# **Addressing Classroom Problem Behavior Reinforcers Reconsidered**

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For more information go to: www.practicalfunctionalassessment.com

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## If problem behavior is occurring with regularity.....

1. It is being reinforced

There are always other factors to consider

but reinforcement is always playing an important role that requires the team's full consideration

## If problem behavior is occurring with regularity.....

- 1. It is being reinforced
- 2. By multiple reinforcers

#### The reinforcers

for problem behavior in the classroom may not be singular, static, or generic, and instead are probably multiple, dynamic, and qualitatively rich.

Antecedent	→ Student Behavior	→ Consequence
Establishing operation	→ Problem Beh.	→ Reinforcement
Teacher assists another classmate	Throws materials	Teacher's attention
ParaPro instructs student to turn off iPad	SIB	ParaPro gives a little more time on iPad

#### The **one** thing at a time model:

An Antecedent

<u>An</u> Establishing operation  $\rightarrow$  A Behavior  $\rightarrow$  A Consequence

 $\rightarrow$  <u>A</u> Problem Behavior  $\rightarrow$  <u>A</u> Reinforcer

#### The shift to the many things at a time model:

Antecedents

Establishing operation<u>s</u>

- → Behaviors → Consequences
- $\rightarrow$  Problem Behavior<u>s</u>  $\rightarrow$  Reinforcer<u>s</u>

#### The many things at a time model:

Antecedents Establishing operations

Put away iPad to do chores (brother present)

- → Problem Behaviors → Reinforcers → Noncompliance + → Avoidance o
  - Noncompliance + resistance + negotiating + screaming + flopping + slapping

 $\rightarrow$  Behaviors

→ Avoidance of chores + continued time on iPad + choices + undivided attention

 $\rightarrow$  Consequences

#### Walt + Parent

Age: Diagnosis: Language Level: 4 Autism Fluent speech

Parent pretest (baseline)

Establishing operation<u>s</u> Put away iPad + to do chores (brother present)  $\rightarrow$  Problem Behavior<u>s</u>  $\rightarrow$  Reinforcer<u>s</u>

→ Noncompliance +
 → Avoidance of chores
 resistance +
 continued time on iPad +
 choices +
 screaming +
 undivided attention
 flopping +
 slapping

### If problem behavior is occurring with regularity.....

- **1. It is being reinforced**
- 2. By multiple reinforcers
- 3. In context of multiple establishing operations

I.e., problem behavior is influenced by synthesized reinforcement contingencies

#### Typical Reinforcement Period (Diego)

- Age 11
- Diagnosis
  Autism
- Language Level Speaks in Short Sentences
- Referred for

Self-injurious behavior, Aggression, Property Destruction

• Model

School consultation

#### Baseline example (Diego)

• Age

#### 11

- Diagnosis
  Autism
- Language Level Speaks in Short Sentences
- Referred for Self-injurious behavior, Aggression, Property Destruction
- Model

School consultation

From Hanley et al. 2014, JABA

Case Example (Gail, 3 yo, dx: PDD-NOS) Setting: Clinic

Isolated contingencies sometimes do not influence behavior whereas synthesized contingencies do.



#### **Comparison** (Slaton et al., 2017, *JABA*)



\*Whole contingencies have properties that sometimes cannot be found in the parts of the contingency **Isolated** contingencies sometimes do not influence behavior whereas synthesized contingencies do.

From:

Nature and Scope of Synthesis in Functional Analysis and Treatment of Problem Behavior

Slaton & Hanley (in press, JABA)

Synthesized Contingency	First Author (Year)	Participants
Escape to mand compliance	Bowman (1997) Eluri (2016) Jessel (2016) Roscoe (2015)	Ben, Jerry Pablo Allen, Mike, Jesse, Jian Chris
Escape to previous activity	Adelinis (1999) Fisher (1998) Hanley (2014) Hagopian (2007)	Raffie Ike, Tina Bob Perry, Maxwell, Kelly
Escape to rituals / stereotypy	Leon (2013) Rispoli (2014) Jessel (2016) Slaton (2017)	Laura Timmy, John, Diego Sam Chloe
Attention + tangibles	Brown (2000) Ghaemmaghami (2016) Hanley (2014) Mann (2009) Payne (2014) Santiago (2016)	Jim Jack, Nico Gail Madison Samantha Karen
Escape + tangibles	Fisher (2016) Jessel (2016) Lambert (2017) Lloyd (2015) Roscoe (2015) Slaton (2017) Strohmeier (2016)	Cameron Kristy, Jim, Carson, Chris, Mitch S-2 Abhi, Sid Jim Riley, Dylan, Jeff, S-1 (no pseudonym given)
Escape + attention	Mueller (2005) Payne (2014) Sarno (2011)	Bob Andrew Brandon, Franklin, J'Marcus
Escape + attention + tangibles	Fisher (2016) Ghaemmaghami (2015) Jessel (2016) Santiago (2016) Slaton (2017)	Alan, Allie, Sylvia, Tina Dan Jeff, Gary, Wayne, Earl, Keo, Lee, Paul Zeke Diego, Emily, Kyle, Jonah
Escape + attention + tangibles + mand compliance	Ghaemmaghami (2016) Hanley (2014) Jessel (2016)	Alex Dale Jian
Escape + preferred conversation topics	Jessel (2016) Santiago (2016) Slaton (2017)	Sid, Beck, Steve Karen Mason

# Treatment efficacy often depends on synthesized (%) From: Nature and Scope of Synthesis in Functional Analysis and Treatment of Problem Behavior Image: Comparison of Compariso



**Synthesized contingencies** had a better effect size in 25 of 26 cases (96%) and never had a smaller effect

Treatment applications

Synthesized □ Isolated

# Treatment efficacy often depends on synthesized (%) From: Nature and Scope of Synthesis in Functional Analysis and Treatment of Problem Behavior Image: Comparison of Compariso



## The many things at a time TREATMENT model:

Antecedents Same establishing

Operation<u>s</u>

→ Behaviors

→ New Skills → Same reinforcers Communication Toleration Contextually appropriate behavior

Put away iPad + to do chores (brother present) \* "excuse me"
 Listens to parent
 "May I have my way please"
 "Okay, no problem"
 Complies with multiple
 instructions and corrections

 break from more chores+ time on iPad + choices of activity + some undivided attn

 $\rightarrow$  Consequences



#### Walt + Parent

Age: 4 Diagnosis: Autism Language Level: Fluent speech

#### Generality test

\*Note how he communicates, tolerates, and complies with the parental expectation

\*\*Note how he handles being corrected and held to a high standard

\*\*\*Note how he "checks in" with his parents as he engages in the expected behavior.

These outcomes occur because his parent has been taught to never foreshadow which behavior will be reinforced and to routinely reinforce mere communication, toleration, and small amount of contextually appropriate behavior while also sometimes expecting an impressive amount of contextually appropriate behavior (these strategies keeps hope alive and problem behavior away).

#### Intervention example (Diego)

- \*Note the reinforcement of a mere tolerance response (a surprise shorty!)
- and then reinforcement of a long chain of contextually appropriate (IEP-based) behavior
- \*\*Note the use of the synthesized reinforcer (same one as that used in baseline)

- Age 11
- Diagnosis
  Autism
- Language Level
  Speaks in Short Sentences
- Referred for

 $\bullet$ 

- Self-injurious behavior, Aggression, Property Destruction
- Model School consultation

Effects de	emed meaningful by nd teachers	Journal of Applied Behavior Analysis JOURNAL OF APPLIED BEHAVIOR ANALYSIS	2014, 47, 16-36	NUMBER 1 (SPRING)	
following analysis and treatment involving		PRODUCING MEANINGFUL IMPROVEMENTS IN PROBLEM BEHAVIOR OF CHILDREN WITH AUTISM VIA SYNTHESIZED ANALYSES AND TREATMENTS			
		GREGORY P. HANLEY, C. SANDY JIN, NICHOLAS R. VANSELOW, AND LAURA A. HANRATTY		LOW, AND (2014, JABA)	
continger	ncies	J Autism Dev Disord DOI 10.1007/s10803-015-2617-0	'ESTERN NEW ENGLAND UNIVERSITY	CrossMark	
delivered	on	ORIGINAL PAPER			
intermitte schedules	ntermittent and unpredictable chedules The Generality of Interview-Informed Functional Analyses: Systematic Replications in School and Home (2016, JA Joana L. Santiago <sup>1</sup> · Gregory P. Hanley <sup>2,3</sup> · Keira Moore <sup>4,5</sup> · C. Sandy Jin <sup>4,6</sup>				
Similar	Strand & Eldevik		(201	7, <i>Beh. Int.</i> )	
effects Herman, Healy, & I		ydon	(201	8, Dev. Neuro.)	
reportea bv	Jessel, Ingvarsson,	Metras, Hillary, &	Whipple (201	8,	
other	Beaulieu, Clausen, Williams, & Herscovitch		covitch (201	8, <i>BAP</i> )	
<i>research</i> Chusid & Beaulieu			(201	8, <i>JABA</i> )	
groups	Taylor, Phillips, & Gertzog		(201	8, <i>Beh. Int.)</i>	

#### Why do synthesized contingencies allow for effective outcomes?

**Could be the:** 

greater amount of reinforcement more varied reinforcement opportunity to choose reinforcement positive interaction between reinforcers

....

Until these things are parceled out (only to discover it is probably all of them), let's consider this metaphor:

#### **Greater Motivational Distance Travelled**





here we have relatively short motivational distance travelled

No tangibles, no mand compliance, limited sensory reinforcers, no high quality attention, & work tangibles, mand compliance,to all sensory reinforcers,high quality attention, and no work



#### here we have relatively long motivational distance travelled

## if problem behavior is occurring with regularity .....

- **1.** Assume it is being influenced by multiple reinforcers at the same time
- 2. Use synthesized reinforcement contingencies to teach expected behavior and the important life skills
  - communication,
  - toleration,
  - contextually appropriate behavior
- 3. Maintain these skills via intermittent and unpredictable reinforcement
  - and don't forget about surprise shorties!

## To learn more go to: <u>www.practicalfunctionalassessment.com</u>

And consider attending (or viewing later) sessions 48 and 61