Strategies to Increase Beginner Classroom Participation Skills:

Decreasing Problem Behavior with a FBA: Part 2

The Intervention and Behavior Support Plan

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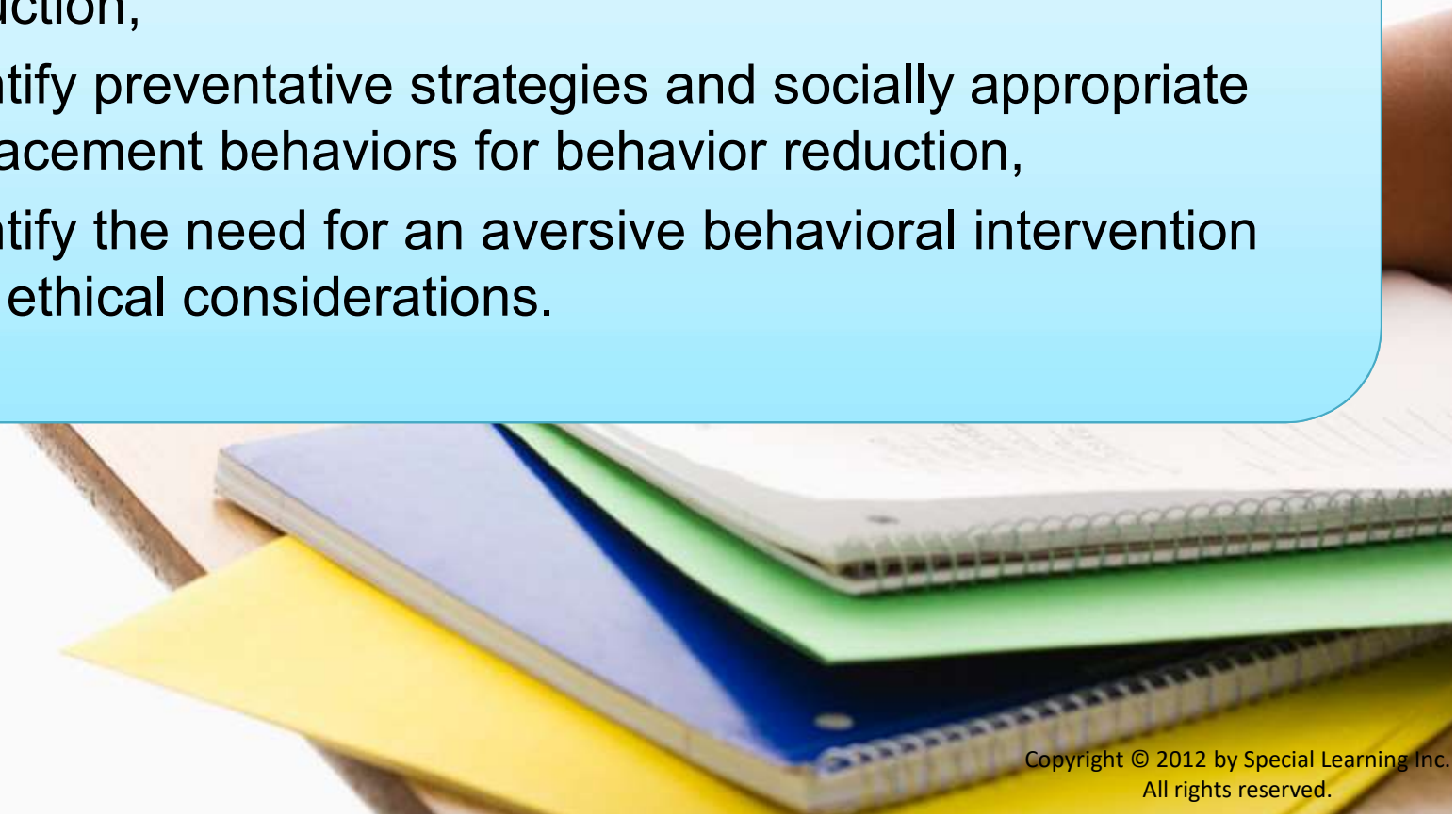
Objectives

1. Identify appropriate reinforcement strategies for behavior reduction,
2. Identify preventative strategies and socially appropriate replacement behaviors for behavior reduction,
3. Identify the need for an aversive behavioral intervention and ethical considerations.



Review of Behavior

MOtivation **A**ntecedent → **B**ehavior ← **C**onsequence

What happens well before the behavior occurs	What happens right before the behavior occurs	The target behavior of interest	What happens right after the behavior occurs

Common Topographies of Challenging Behavior in Children with ASD

- Self-stimulation
- Tantrums
- Aggression
- Non-compliance
- Self-injury
- Property destruction
- Elopement
- Mouthing items

Functional Assessment of Behavior

1. Gather information from the indirect and descriptive assessments.
2. Interpret the information and formulate a description and hypothesis.
3. Test the hypothesis with a functional analysis.
4. Develop an intervention based on the function of the problem behavior.
5. Monitor the progress of the behavioral intervention

Hypotheses

Setting Events | Antecedents → | Behavior → | Consequence

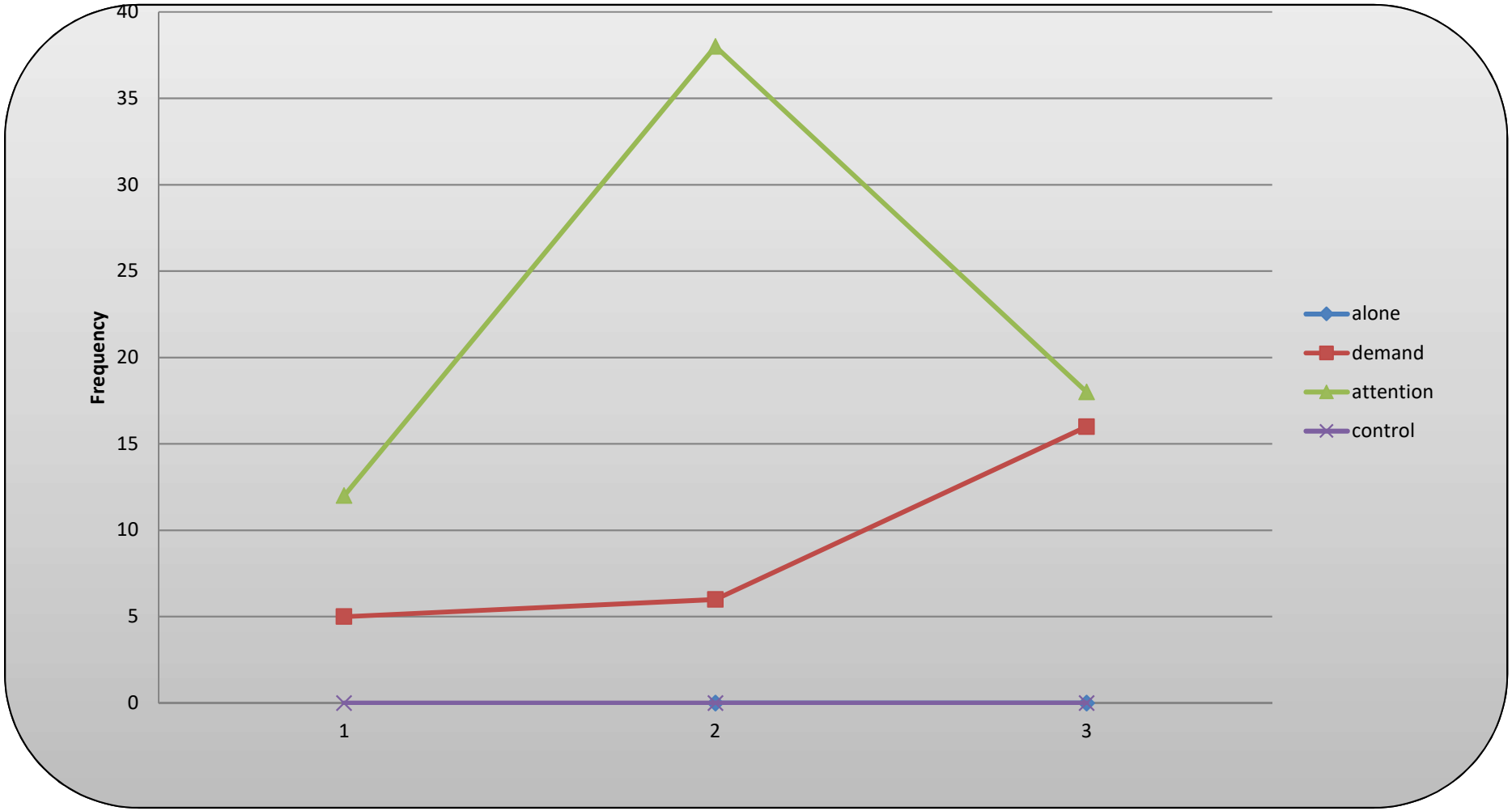
- Analyze the data that you have collected over *repeated* observations to determine the maintaining variables
- Create statements to provide yourself a visual analysis

Review of an FBA

- Individual:
  - 5 year old boy diagnosed with Autism and Down Syndrome
- Target Behavior:
  - Aggression toward others: defined as hitting, kicking, pinching, scratching and/or hair pulling
  - Noncompliance: defined as swiping programming materials, pushing over objects, and/or throwing items on the floor
- ABC chart results
  - Aggression toward others: seems to be maintained by attention
  - Noncompliance: seems to be maintained by attention

Functional Analysis Results: Aggression Toward Others

Functional Analysis Results: Noncompliance



Hypotheses

Setting Events	Antecedents	→	Behavior	→	Consequence
????	Attention is averted		Aggression toward others		Gets attention
????	Task is presented		Non-compliance		Gets attention Removal of Task

See the difference between the results off the consequence for non-compliance???

Starting a Behavior Support Plan

- Enlist a team
  - Parents
  - Physicians
  - Neurologists
  - Psychologists
  - Behavior Analysts
  - Teachers

Communication from the beginning is a must!

Structure of a Behavior Support Plan

- Personal Information
- Behavioral definition
- Baseline data
- Previous interventions
- Preventative Strategies
- Schedules of Reinforcement
- Replacement Behaviors
- Reactive Strategies
- Reductive Strategies

Personal Information

- Name
- Date of birth/current age
- Description of the individual
  - Summery of strengths
  - Psychological/Psychiatric information
    - Cognitive/adaptive level
    - Current mental health treatment needs
    - Co-occurring diagnosis
- Communication ability/needs
- Medication information/concerns
  - Fine/gross motor limitations
  - Sensory deficits
  - Current medications
- Medical/Safety
  - Contraindications

Behavioral Definition and Baseline

- Provide an objective behavioral definition
  - Defined by topography
  - Defined by function
- Baseline data
  - Frequency
  - Duration
  - Interval

Previous Interventions

- Interview with the family and instructors
  - What have they tried before?
    - When?
    - How long?
    - What worked?
    - What didn't work?

Preventative Strategies

- At times simple interventions can prevent challenging behavior from occurring
- Identify the most commonly presented antecedent and modify or prevent it and,
- Identify the most commonly presented consequence and determine if the child can gain access to the reinforcer prior to the occurrence of the behavior

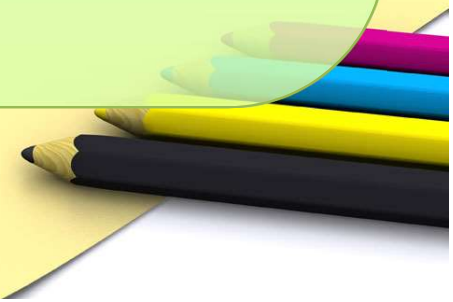
Basic Preventatives

- Setting events
  - Time of the day
  - Sleep
  - Eating
  - Pain
  - Medication change

- Identify precursor behavior(s)
  - Immediate

Attention-Maintained Preventatives

- Non-contingent attention
  - Provide the child a schedule of attention that is tighter than the current schedule of problem behavior occurrences
- Structure downtime
  - Provide opportunities to engage in preferred and/or non-challenging activities during time when attention will not be available
- Teach the child to play
  - Play is how a child will spent much of his time – teach him how to entertain himself with toys and other children



Access-Maintained Preventatives

- Provide the child the opportunity to communicate as much as possible
  - Communication device next to the child
- Provide the child a schedule of activities to follow
  - Across environments; within the classroom
- Use timers to indicate time of access to rewarding items/activities

Escape/Avoidance-Maintained Preventatives

- Provide the child a schedule of activities to follow
  - Across environments; within the classroom
- Provide the child a choice in activities as much as possible
- Use errorless teaching
  - Be mindful of prompting strategies
- Modify/adjust the response expectation
  - Requirement and length
- Modify/adjust the teaching materials

Escape/Avoidance-Maintained Preventatives

- Priming
  - Practice skills prior to requiring performance
- Provide a high-*p* sequence
  - Behavioral momentum
- Intersperse teaching trials
  - Practice mastered skills at a high ratio than acquisition skills
- Physically modify the environment
- Provide frequent breaks
  - Be mindful if the child avoids coming back to the instructional area

Consequence-Based Interventions

- Interruption and Redirection
- Extinction
- Differential Reinforcement of Alternative Behavior (DRA)
- Differential Reinforcement of Incompatible Behavior (DRI)
- Differential Reinforcement of Other Behavior (DRO)
- Differential Reinforcement of Low/High Rates of Behavior (DRL/H)
- Punishment Procedures

Interruption and Redirection

- Involves physically preventing the target behavior from occurring and redirecting to another activity
  - Sensory extinction
  - Physical redirection

Interruption and Redirection

Antecedent	→ Behavior	→ Consequence
Body has been deprived of sensory on the nose	Presses hand to bridge of nose	Deep pressure on the bridge of the nose

SENSORY EXTINCTION	Behavior	→ Consequence
Body has been deprived of sensory on the nose (child wearing nose guard)	Presses hand to bridge of nose	Deep pressure on the bridge of the nose does not occur

Interruption and Redirection

Antecedent	→	Behavior	→	Consequence
Body has been deprived of sensory on the nose		Presses hand to bridge of nose		Deep pressure on the bridge of the nose
PHYSICAL REDIRECTION		Behavior	→	Consequence
Body has been deprived of sensory on the nose		Presses hand to bridge of nose starts to occur		Instructor blocks the child from pressing the bridge of the nose

Extinction

- The process of no longer delivering reinforcement when the target behavior occurs
  - Access: no longer giving access to the tangible
  - Attention: no longer giving attention (planned ignoring
  - Escape/avoidance: no longer allowing a child to escape/avoid a task
  - Automatic reinforcement: no longer allowing access to sensory

Extinction

Antecedent	→	Behavior	→	Consequence
Peer has a toy that the child likes		Aggression toward the peer		Child gains access to the toy
		Behavior	→	Consequence
EXTINCTION		Aggression toward the peer		Peer does not give the child the toy

Extinction

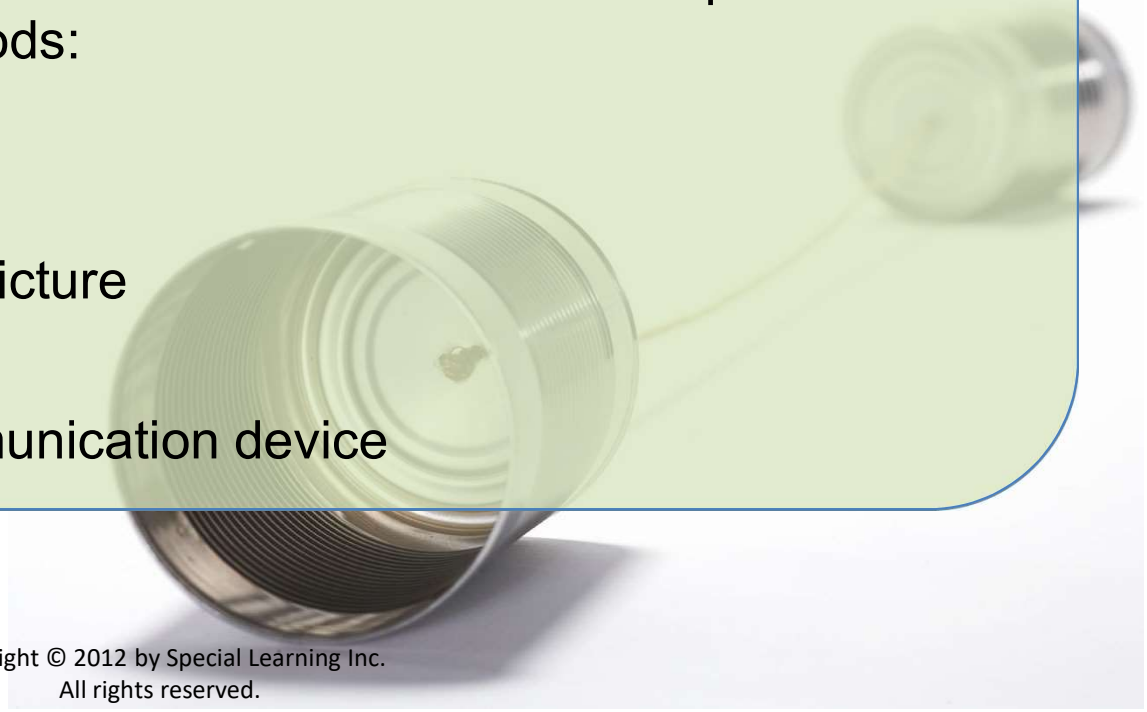
- Everyone must be consistent with implementation for the procedure to be successful
- The target behavior "will get worse before it gets better"
- Gradual reduction
- Not just *ignoring* the child!

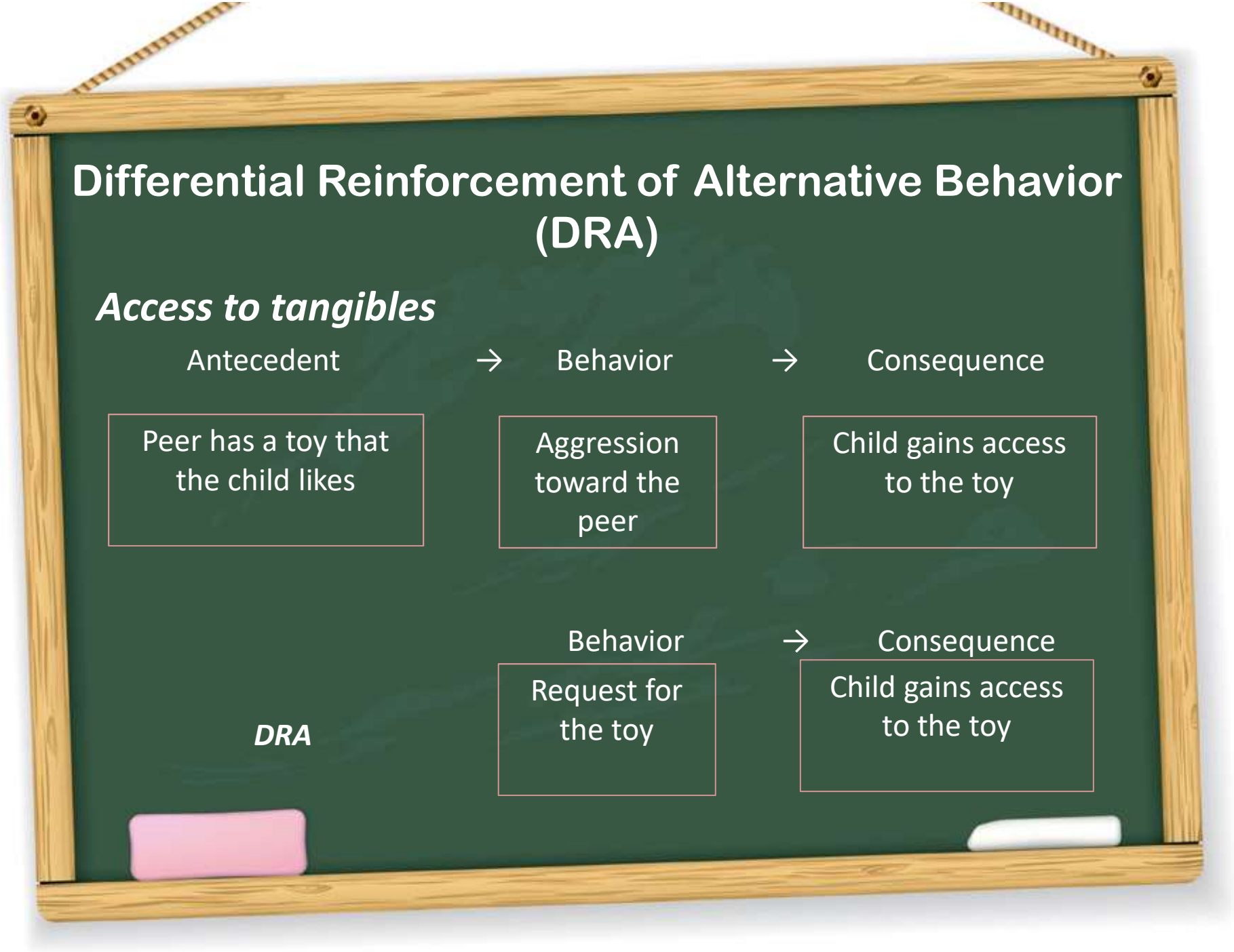
Differential Reinforcement of Alternative Behavior

- DRA: the process of reinforcing a different, more socially appropriate behavior *that serves the same function* as the behavior targeted for reduction

Functional Communication Training

- States that behavioral problems have a communicative intent and can replace the behavior when the correct function is determined. We then teach the child to communicate rather than engage in the problem behavior.
- FCT is dependent on several variables and can be implemented using a variety of methods:
  - Requesting with:
    - Vocalization
    - Exchange of a picture
    - Sign
    - Electronic communication device





Differential Reinforcement of Alternative Behavior (DRA)

Attention

Antecedent	→	Behavior	→	Consequence
Adult's attention is averted		Tantrum		Child is comforted by the adult

	Behavior	→	Consequence
DRA	Says the adult's name/asks for hug		Child is comforted by the adult

Differential Reinforcement of Alternative Behavior (DRA)

Escape

Antecedent	→	Behavior	→	Consequence
Math is an identified challenging task		Non-compliance maintained		Math is terminated after 30 seconds of non-compliance

	Behavior	→	Consequence
DRA	Request for a break		Provide a break from math for a determine time

Differential Reinforcement of Incompatible Behavior

- DRI: the process of reinforcing behavior that is incompatible to the behavior targeted for reduction; thus, no longer reinforcing the target behavior
  - Reinforce another socially appropriate behavior that physically prevents the individual from engaging in the target behavior

Differential Reinforcement of Incompatible Behavior

Antecedent	→	Behavior	→	Consequence
Food is present and there is motivation to eat		Eats with his hands		Gains access to food

DRI

Behavior	→	Consequence
Eats with utensils		Gains access to food

Differential Reinforcement of Incompatible Behavior

Antecedent	→	Behavior	→	Consequence
Instruction is being delivered at the table		Out of seat behavior		Gets a break from instruction

DRI

Behavior	→	Consequence
In seat behavior		Gains access to attention from the instructor

Differential Reinforcement of Other Behavior

- DRO: the process of providing reinforcement for the absence of target behavior after a determined time interval

"A practitioner using differential reinforcement of other behavior (DRO) delivers a reinforcer whenever the problem behavior has not occurred during or at specific times. DRO provides reinforcement for not responding because reinforcement is contingent on the absence or omission of target behavior."

Differential Reinforcement of Other Behavior

Antecedent	→ Behavior	→ Consequence
Academic tasks	Child engages in aggression every 30 minutes	Gains access to reinforcement

DRO

Behavior	→ Consequence
Child refrains from engaging in aggression in 20 minutes	Gains access to reinforcement

Replacement Behaviors

- Access maintained behaviors
  - Requesting for wants
  - Following schedule
- Escape/avoidance maintained behaviors
  - Following schedule
  - Requesting a break
  - Tolerance
- Attention maintained behaviors
  - Requesting for attention
- Automatic reinforcement maintained behaviors
  - Teach another way to gain access to the reinforce

Implementing a Behavior Support Plan

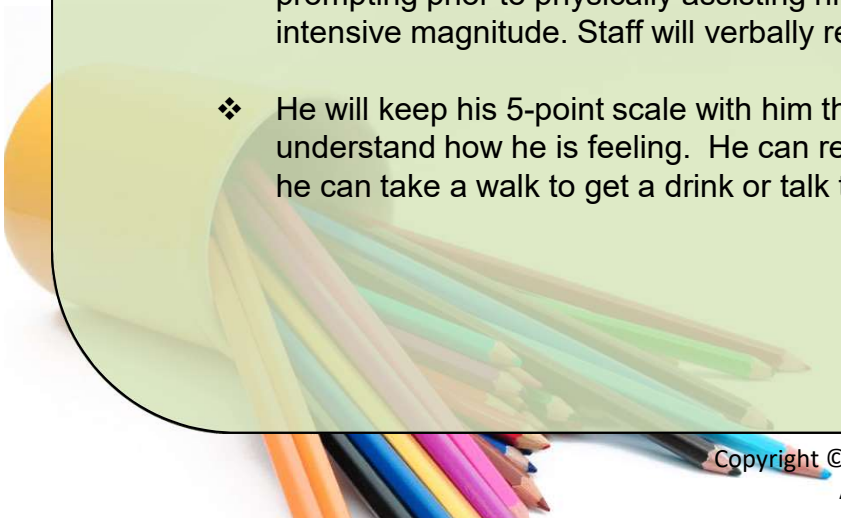
- Create a Behavior Support Plan (BSP)
  - Approval for all behavioral interventions
    - Guardians
    - Governing body
- Identify data collection system
- Train the implementation team
  - Guardians and all staff
- Daily reports on behavior
- Weekly visual analysis and meeting with guardians
- Monthly visual analysis and report with governing body
- Make necessary changes

Case Study 1 - Information

- Age = 10 years old boy
- Diagnoses: PDD-NOS; Mild ID; Impulse Control Disorder-NOS
- Target behavior:
  - Self injury (hitting self with hands or objects, typically targets his head), refusing instructor's directives, saying "no, I don't want to," crying/screaming, eloping from the chair or instructional area with or without aggression towards others (hitting, kicking, spitting, etc.) and/or property destruction (throwing, swiping, kicking and/or destroying objects and stimuli).
- Maintaining Variables: seems to be escape/avoidance & access to preferred items

Case Study 1 - Preventatives

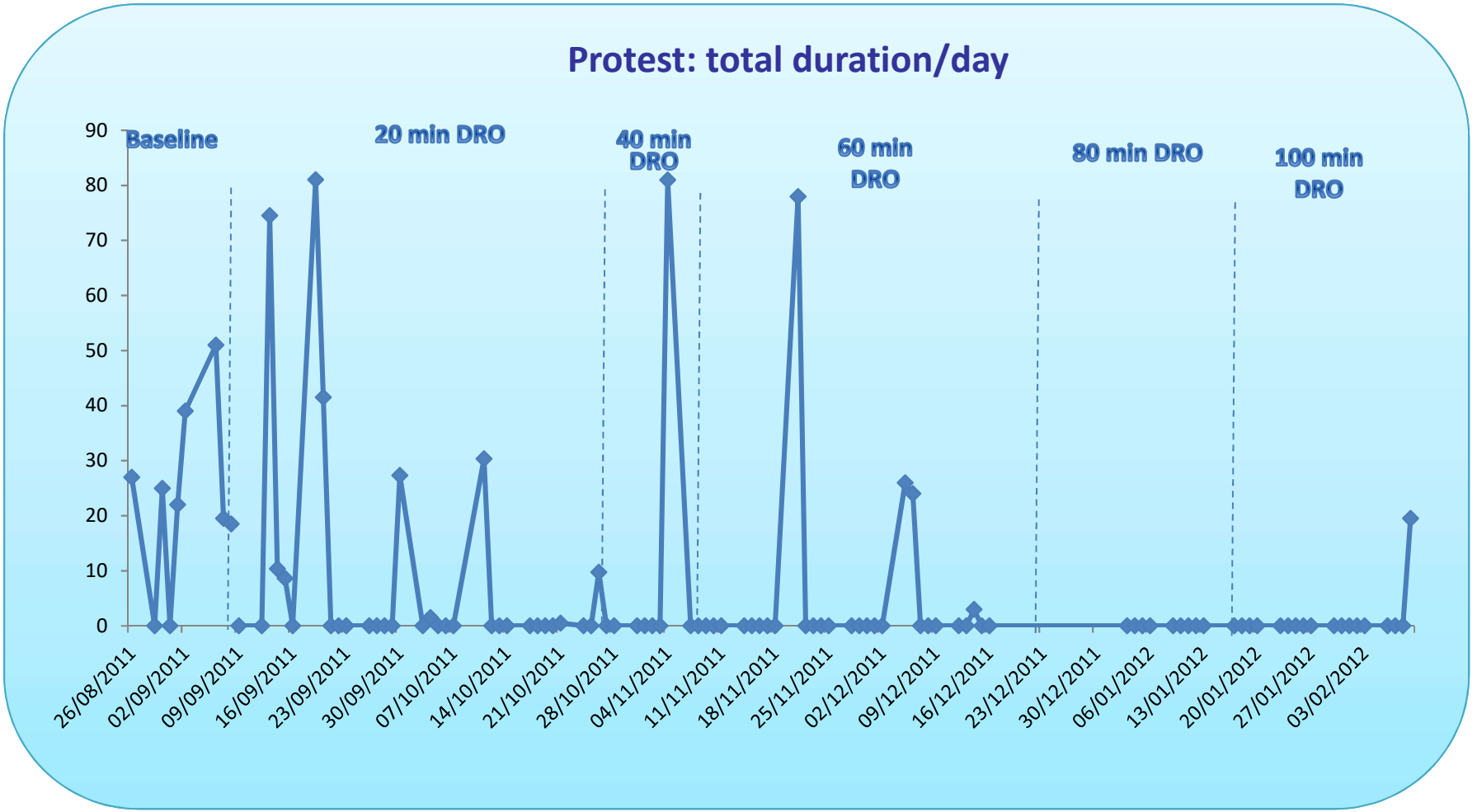
- Preventatives:
  - Monitor task difficulty and allow to communicate requests.
  - Staff will say “my turn” when requiring him to give up a preferred activity. Staff will set a timer to indicate “reward time.”
  - Staff will refrain from making him choose an activity that he will earn for his reward prior to reward time. Staff will use statements like, “after following your rules, you will earn _____’s time.”
  - Staff will remind him of his rules when he starts to engage in precursor behavior (tapping self lightly on the legs) and prompt him to request for help by raising his hand. They will also remind him, “We are here to help you” when they see him start to escalate.
  - Staff will refrain from physically prompting him through programming; they will use gesture and model prompting prior to physically assisting him. If he requires physical prompting a light touch will be the most intensive magnitude. Staff will verbally remind him of the task that is being presented in need of completion.
  - He will keep his 5-point scale with him throughout the day and staff will refer to it when he needs help him understand how he is feeling. He can request breaks prior to engaging in target behaviors. During his break he can take a walk to get a drink or talk through his feelings with his Social Worker.



Case Study 1 – Replacement Behaviors and Intervention

- Replacement Behaviors:
  - Requesting for help
- Intervention:
  - Token economy system using a Differential Reinforcement of Other Behavior
  - Neutral Redirection: Stop the timer and neutrally redirect to another activity (avoid eye contact, keep a neutral facial expression, and limit talking to neutral verbal prompts only).
  - Restitution for property destruction

Case Study 1 - Data



Case Study 2 - Information

Age = 17 years old boy

Diagnoses: Autism; Borderline Intellectual Functioning

Target behaviors:

Noncompliance – defined as refusing to complete a presented task or answer a question within 3-5 seconds with/without folding arms and/or turning away and/or making statements such as "I don't want to do this" or "I will do it at home." This may escalate to eloping from the instructional environment and/or shoving an adult out of the way.

Seems to be maintained by escape/avoidance

Speaking out – defined as making inappropriate comments, answering questions without being called upon and commenting during the teacher's instruction.

Seems to be maintained by attention

Passing gas – defined as flatulence occurring outside of a restroom or without excusing one's self from an environment with others present.

Seems to be multiply controlled by negative automatic reinforcement and attention.

Belching - defined as either the audible release of gas from the digestive tract orally, outside of a restroom setting, and/or without covering/closing one's mouth to muffle sound or excusing one's self from the environment

Seems to be multiply controlled by negative automatic reinforcement and attention.

Invading personal space – defined as entering another person's personal space, closer than 1 arm's length distance.

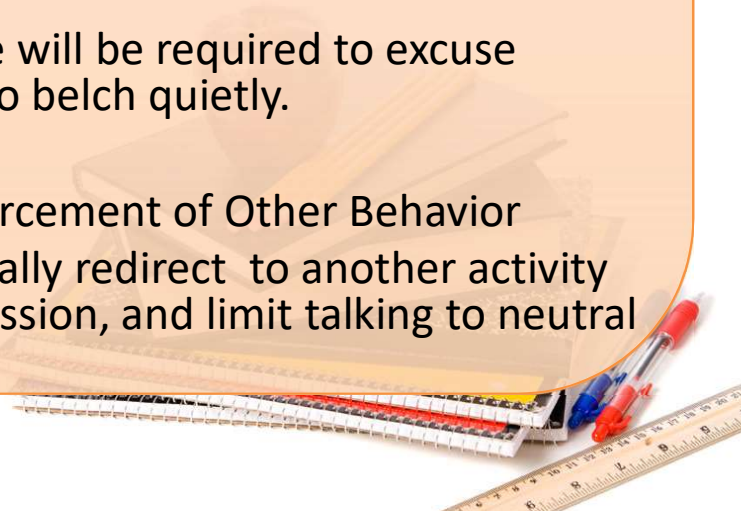
Seems to be maintained by attention

Case Study 2 - Preventatives

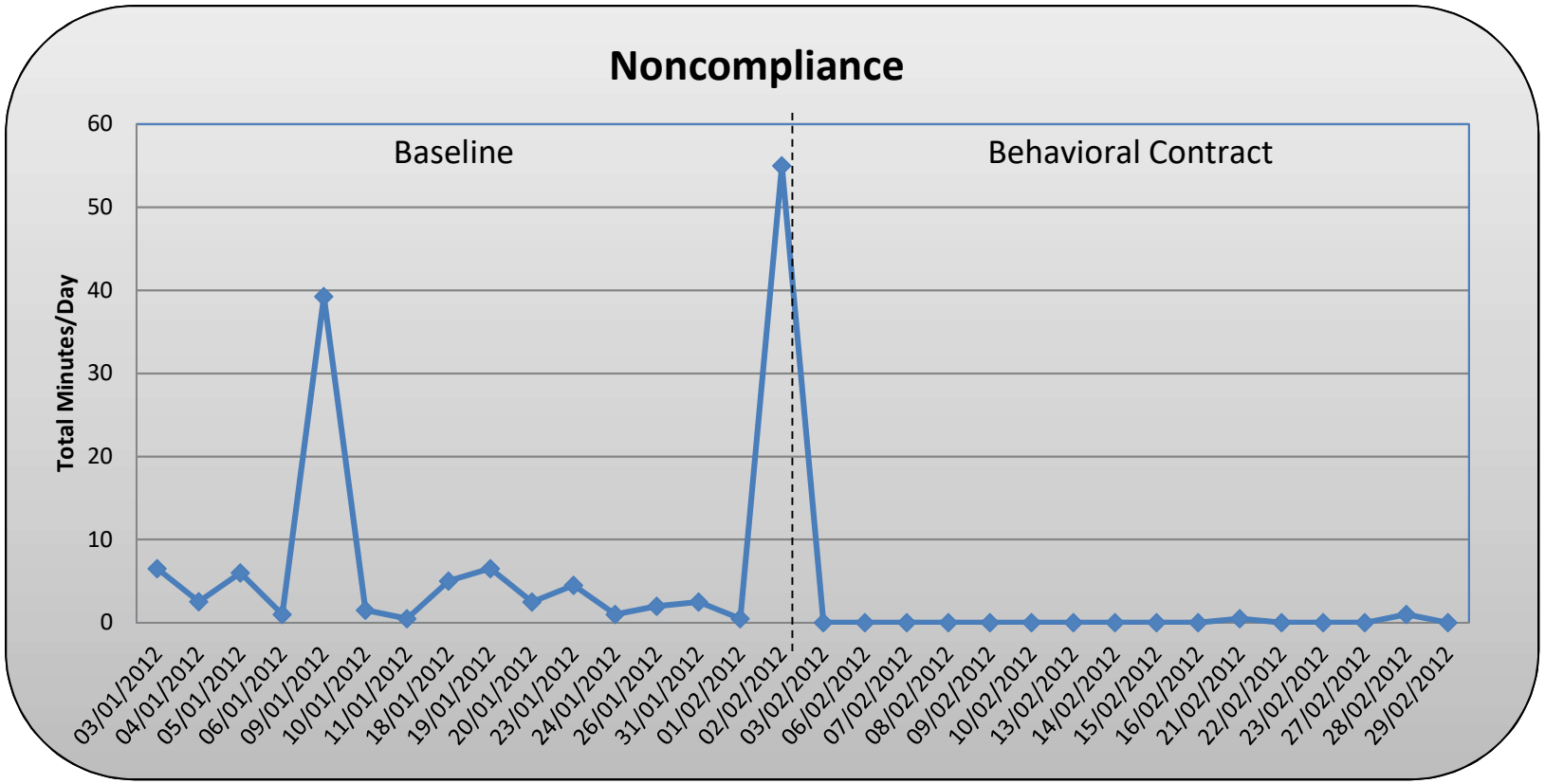
- Preventatives:
  - Social reinforcement (verbal and non-verbal) will be provided for all appropriate/functional behaviors. These include but are not limited to: staying on-task during assignments and downtime, following simple commands, sitting nicely with his shirt down. The verbal rewards will be provided through a whisper to prevent distraction to the other students in the classroom.
  - He will be reminded of his rules when he is most likely to engage in the target behaviors (verbally or written reminders). He is most likely to engage in noncompliance during history class and he speaks out during all classes. He is most likely to invade others' personal space in unstructured social situations. He is most likely to engage in belching during and after lunch. His staff will also remind him of his rules when he shows signs of escalation including rocking, active feet, and commenting that he may not have time to complete the work.
  - He will prepare his written schedule of activities within his instructional environment if the class is not already structured in this manner with the assistance of his staff.
  - Frequent reinforcer interviews will be conducted, to help identify which items/activities are most motivating to him to be reserved for non-occurrences of target behavior.
  - With the assistance of the Intervention Specialist and Teacher, the presentation of the class's material will be adjusted to best suit his needs.
  - Staff will cue him to read his social stories during his downtime and prior to social interactions or mock opportunities.

Case Study 2
Replacement Behaviors and Intervention

- Replacement Behaviors:
  - Following a written schedule – He will be required to follow his daily schedule, marking off that he has completed each academic block after completion.
  - Requesting for a break – He will request to take a break when he starts to feel overwhelmed by the presented task. He will be given 1 break card per ½ block of World History and Pre-Algebra (a total of 4). He will be able to sit quietly in another area of the classroom or walk in the hallway; he will not be allowed to engage in a preferred activity. He will receive a break for 5 minutes.
  - Following the classroom's rule – He will be expected to follow each classroom's rules. These will be reviewed at the beginning of each academic block.
  - Excusing himself to pass gas or belch – He will be required to excuse himself to pass gas and cover his mouth to belch quietly.
- Intervention:
  - Behavioral contract using a Differential Reinforcement of Other Behavior
  - Neutral Redirection: Stop the timer and neutrally redirect to another activity (avoid eye contact, keep a neutral facial expression, and limit talking to neutral verbal prompts only).



Case Study 2



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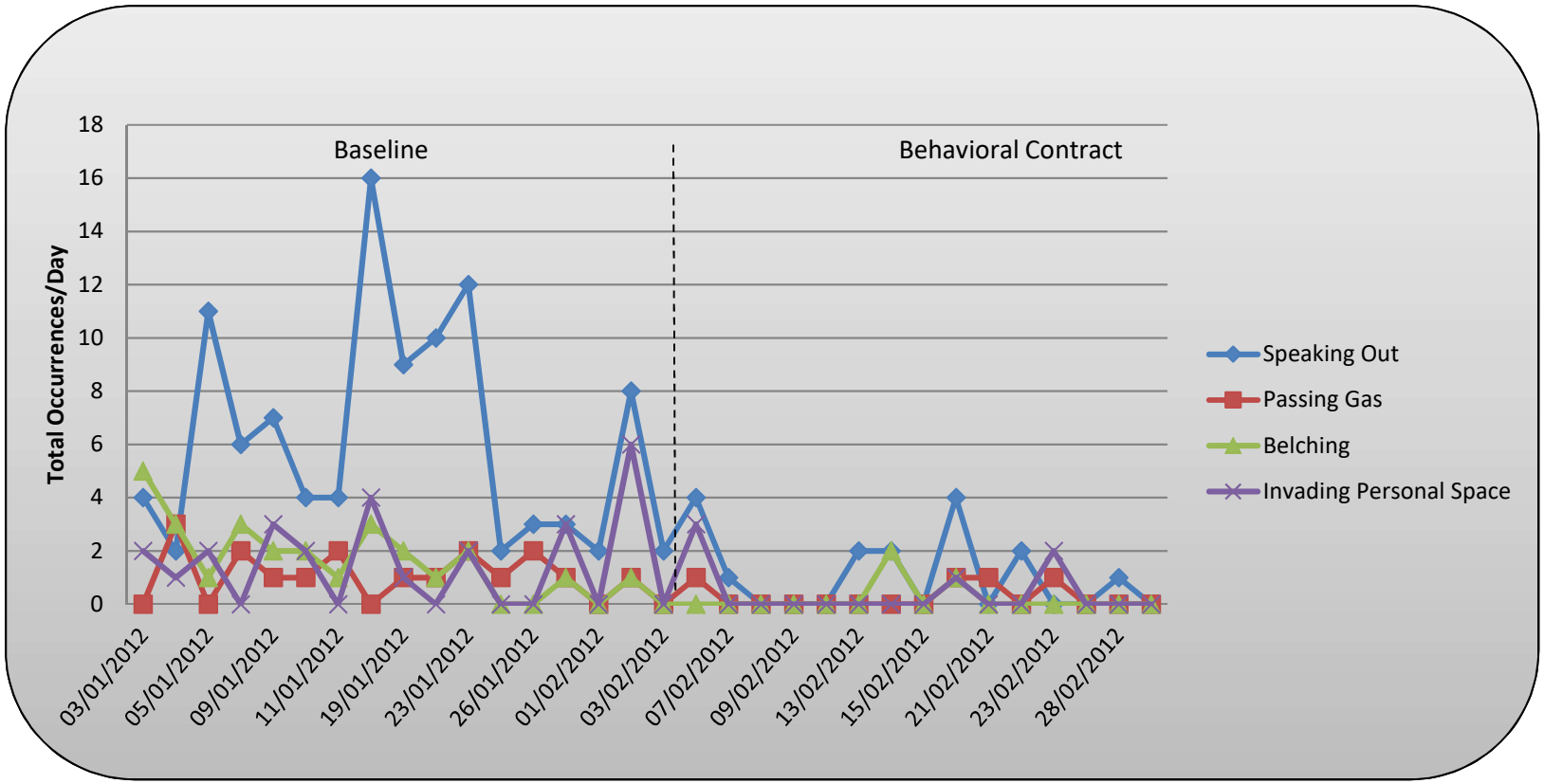

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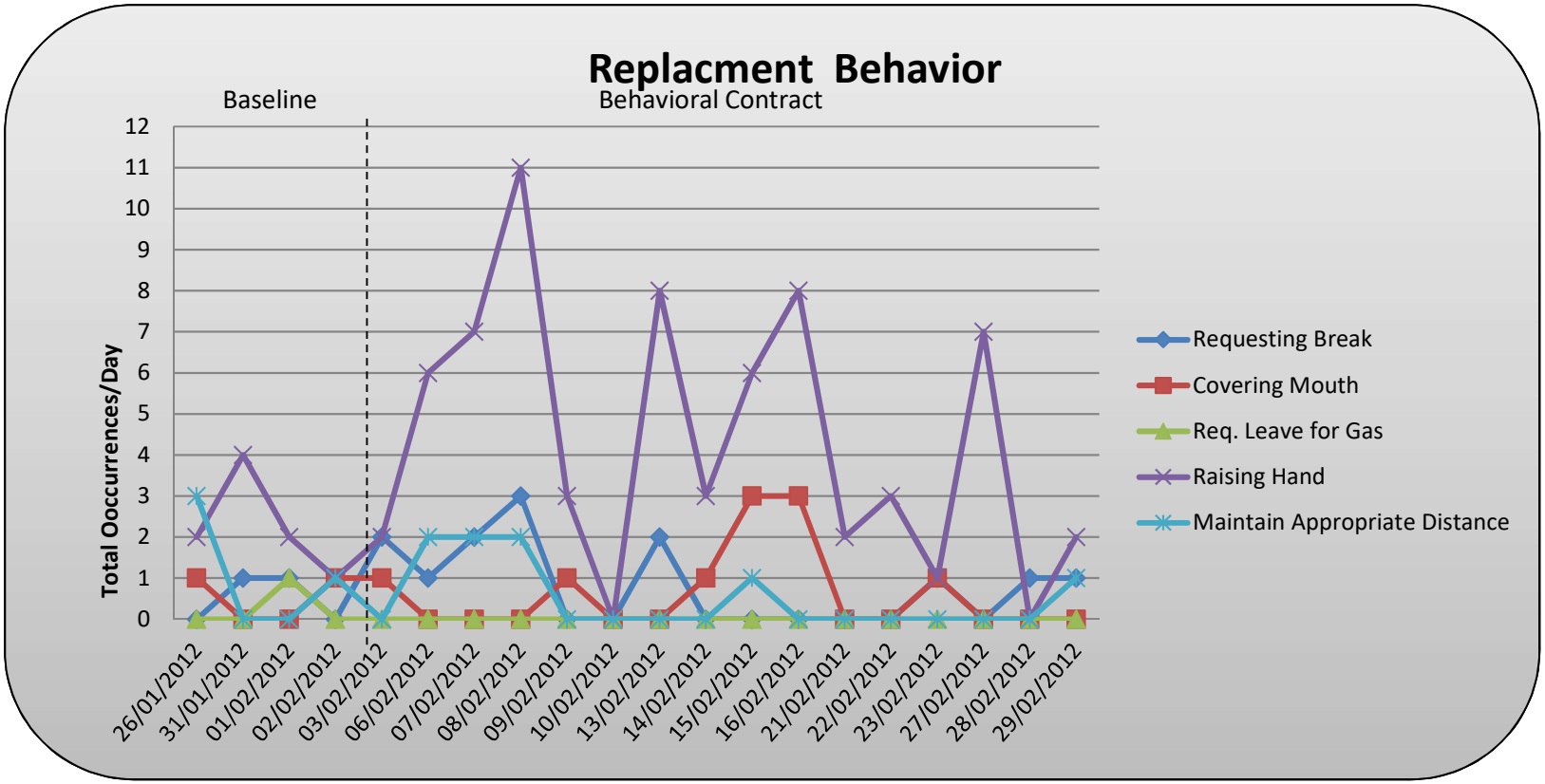


What happens when reinforcement is not enough to change behavior?

- Response Cost
  - Through the use of a token economy system, desirable behavior is increased and problem behavior is decreased through the delivery of tokens. The consumer receiving the tokens will later exchange a requisite number of tokens for a preferred item or activity.
  - The addition of a response cost within a token economy system means a token will be removed contingent upon engaging in the target behavior.
    - Stair-step method
  - *Must always be used with a schedule of reinforcement*

Case Study 3 - Information

- Age = 6 your old girl
- Diagnoses: Autism; Borderline Intellectual Functioning
- Target behaviors:
  - Tantrums: defined as eloping from instructor, pushing instructor with a portion of her body, falling to the floor, kicking, hitting, scratching, and/or destruction of property (including throwing objects at instructor, overturning furniture, and/or swiping/throwing or ripping/biting materials) – all attempts included.
- Maintaining variables:
  - Seems to be maintained by access to preferred items/activities and attention from others.

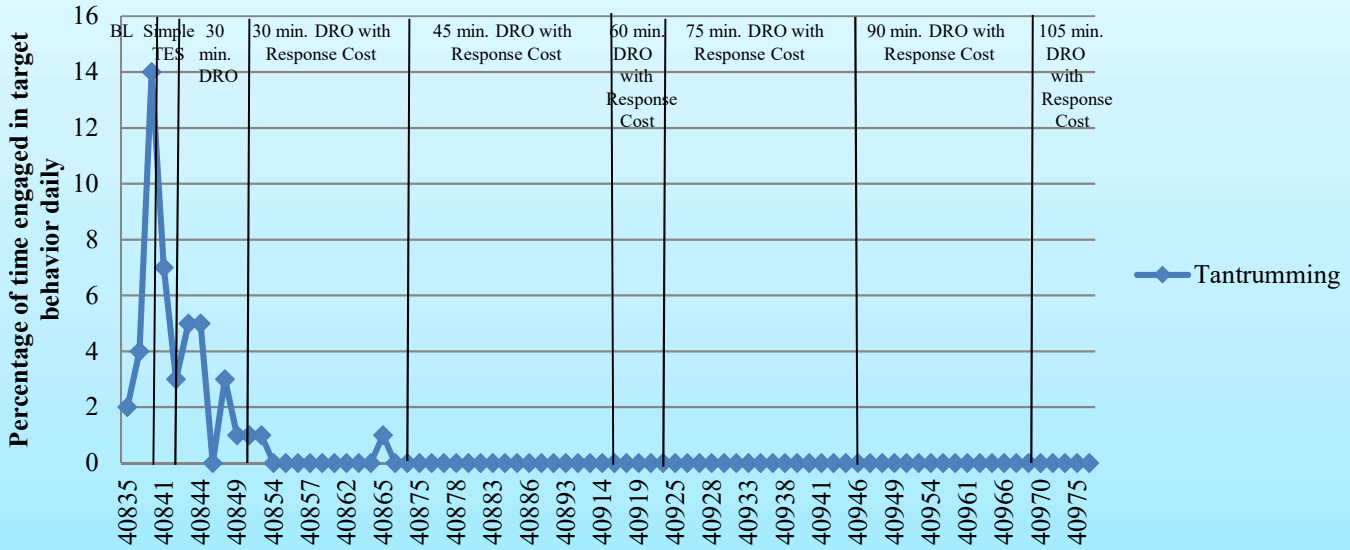
Case Study 3 - Preventatives

- Preventative
  - Social reinforcement will be provided to her for all appropriate/functional behaviors. These include but are not limited to: staying on-task during programming, answering instructor questions with an appropriate volume, and appropriately communicating wants/needs through a verbal request.
  - She will follow and manipulate her own visual schedule of activities both within her instructional environment and across instructional environments, to better assist her in predicting upcoming transitions.
  - She will learn in a 1:1 ratio in her own classroom, free of unnecessary materials; needed instructional materials will be kept well-organized and will remain in the instructor's possession. She will slowly increase her time in the classroom with other consumers as the target behavior decreases.
  - She will be reminded of the rules prior to transitions from preferred activities to non-preferred activities, and prior to denying her access to a preferred item/activity.
  - She will be reminded of the rules when displaying precursor behavior, such as screaming, yelling, or giggling. The staff will use a whisper model prompt to elicit the softer vocalization.
  - Frequent preference assessments will be conducted with her, to help identify which items/activities are most motivating to her to be reserved for non-occurrences of target behavior.
  - Fast-paced instruction and building behavioral momentum will keep her learning interesting and fun.

Case Study 3
Replacement Behaviors and Intervention

- Replacement Behaviors:
  - Requesting for attention through a gestured cue (such as tapping an individual on the shoulder) or through saying “excuse me”.
  - Accepting “no” from an adult after requesting for an item/activity.
- Intervention:
  - Token economy system with response cost
    - Differential Reinforcement of Other Behavior
  - Neutral Redirection: Stop the timer and neutrally redirect to another activity (avoid eye contact, keep a neutral facial expression, and limit talking to neutral verbal prompts only).
  - Restitution for property destruction

Case Study 3



Case Study 4 – Information

- Age = 10 year old girl
- Diagnoses: Autism; Mild Intellectual Disability; Seizure Disorder
- Target behaviors:
  - Non-compliance: defined as refusing to comply with instruction. Sometimes, the non-compliance includes oppositional behaviors such as self injury (biting), aggression toward others (hitting, biting, kicking, choking, pulling hair), verbal threats (any statement of wanting to bring harm to self or others), property destruction (swiping, ripping, throwing materials), with/without crying - all attempts included. At times non-compliance will escalate to intentional urination.
- Maintaining Variables:
  - Seems to maintained by access to tangible and escape/avoidance

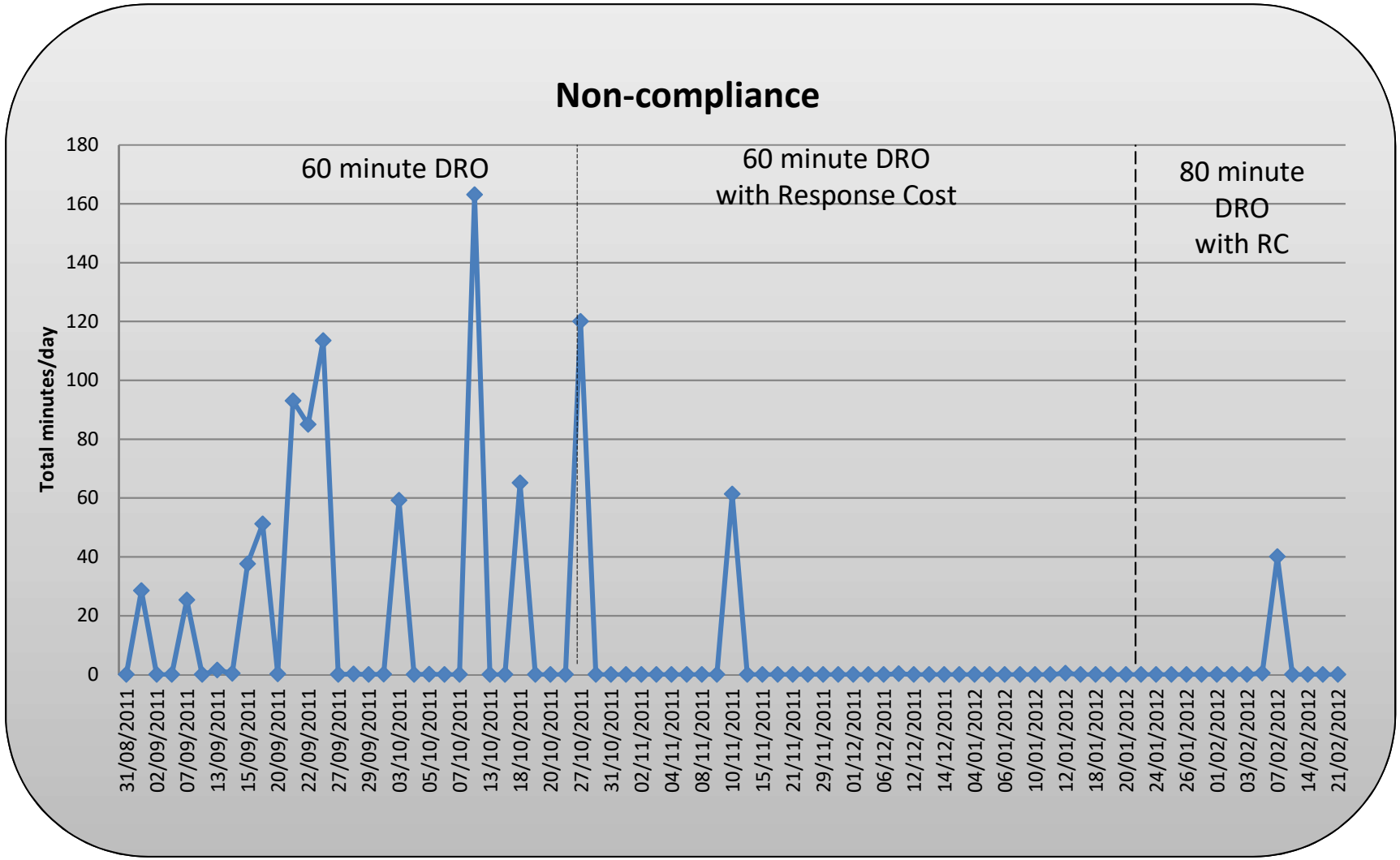
Case Study 4 - Preventatives

- Preventatives
  - She engages in many precursor behaviors such as making statements about not hurting others (i.e. “I cannot hit my teacher”). At this time, the instructor will model prompt “quiet hands” or hands down to her sides. She will also be reminded of her rules at this time.
  - As much as is possible, she will be blocked from viewing others engaging in challenging behavior; she has a history of engaging in non-compliance when others do. At these times, staff will to prompt her to request to leave the area.
  - She tends to target her right arm (inside of the elbow) or both hands’ fingers at once when engaging in self injury. Staff will be mindful of this and be prepared to block these responses when precursor behavior occurs.
  - She will be lightly prompted to change the grip on her writing utensil; she is resistant to a full physical prompt and using full physical prompts will, at times, lead to non-compliance.
  - Use fast-paced instruction for programming purpose to avoid target behaviors and to make learning interesting.
  - Staff will monitor her programming targets to prevent boredom.
  - Her schedule will always be in view.
  - She will be reminded of her rules at the beginning of her DRO schedule “use and inside voice and nice words, use nice hands and feet, listen to my teacher”

Case Study 4 - Replacement Behaviors and Intervention

- Replacement Behaviors
  - Requesting for a break (leave the area or stop an activity)
  - Requesting for items
- Intervention
  - Token economy system with response cost
    - Differential Reinforcement of Other Behavior
  - Neutral Redirection: Stop the timer and neutrally redirect to another activity (avoid eye contact, keep a neutral facial expression, and limit talking to neutral verbal prompts only).
  - Restitution for property destruction

Case Study 4



What happens when reinforcement is not enough to change behavior?

- Time Out: a procedure in which the consumer is required to remove him or herself from positive reinforcement contingent upon the occurrence of target behavior.
  - *Must always be used with a system of reinforcement*

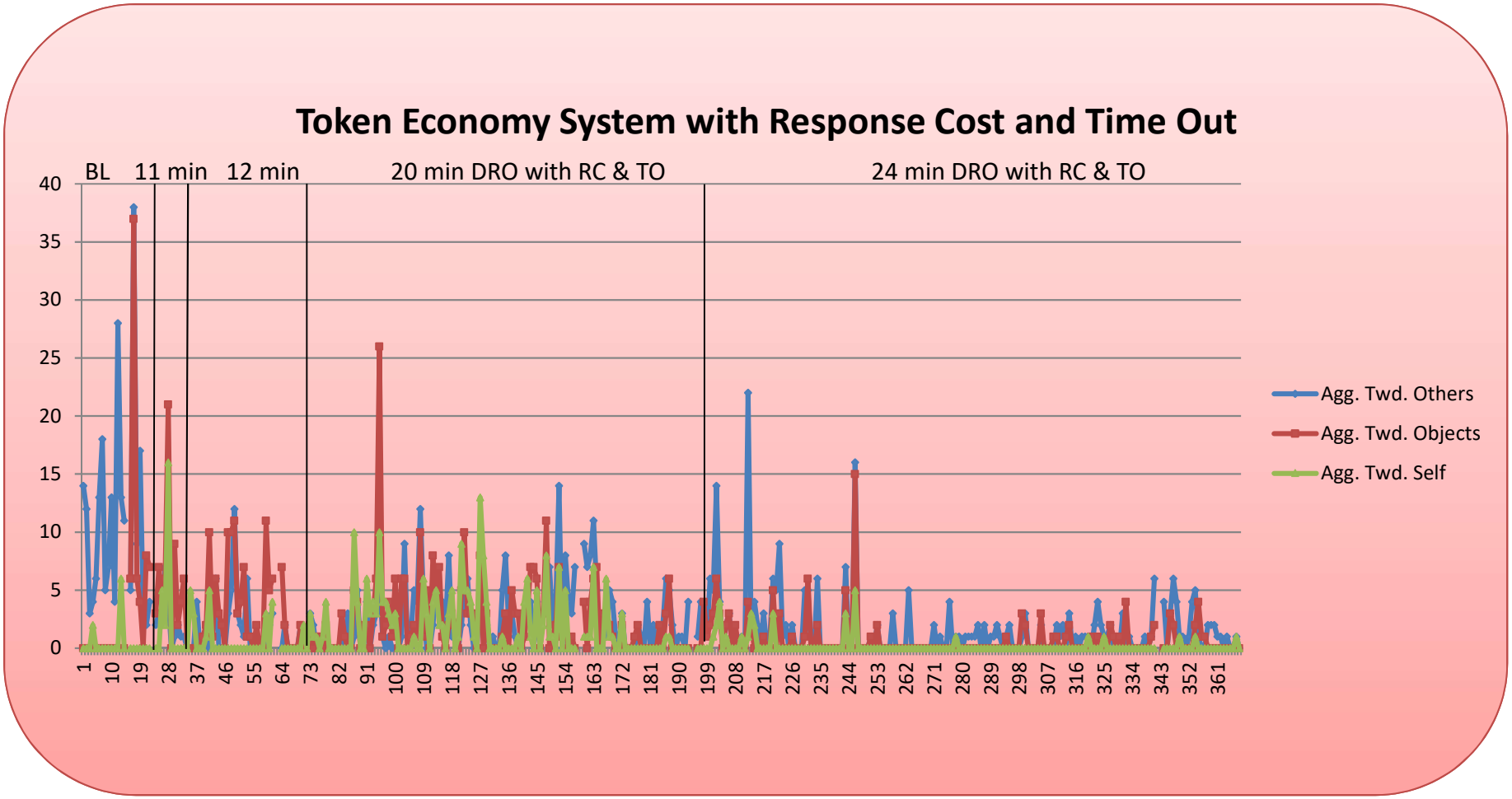
Case Study 5 - Information

- Age = 15 year old male adolescent
- Diagnoses: Autism; Moderate Intellectual Disability
- Target behaviors:
  - Aggression toward others: defined as hitting, biting, kicking and pushing others
  - Property destruction: hitting, throwing, crushing and ripping objects
  - Self injury: hitting and biting self
- Maintaining variables:
  - Seems to be maintained by access to preferred items

Case Study 5
Preventatives, Replacement Behaviors and Intervention

- Preventatives
  - Following a daily schedule
  - Prompting to interlock fingers prior to saying “no”
  - Communication book located next to him at all times
  - Provide small meals throughout the day
  - Sit on the floor with crossed legs
- Replacement behaviors
  - Communicating through exchange of an icon
- Intervention
  - Token economy system with Response Cost
    - Differential Reinforcement of Other Behavior
  - Time Out – 3 minutes
  - Neutral Redirection: Stop the timer and neutrally redirect to another activity (avoid eye contact, keep a neutral facial expression, and limit talking to neutral verbal prompts only).
  - Restitution for property destruction

Case Study 5



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