board for math, teacher led instruction and independent math work. He is presented with a choice board and token board and selects “outside” to work for. He must earn 3 tokens during the 30 minute session and can earn a token for participating/completing his work and for staying in his seat. It has been raining on and off throughout the day and “outside” has not been an option until this session. Matthew is feeling a little tired due to waking up very early that morning before school. He does not have the expressive language ability to share this, but his body language suggest it; he is slumped in his chair and continually putting his head down. He participates in the smart board activity fully and receives his first token. During teacher led instruction it is very windy outside and another student in the classroom begins scripting loudly. Additionally, music class is occurring next door. Matthew does not participate when the teacher asks him a question. He does not receive his token for that part of the schedule. He begins rocking in his seat and plugs his ears, vocalizing loudly. This behavior often precedes aggression. His parents report that he engages in these behaviors when he is anxious. When his independent work is presented to him, he pushes it on the floor. The assistant teacher prompts him to pick it up. He refuses and she prompts again, this time guiding his arm down to pick it up. He resists and she lets go, then removes another token. Matthew hits the teacher.

## **Antecedents and Setting Events**

- Antecedents immediately precede behaviors
- Antecedents are elements of the environment that may or may not “cause” the behavior
- Setting Events are situations or events that may increase the likelihood of the behavior to happen at a later time.

## Antecedents

- What is the antecedent for Matthew's behavior of pushing materials to the floor?
- **independent work is presented to him**
  
- What is the antecedent for hitting his teacher?
- **The assistant teacher prompts him to pick it up. He refuses and she prompts again, this time guiding his arm down to pick it up. He resists and she lets go, then removes another token**
  
- Are these antecedents the cause of Matthew's behavior?

## Setting events

- What are the setting events for Matthew's behaviors of pushing materials to the floor?
- **Matthew is feeling a little tired due to waking up very early that morning before school.**
- Are these setting events the cause of Matthew's behavior?

## What is a “teachable moment?”

- Is the student ready to learn?
  - Ready behaviors look different for some students
- Is he or she attentive to teaching materials?
- Is he or she exhibiting positive listening behaviors?
- Is he or she participating in instruction?

## What is a “teachable moment?”

- Was Matthew ready to learn?
- During the Smart Board activity, he participated well, but what about the rest?
- **He begins rocking in his seat and plugs his ears, vocalizing loudly.**
- Is he attentive to teaching materials?
- Is he exhibiting positive listening behaviors?
- Is he participating in instruction?
- **Was he ready for the next demand?**

## Reinforcement and Extinction

- Reinforcement is a consequence following a behavior that increases the likelihood the behavior will happen again
- Extinction occurs when reinforcement for a behavior is no longer accessible and the behavior stops occurring.
  
- Reinforcement is different from preferences
- Different than play and leisure
- Not just “I want”
  
- Extinction can be risky
- Most students do not give up easily
- When reinforcement is no longer available or provided, they try something else or try harder
- For children with autism, a change in routine can increase anxiety and behaviors

## **Reinforcement** What was the reinforcement for Matthew's positive behaviors?

- **He is presented with a choice board and token board and selects “outside” to work for.**
- Was it effective?
- Elements of reinforcement to consider:
  - Density
  - Satiation
  - Immediacy
  - Deprivation
- Was Matthew satiated or deprived of outside that day? How might that impact the powerfulness of that reinforcer?
- **It has been raining on and off throughout the day and “outside” has not been an option until this session.**

## Extinction

- What was the reinforcement for Matthew's challenging behaviors?
- **Throwing materials to the floor = likely escape function.**
- **Was extinction applied?** If the reinforcer was escape from the task and the teacher tried to remove that reinforcer by reintroducing the task, then extinction was certainly attempted.
- **Did it work?**
  - Matthew's behavior increased in intensity, leading to aggression.

## Instructional Control

- Another word for this phenomenon is “discriminative stimulus”
- The teacher wants to supply the stimulus or instruction and have the corresponding behavior follow
- Reinforcement follows the behavior
- When a student is non-compliant during a challenging behavior, there is a concern for loss of instructional control.

## Instructional Control

- Matthew's teacher and assistant teacher were trying to retain instructional control by following through on the original demand.
- **Did it work?**
- **What could be done differently to maintain that control?**

## De-escalation

- Escalation is the period of time transitioning from calm to a heightened state of emotion and arousal
- De-escalation is the phase during which the student returns to a stable baseline for behaviors
- De-escalation should be individualized.

## De-escalation

- Was Matthew escalated?

**He begins rocking in his seat and plugs his ears, vocalizing loudly. This behavior often precedes aggression.**

- Was anything done to help him de-escalate?
- What would have changed for instructional control and the power of the reinforcer if de-escalation had occurred?

## **Integrating ABA with Speech and Language Therapy and Occupational Therapy**

- Applied Behavior Analysis focuses on changing behavior by manipulating the environment (antecedents, reinforcement and others).
- ABA recognizes internal events but cannot address them.
- Speech and Language therapy provides the acquisition of communication skills.
- Occupational therapy address sensory integration.

## Occupational Therapy

- How can sensory integration be useful in this scenario?
- Was there anything in the environment that could have been changed?
- **During teacher led instruction it is very windy outside and another student in the classroom begins scripting loudly. Additionally, music class is occurring next door.**
- Can this be controlled with ABA techniques or supports? Are there sensory supports that can be offered?
  - Headphones
  - Quiet work space for independent work?
  - Would those interventions likely have impacted his behavior?
- Could anything have been done for Matthew to encourage participation?
- **Matthew is feeling a little tired due to waking up very early that morning before school. He does not have the expressive language ability to share this, but his body language suggest it; he is slumped in his chair and continually putting his head down.**
- Sensory activities can stimulate or calm. Which does Matthew need? Would stimulating activities likely impact his challenging behaviors?

## Speech and Language Therapy

- Was Matthew able to communicate his physical feelings?
- Was he able to communicate his feelings? Could he have been feeling anxious?
- To address this behavior long term, would a communication based replacement behavior be effective?
  - Functional Communication Training

# Applied Behavior Analysis

## FBA and BIPs

- Functional Behavior Assessments (FBAs) assess the cause and/or maintaining variables of behaviors to determine the function.
  - Consist of direct and indirect assessment
    - Observation, analysis of antecedents and consequences
    - Screening tools
    - Interview of staff and parents (and student when possible)
- Behavior Intervention Plans (BIPs) identify proactive strategies to prevent behaviors, reactive strategies to de-escalate and avoid reinforcing the behavior should it occur, and replacement behaviors
  - Replacement behaviors should achieve the same function as the challenging behavior

# Applied Behavior Analysis

## FBA and BIPs for Matthew

- Based on the sample given, what hypothesis would you test regarding the function of the behavior
  - Likely escape maintained
  - What setting events and environmental conditions should be considered?

# Applied Behavior Analysis

## FBA and BIPs for Matthew

- What proactive strategies could be put in place to reduce the likelihood of this behavior occurring in this situation?
  - Sensory supports to increase attention and participation
  - Quiet working environment

# Applied Behavior Analysis

## FBA and BIPs for Matthew

- What replacement behaviors can be taught?
  - Asking for a break
  - Communicating physical feelings (sick, tired)
  - Communicating emotions (worried about rain)

# Applied Behavior Analysis

## FBA and BIPs for Matthew

How could the reactive strategies be changed to reduce escalation?

- Remove response cost procedure (removal of token)
- Avoid physical prompting when escalated
- Allow calming activities when precursor behaviors are presented

## Summary

- Applied Behavior Analysis provides us with many useful tools to address behaviors.
- However, there are limits to reinforcement and extinction manipulations.
- It is important to understand the impact of more complicated ABA phenomenon such as setting events, private events, and the elements of reinforcer effectiveness
  
- By using an interdisciplinary approach, we can address the needs of the whole child.
- Collaborating with SLPs and OTs allows an opportunity to select more appropriate and effective interventions.
- ABA, Speech therapy and Occupational therapy are not mutually exclusive.

# Questions and Answers

