

Using Skill Based Interventions to Reduce Challenging Behavior

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Introduction

- The focus of treating challenging behavior has shifted from consequence-based interventions to preventative measures through teaching alternative, more appropriate replacement behaviors (Hendrix & O'Brien, 2022).
- More intrusive behavior reduction procedures interventions should be used as a last resort following failure of less intrusive interventions or in the presence of imminent harm. Such procedures can be both ethical and effective, when developed and monitored by qualified professionals, under specific circumstances based on the severity of behavior and significant risk of harm (Sturmey, 2015).
- Appropriate replacement behavior(s) should have clear operational definitions and be increased to serve as an alternative to challenging behavior (Reeves et al., 2017).

The current study evaluates a treatment plan utilizing skill-based interventions to decrease rates of challenging behavior through teaching replacement behaviors, implementing self-regulation strategies, and providing a designated safe space for de-escalation.

Method

Participant & Setting

- Implemented by Sheila Orozco, BCBA, and RBTs Joey Taczak and Justin Dale in a center-based setting with a 20-year-old male diagnosed with autism spectrum disorder (ASD)
- Client engaged in severe challenging behaviors including aggression, self-injury, and destruction of property
- Client required a sustainable intervention that could be effectively implemented by caregivers as they approached the maximum age for school district-provided services and increasing strength presented challenges

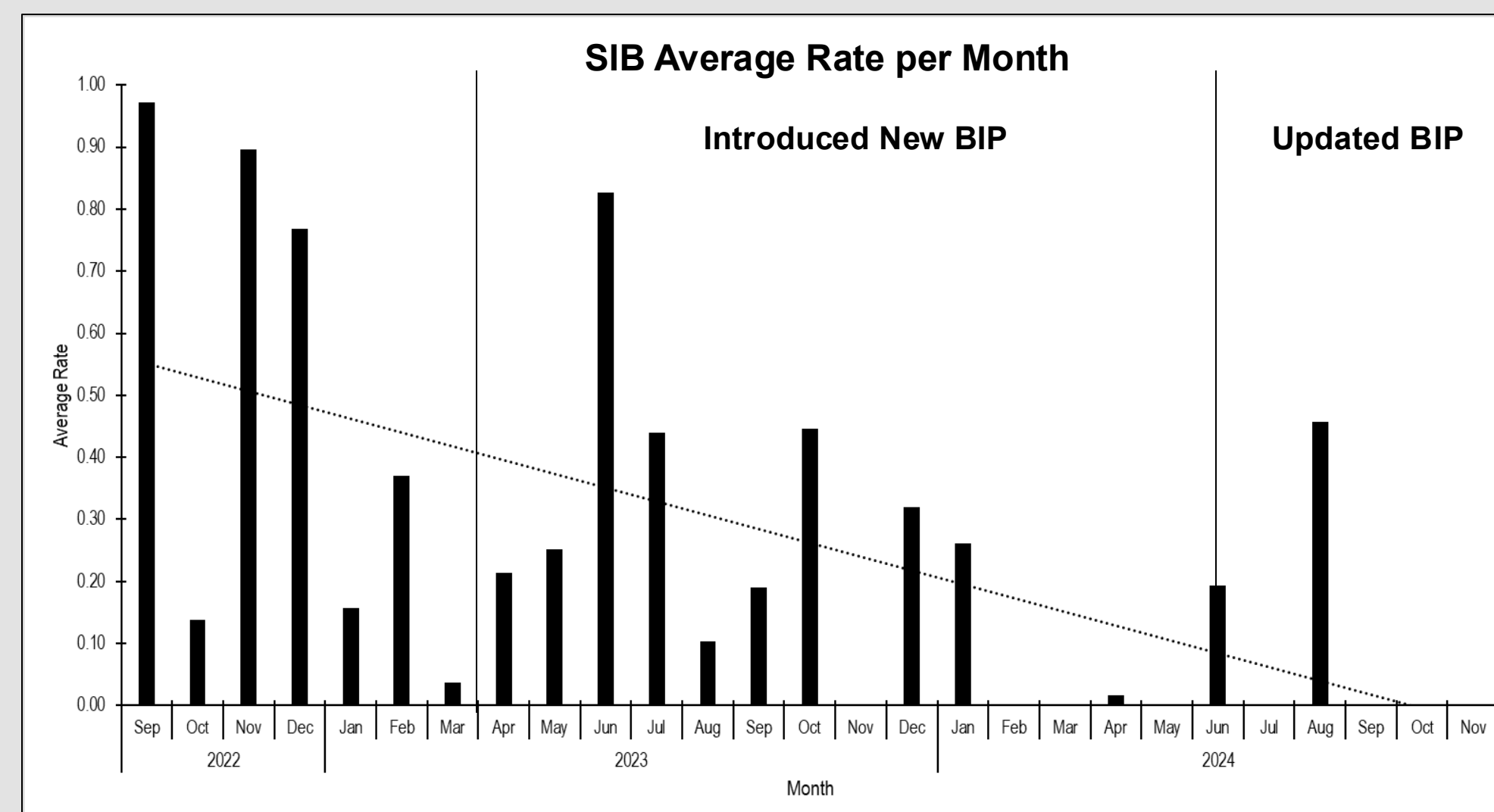
Experimental Design & Variables

- A single-subject A-B design was used to examine the effectiveness of an intervention to reduce engagement of high magnitude challenging behaviors through teaching functional replacement behaviors

Challenging Behaviors Targeted for Reduction			
	Definition		Data
Physical Aggression (PA)	Any act or blocked attempt to hit, push, kick, head butt, pinch, bite, or grab another person or their clothes, or other actions that result in tissue damage to another.		Rate/hour
Self-Injurious Behavior (SIB)	Any act or blocked attempt to hit self in the head with any body part or object with force that leaves a visual marks (e.g. red marks, contusions, etc.) and/or audible sound that can be heard from 5 feet away, or leads to a restraint. Any act or blocked attempt to biting self		Rate/hour
Low Magnitude Property Destruction (LMPDD)	Any instance in which the client breaks, rips, throws or hits with force, or swipes an item of his own or an item he is wearing and displaces the item or makes that item unusable.		Rate/hour
High Magnitude Property Destruction (HMPDD)	High mag PDD is defined as any instance in which the client breaks, rips, throws or hits with force, or swipes an item that is not his, which includes item that belongs to the center, peers or staff and displaces the item or makes that item unusable.		Rate/hour
Intervention			
Environmental Manipulations:	Access to a beanbag along a wall reinforced with padding	Sensory bucket- Located next to the beanbag and filled with items that are appropriate for ripping (cardboard, paper, sticks, etc.).	
Presentation of sensory bucket items:	Neutral state- present sensory bucket items when the client is happy, relaxed, and engaged (HRE)	Escalated state- after the occurrence of challenging behaviors, client is redirected to the beanbag and presented with items from the sensory bucket for him to engage with for five minutes.	At the onset of precursors- when the client is observed to put his head down into his shirt, starts to cry, and/or brings his hand up to the side of his face near his eyes with his palm facing inward and fingers extended.
Client has unlimited access to the beanbag and sensory bucket items at his request.			

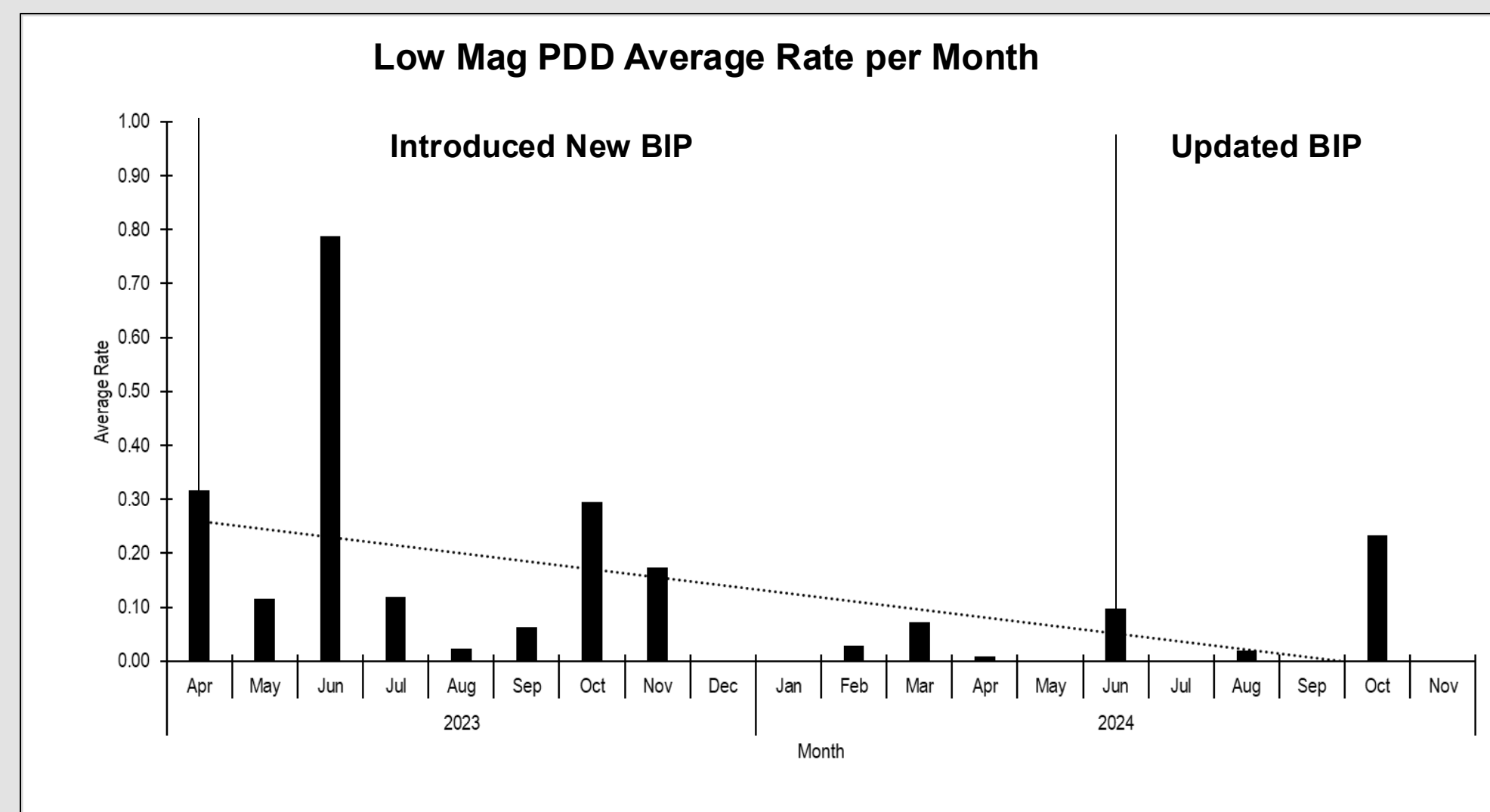
Results

Figure 1
Average Rates of Self-Injurious Behavior



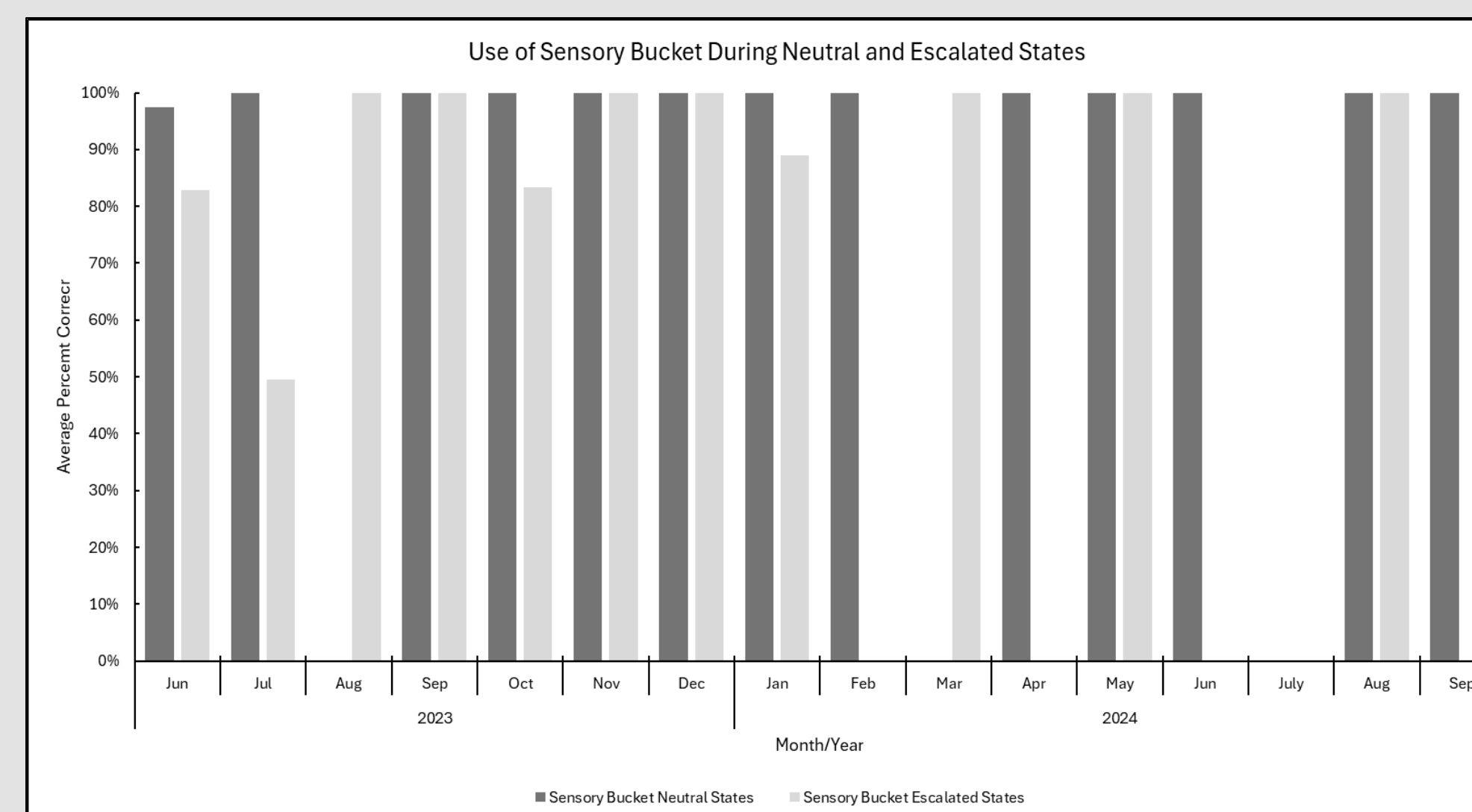
Note. Average rate per month of engagement in self-injurious behavior from September 2022-November 2024.

Figure 3.
Average Rates of Low Magnitude Property Destruction



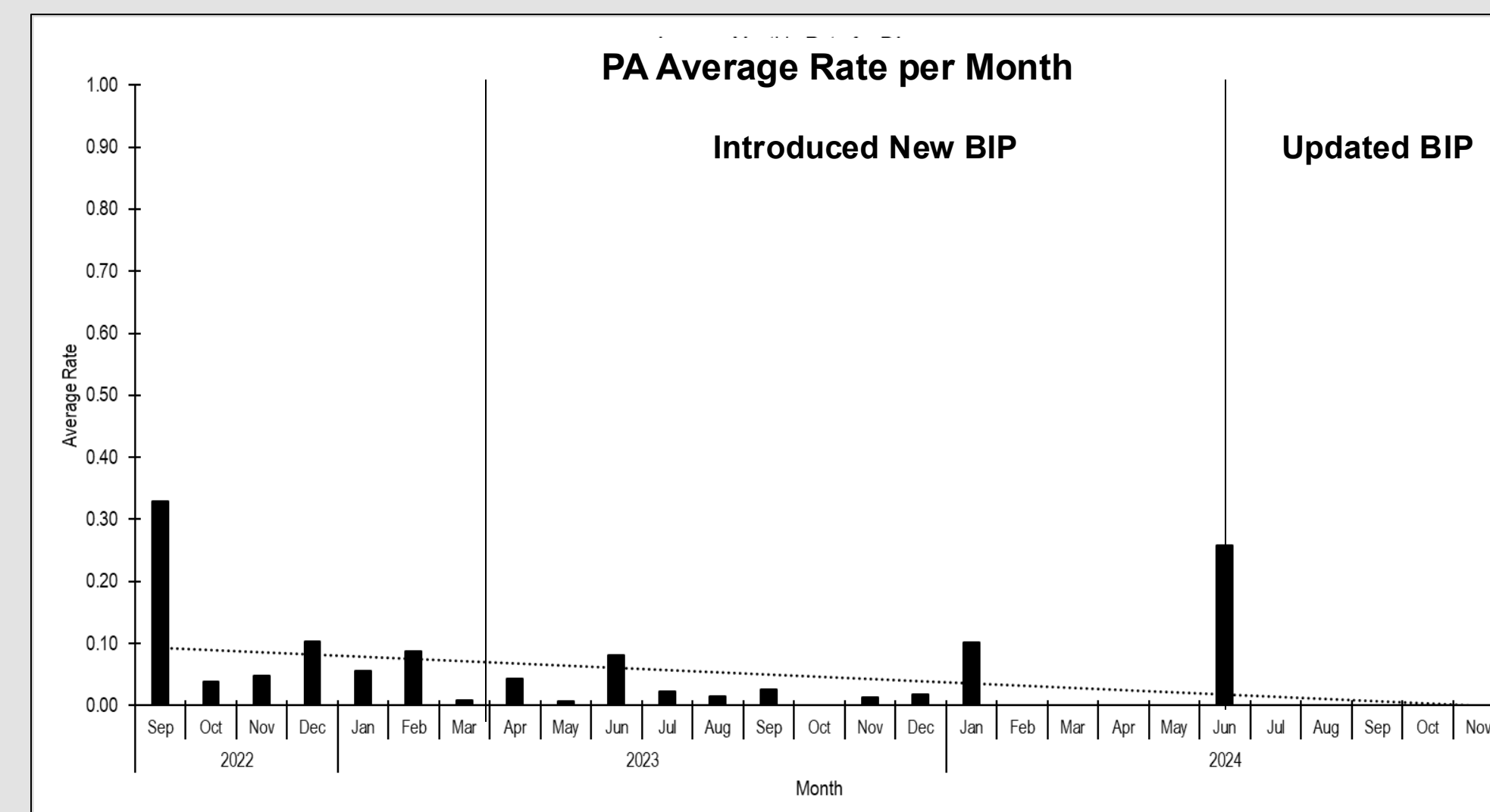
Note. Average rate per month of engagement in low magnitude property destruction from April 2023-November 2024. Intervention began following new BIP in April 2023.

Figure 5.
Use of Sensory Bucket During Neutral and Escalated States



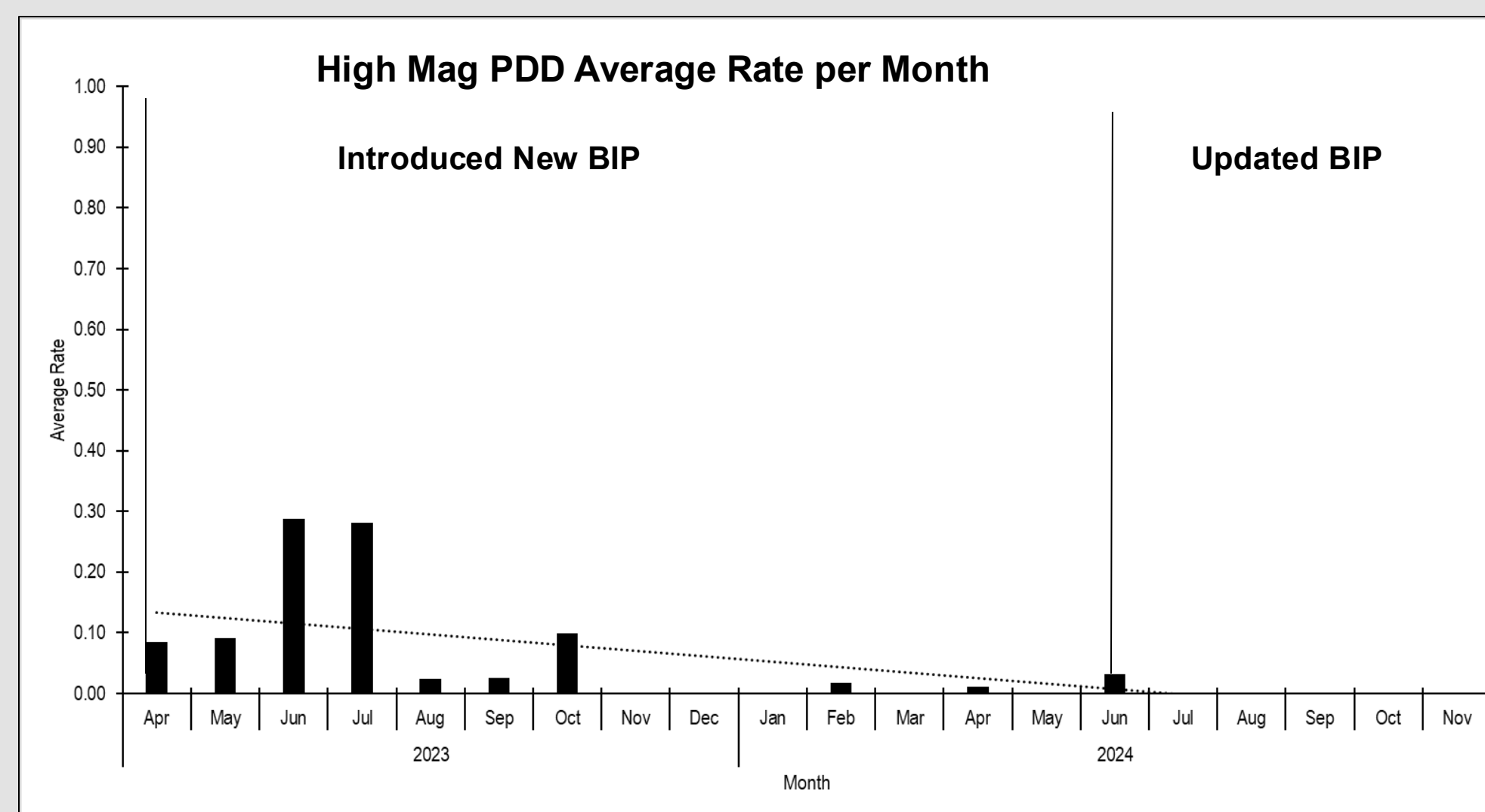
Note. Average percentage per month of correct responding per month for using sensory bucket items across neutral and escalated states.

Figure 2.
Average Rates of Physical Aggression



Note. Average rate per month of engagement in physical aggression from September 2022-November 2024.

Figure 4.
Average Rates of High Magnitude Property Destruction



Note. Average rate per month of engagement in high magnitude property destruction from April 2023-November 2024. Intervention began following new BIP in April 2023.

Figure 6.
Relevant Events

Date	Event	Date	Event
9/23/2022	Crisis management procedure	5/11/2024	Seizure
11/25/2022	Seizure	5/29/2024	Seizure
5/30/2023	Seizure	6/19/2024	Updated BIP
12/20/2023	Seizure	7/8/2024	Began late arrival
4/17/2023	Introduced new BIP	10/7/2024	Seizure
4/19/2024	Seizure	11/26/2024	Seizure

Note. Relevant dates from September 2022-November 2024. Last crisis management procedure occurred 9/23/2022.

Discussion

- Client consistently engaged in ripping/tearing items when sensory bucket was presented during HRE or neutral states. Within 2 months of introducing the intervention, the client engaged with sensory bucket for 80% of opportunities in the presence of challenging behaviors within No physical crisis interventions have occurred since beginning the intervention.
- Rates of SIB, PA, LMPDD, and HMPDD decreased to zero or near zero levels by November 2024. Rate of additional challenging behaviors decreased as the client began to consistently and independently engage with sensory bucket items.
- Client began to independently request access to ripping/tearing sensory bucket items prior to or at the onset of precursor behavior.
- Parent training will be utilized in the next phase to teach the client's parents how to implement procedures at home. Parent training can successfully teach caregivers how to prevent and address challenging behaviors within home settings (Machalicek et al., 2022).

References

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