

# Practical Functional Assessment and Skill-Based Treatment of Severe Problem Behavior



*Improving Outcomes through Research-Based Innovations*

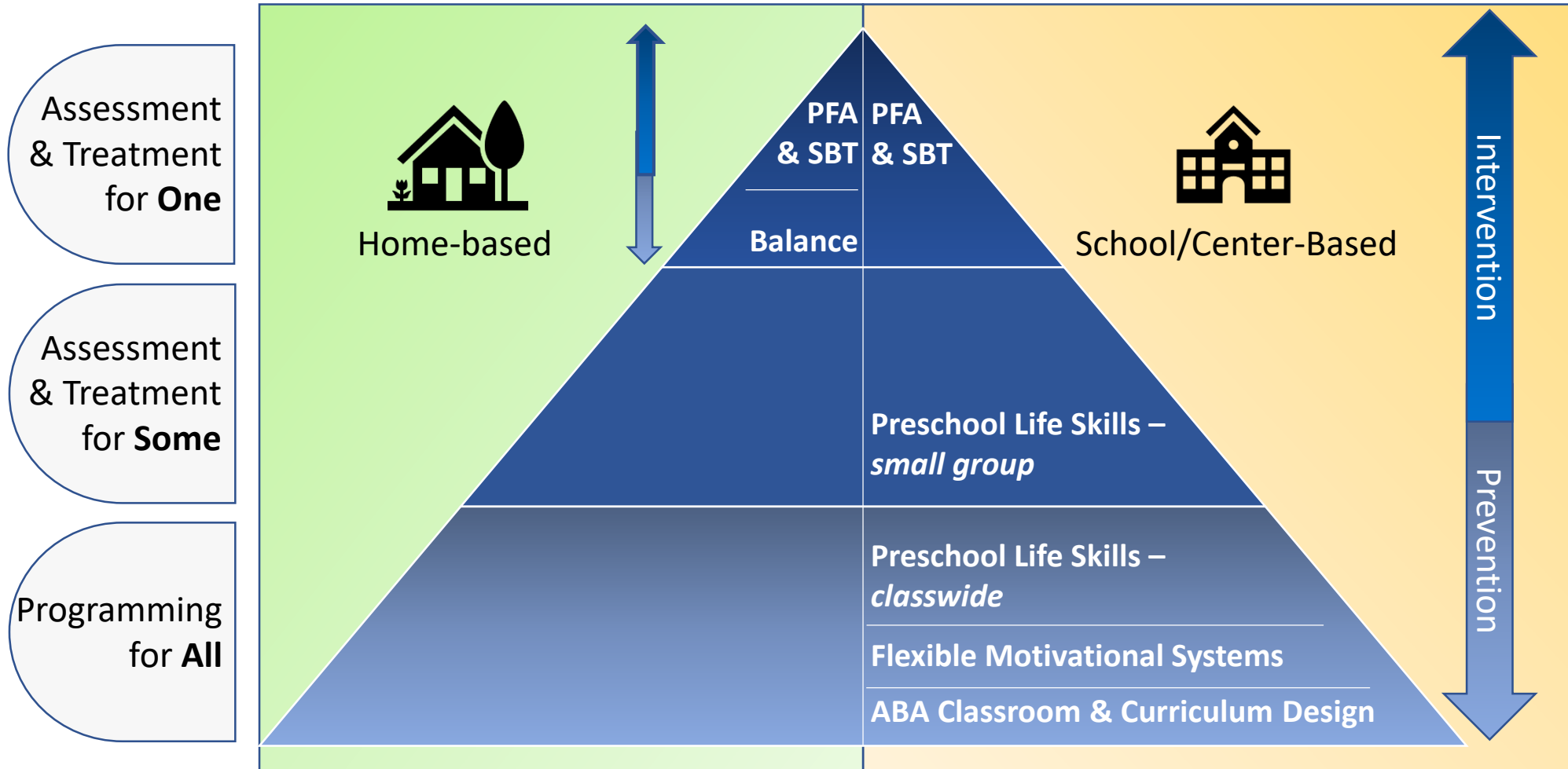


*Presented by*

**Gregory P. Hanley, Ph.D., BCBA-D, LBA**

**2019**

# FTF Behavioral Consulting relies on a **Response to Intervention (RTI) model** for addressing **problem behavior**



# The Problem

- Problem behavior is prevalent among children with autism and is sometimes severe and intractable
- Many “solutions” often exacerbate or prolong the problem
  - *Behavior modification*
  - Behavior medication
  - *Behavior mollification*
  - Behavior micro-analysis
  - Behavior remediation without developing a replacement repertoire

# A Probable Solution

## PFA & SBT

- **Practical Functional Assessment and Skill-Based Treatment**
  - Shown to produce socially meaningful outcomes
  - Shown to be a socially valid and generally applicable process
  - Shown to be effective without coercion or physical management

# Assumptions

Multiple events co-occur to evoke problem behavior

e.g., request to stop doing what he is doing, presentation of difficult/non-preferred task to complete alone, while no one honors any mands, preferences, etc.

Multiple events occur simultaneously to reinforce (strengthen) problem behavior

e.g., escape from \_\_\_\_\_ to access \_\_\_\_\_ while people are available to \_\_\_\_\_

Different forms of problem behavior by the same child are often maintained by the same **synthesized reinforcement contingency**

**Socially valid outcomes from the  
PFA and SBT process are  
possible**

Effects deemed **meaningful** by parents and teachers following analysis and treatment involving synthesized reinforcement contingencies

*Journal of Applied Behavior Analysis*  
 JOURNAL OF APPLIED BEHAVIOR ANALYSIS 2014, 47, 16–36 NUMBER 1 (SPRING)

*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  
 WESTERN NEW ENGLAND UNIVERSITY

(2014) *JABA*

J Autism Dev Disord  
 DOI 10.1007/s10803-015-2617-0

ORIGINAL PAPER

**The Generality of Interview-Informed Functional Analyses: Systematic Replications in School and Home**

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>

(2016) *JADD*

*Similar effects reported in these studies from other research groups*

Strand & Eldevik (2017) *Beh. Int.*

Herman, Healy, & Lydon (2018) *Dev. Ne.*

Jessel, Ingvarsson, Metras, Hillary, & Whipple (2018) *JABA*

Beaulieu, Clausen, Williams, & Herscovitch (2018) *BAP*

Taylor, Phillips, & Gertzog (2018) *Beh. Int.*

Chusid & Beaulieu (2018) *JABA*

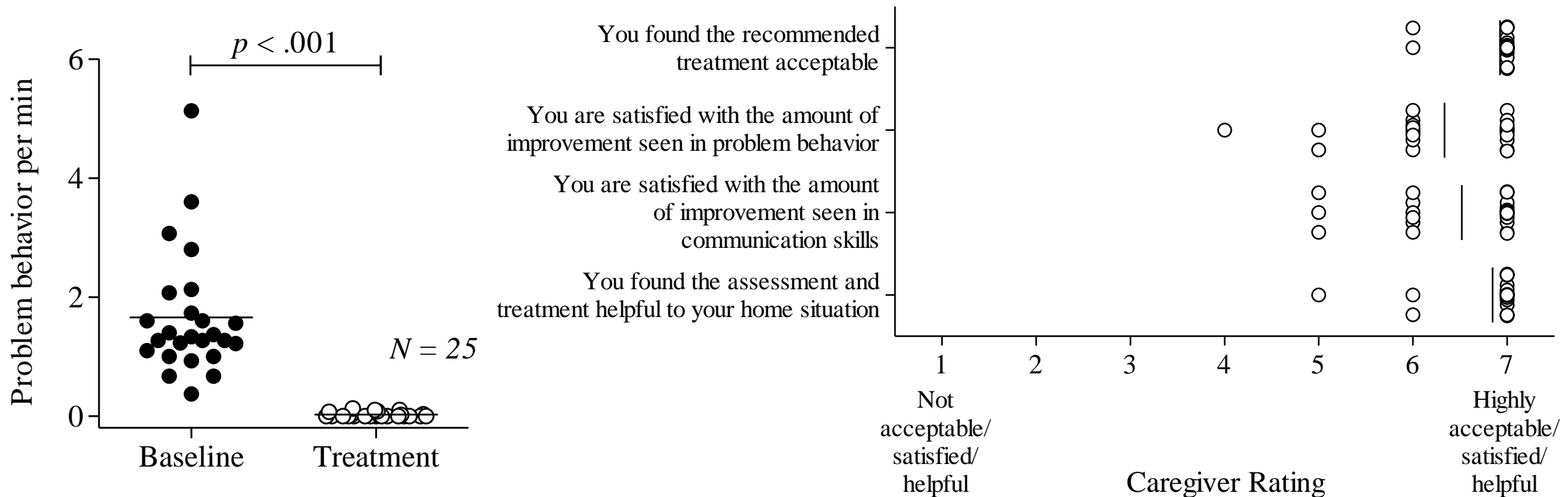
Ferguson, Leaf, Cihon, Milne, Leaf, McEachin, & Leaf (2019) *ETC*

**Socially valid outcomes from  
the PFA and SBT processes are  
probable**



# Jessel, Ingvarsson, Metras, Hillary, & Whipple (2018, *JABA*)

## Achieving Socially Significant Reductions in Problem Behavior following the Interview-Informed Synthesized Contingency Analysis: A Summary of 25 Outpatient Applications



*\*Similar CCCSD evidence for any other functional assessment process does not exist.*

# PFA and SBT are consistent with Trauma-Informed Care

## Safety



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Ensuring physical and emotional safety

## Choice



Individual has choice and control

## Collaboration



### Definitions

Making decisions with the individual and sharing power

## Trustworthiness



Task clarity, consistency, and Interpersonal Boundaries

## Empowerment



Prioritizing empowerment and skill building

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### Principles in Practice

# Active Response Opportunity

What are the working assumptions when using the PFA process?

# Procedures

\*What is involved in a Practical Functional Assessment (PFA) process?

- An open-ended interview (*always*)
- A functional analysis (*always*)
  - An IISCA
    - An Interview-Informed
    - Synthesized Contingency
    - Analysis

# Example Case: *Brandon*

## The open-ended interview

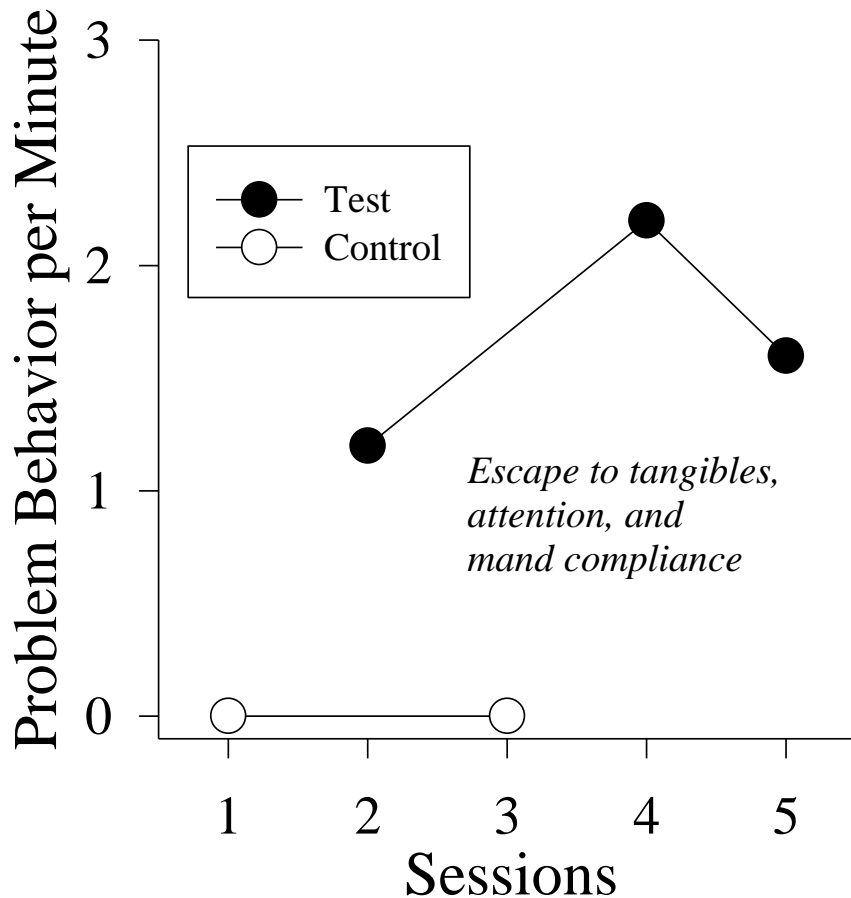
- *Age:* 3
- *Diagnosis:* None
- *Language:* Speaks in short sentences
- *Referred for:* Aggression, meltdowns, noncompliance
- *To:* Life Skills Clinic (outpatient model) at Western New England University

### \* *Mission to identify:*

1. the most concerning problem behavior and all other forms of problem behavior that co-occur in the same situations with (or prior to) the most concerning problem behavior
2. the events that seem to co-occur and reliably evoke problem behavior
3. the types of events and interactions that have occurred following problem behavior and are reported to stop the problem behavior

1. **Hitting, kicking, biting, throwing objects, dropping to the floor while crying, refusing to follow parental instructions**
2. **Interrupting his play/game, removing toys (e.g., action figures), seeing others playing with his toys, adult noncompliance with mands, instructions to play differently, to play quietly on iPad, to sit quietly with books, or to clean up toys**
3. **Escape from parental instructions to his toys, parental attention/interaction, and mand compliance**

# Example IISCA: *Brandon*



## *Notes:*

Test sessions were repeated at least twice

Control and test sessions are alternated to evaluate whether suspected contingency influences problem behavior

\*Why bother with analysis? Why spend time? Why invite the risk?

**Because it gives the practitioner:**

- a context to demonstrate whether they can safely influence problem behavior
- a scientific verification of the hypothesis from the interview
- a properly motivating set of conditions to teach important *life skills*

And the teaching of these skills is the key to a meaningful life

# Aim of a Practical Functional Assessment

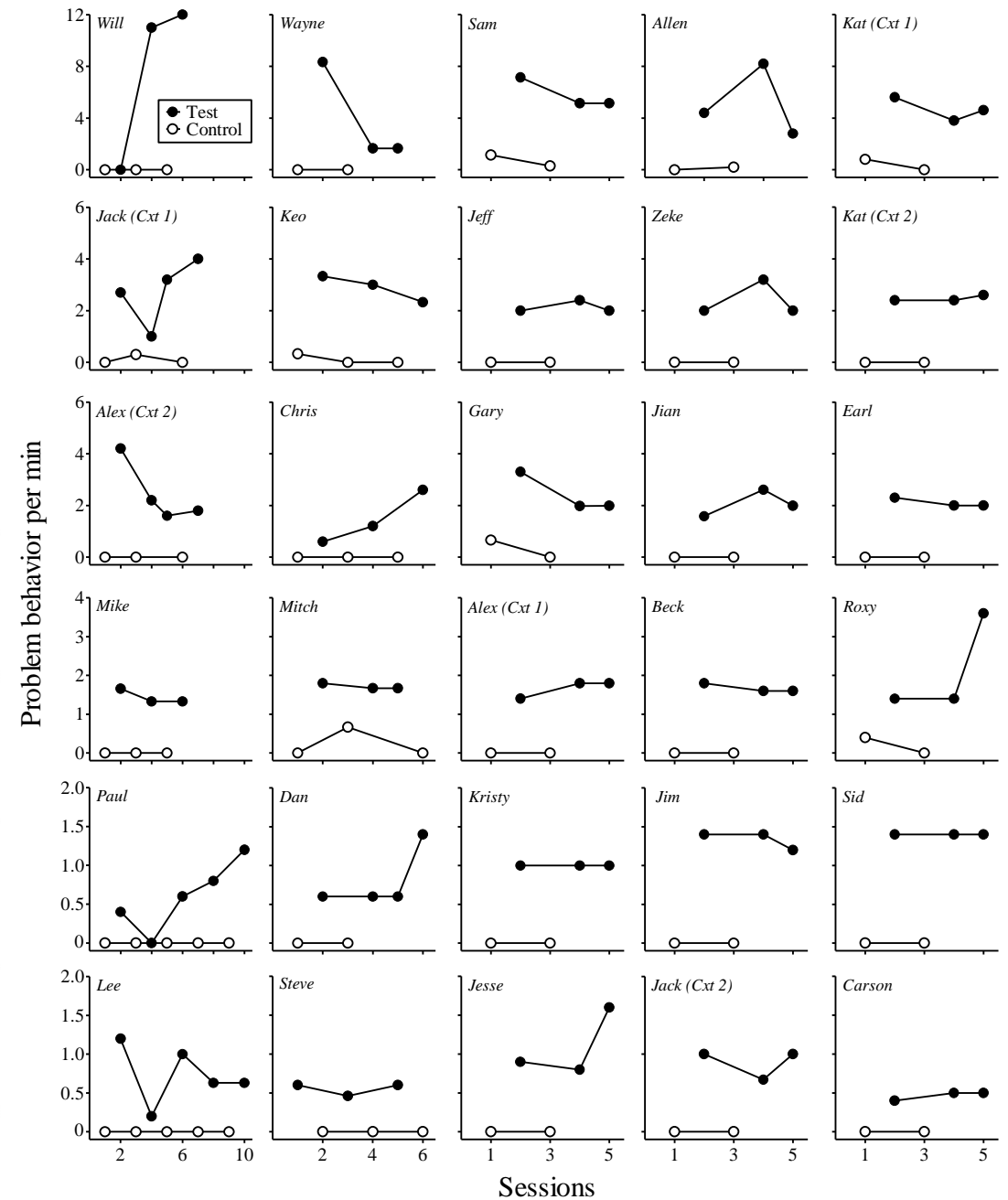
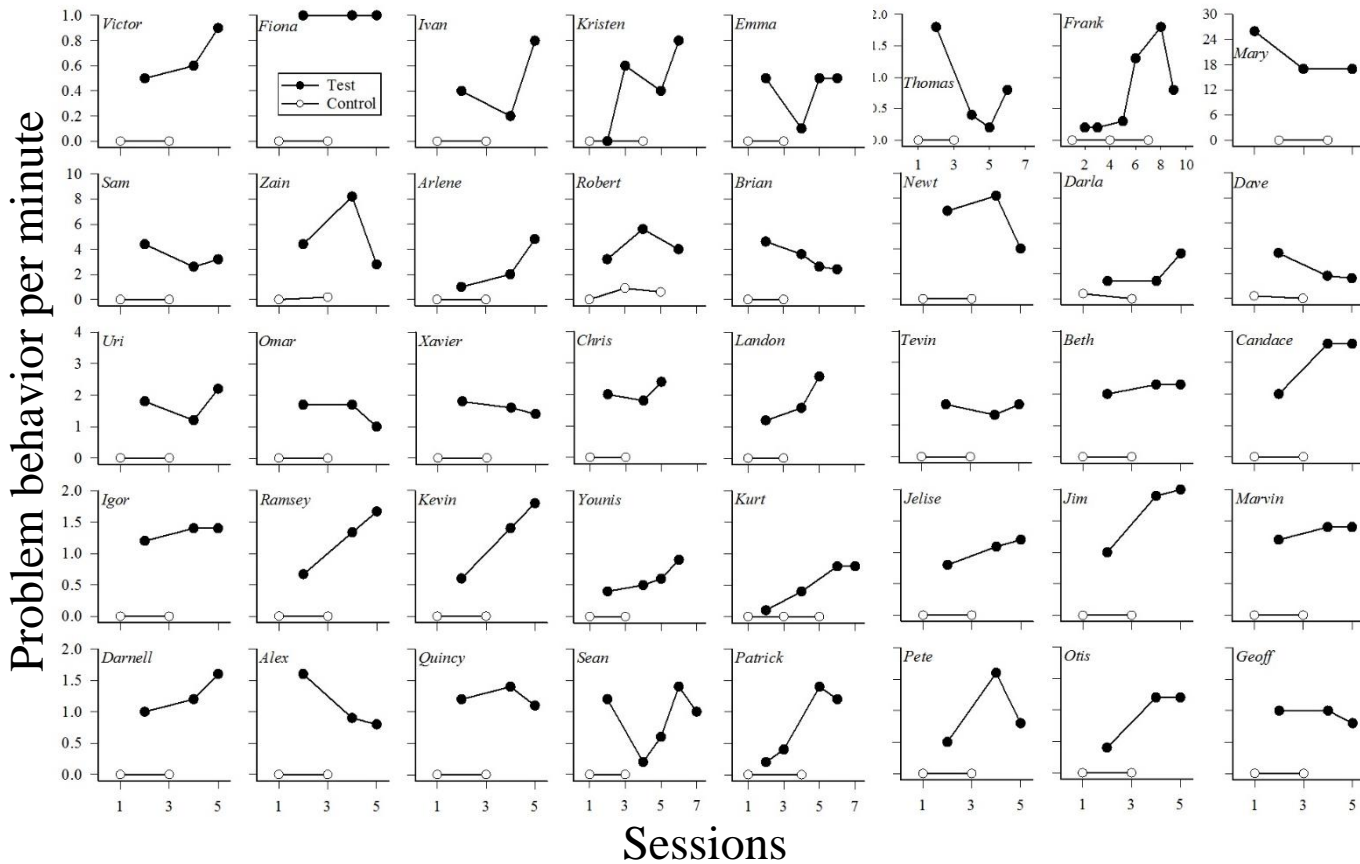
\*NOT to identify the function of a problem behavior\*

**Aim is strong control of problem behavior  
via ecologically-relevant reinforcement contingency**



Strong control of problem behavior is paramount and evident in IISCAs

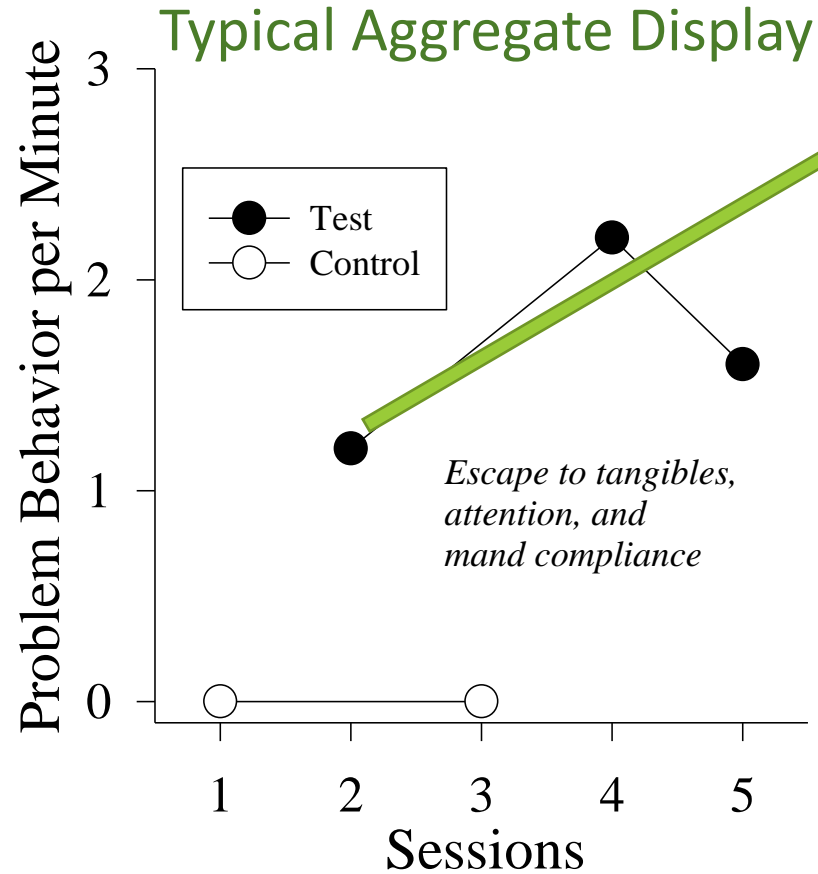
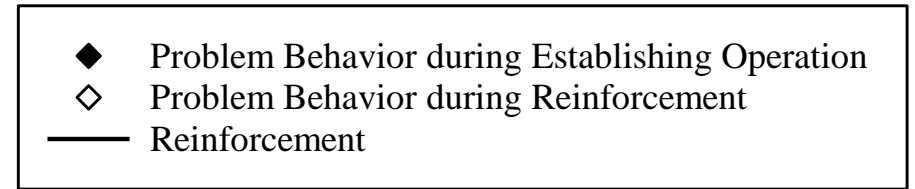
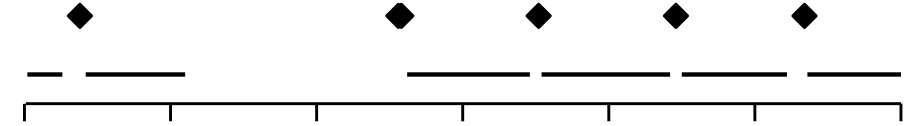
From Rajaraman, Hanley, et al. (in prep.)



Strong control of problem behavior is paramount and evident *within* IISCA test sessions

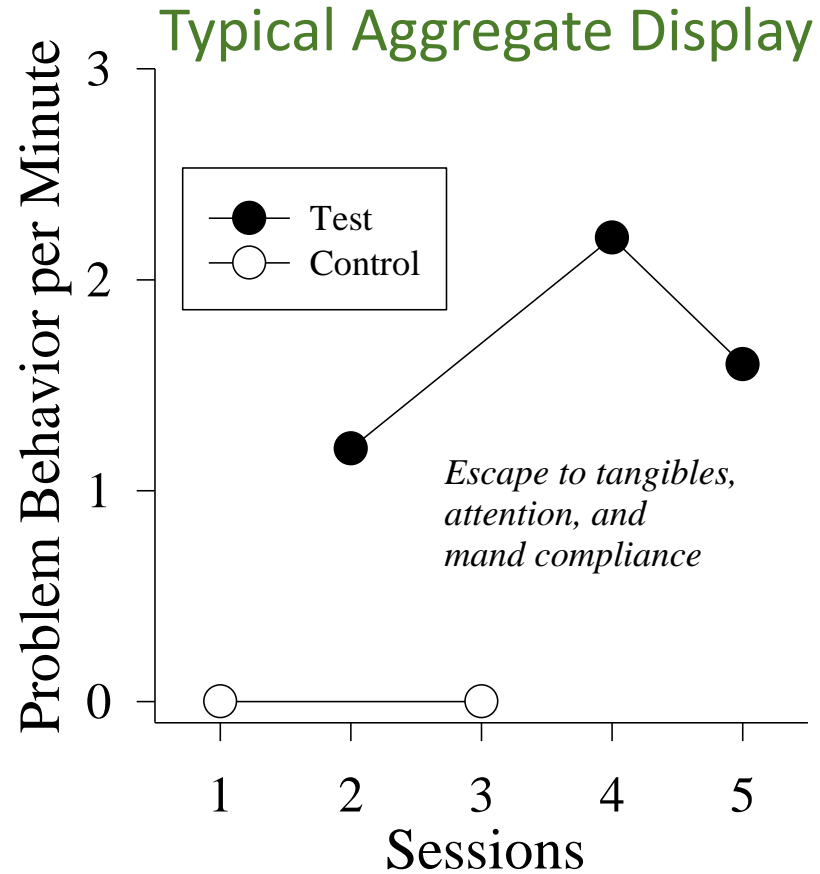
### Intimate Display of Test Sessions

Session 2



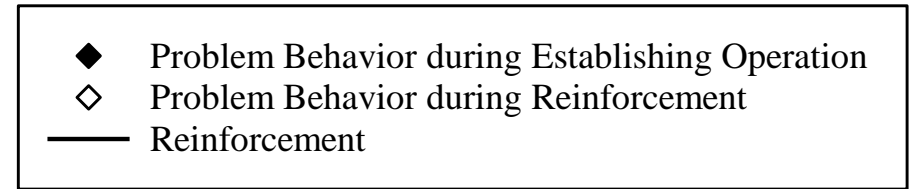
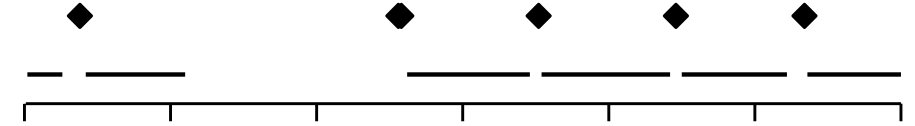
Seconds

Strong control of problem behavior is paramount and evident *within* IISCA test sessions

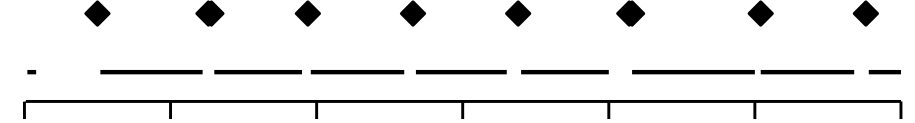


### Intimate Display of Test Sessions

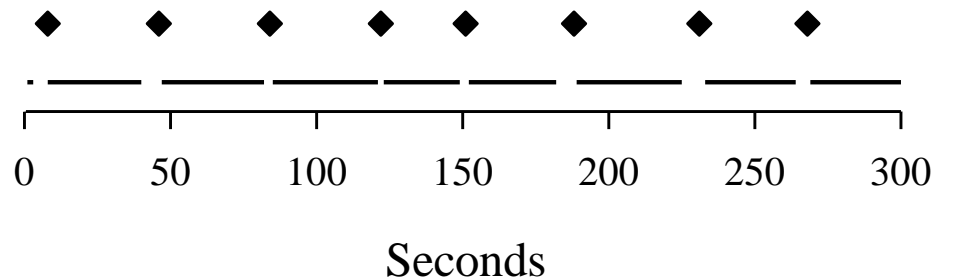
Session 2



Session 4



Session 5



# Implications of strong control of problem behavior

You can turn off problem behavior

= analysis informed treatment process can be safe & effective

You can turn on problem behavior

= skills may be developed in treatment

With an ecologically relevant contingency

= problem behavior reductions and skills  
may transfer to relevant context

# UPDATED IISCA RECOMMENDATIONS

1. Create clear SR and EO locations/periods

## Create clear SR and EO periods

Alternatives:

1. Floor and table
2. Two tables, separated
3. Two tables in L-shape with spinning chair
4. Two bins
5. One Table with signals provided by analyst

EO=Standing

SR=Squatting

# UPDATED IISCA RECOMMENDATIONS

1. Create clear SR and EO locations/periods
2. Have child/client directly enter and experience the SR context
  - a. Access to multiple preferred activities
  - b. Experience, promise of no instructions, redirections, or restrictions
    - i. Freedom of movement
    - ii. Stereotypy unrestricted and admired
  - c. Availability of attention/interaction, mand compliance
3. Relax. Do not begin data collection until child is happy, relaxed, & engaged (HRE)
4. Have parent or staff who understands the child/client present for analysis; ask about HRE; inquire about their understanding and comfort

# UPDATED IISCA RECOMMENDATIONS

1. Create clear SR and EO locations
2. Have child/client enter observation space upon arrival and experience the SR context
3. Relax. Do not begin data collection until child is happy, relaxed, & engaged
4. Have parent or staff who understands the child/client present for analysis; ask about H, R, & E, inquire about their understanding and comfort
5. Rely on an “open-door analysis;” observe where client goes and what they do



# UPDATED IISCA RECOMMENDATIONS

1. Create clear SR and EO locations
2. Have child/client enter observation space upon arrival and experience the SR context
3. Relax. Do not begin data collection until child is happy, relaxed, & engaged
4. Have parent or staff who understands the child/client present for analysis; ask about H, R, & E, inquire about their understanding and comfort
5. Rely on an “open-door analysis;” observe where client who has left goes and what they do
6. Videotape all sessions (consider app for data collection)
7. Record dangerous and non-dangerous PB (reported to co-occur), whether in SR or EO, and engagement during SR

# HSCA Data Sheet-Performance-Based Criteria

(March 3, 2019) Child/Client Name: \_\_\_\_\_ Analyst: \_\_\_\_\_ Implementor: \_\_\_\_\_ Consultant: \_\_\_\_\_

R1s:

% engagement: \_\_\_\_\_

R2s:

% of PBs in EO: \_\_\_\_\_

Minute	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17																
Second	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59		
If in EO	R1																																	
	R2																																	
EO Line																																		
SR Line																																		
If in SR	R2																																	
	R1																																	
Engaged																																		

Second	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59	0-30	31-59			
If in EO	R1																																		
	R2																																		
EO Line																																			
SR Line																																			
If in SR	R2																																		
	R1																																		
Engaged																																			

**Instructions:** **1.** Draw one a horizontal line when in SR, stop line and start new one above when EO is cued and progressively implemented, start line again when SR is cued. **2.** Draw a vertical line for each problem behavior, with R1 lines being extended and R2 lines being relatively short. **3.** If child/client is happy, relaxed, and engaged for the majority of the SR interval, place a check in the 30-s interval. **4.** Impose the initial EO, only after at least 3 min of continuous, happy, and relaxed engagement; impose subsequent Eos after 30 s of continuous, happy, and relaxed engagement. **5.** End the analysis after only one or a couple R2s occur within 5s of the EO cue/progression, one or less R2s and zero R1s occur in the subsequent SR period, and the child re-engages within about 10 s after SR is delivered (i.e., continue analysis if any of these conditions are not met; modify the analysis if these conditions are not met within 30 min

# UPDATED IISCA RECOMMENDATIONS

8. Provide:

**all suspected reinforcers**

immediately following

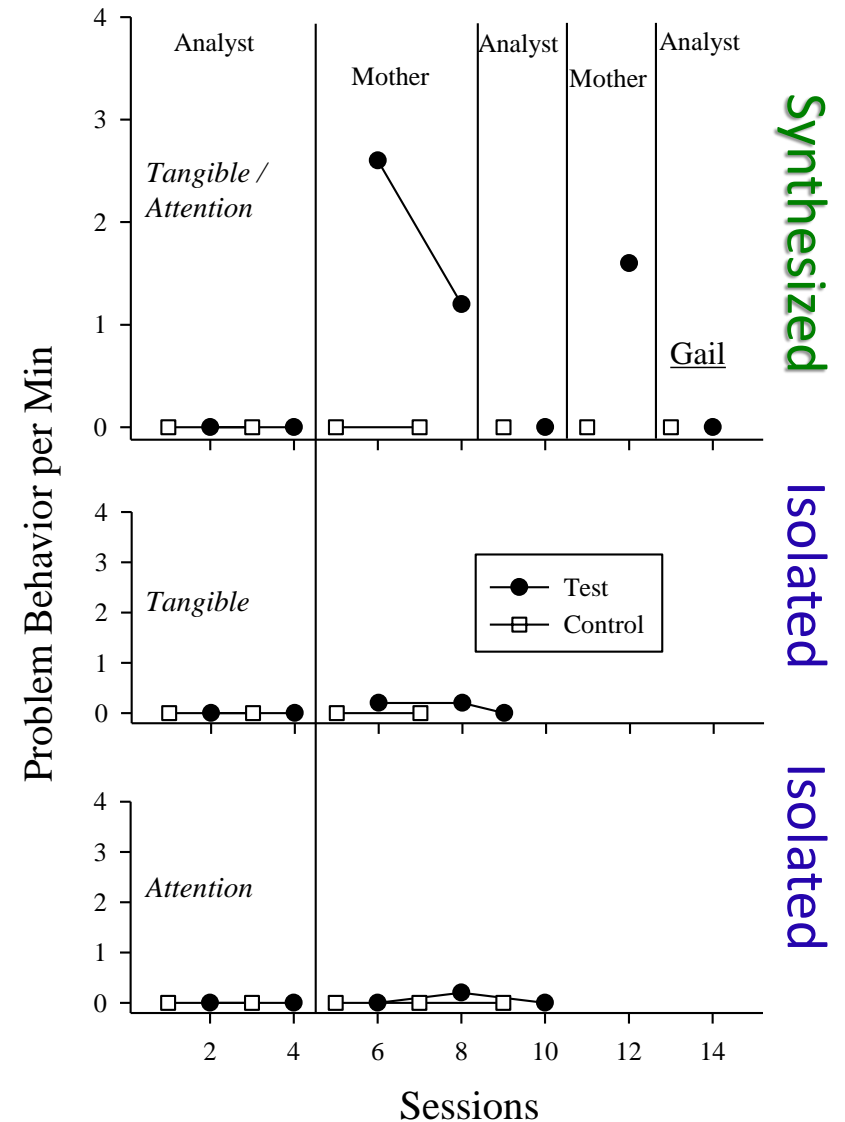
the first response suspected as being part of the response class

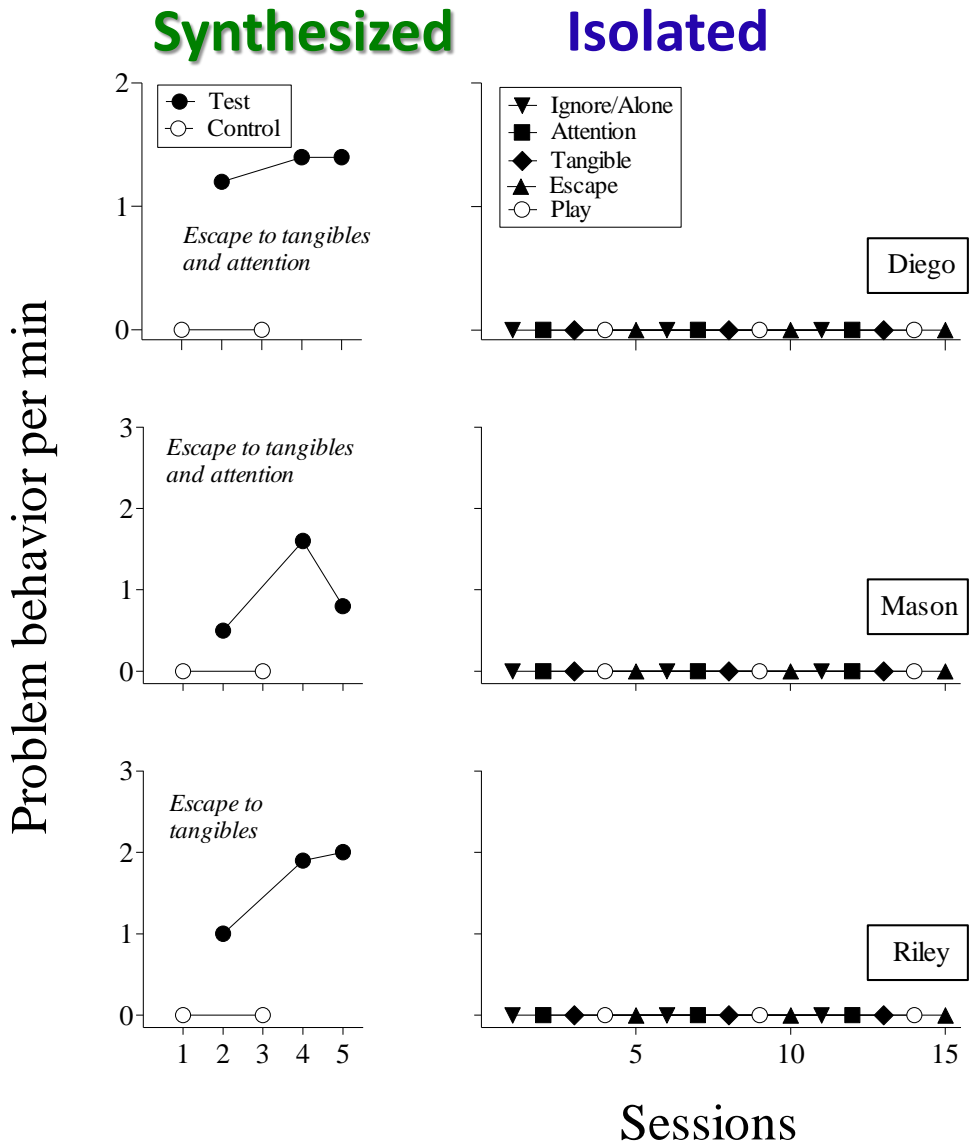
From Hanley et al., 2014, *JABA*

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

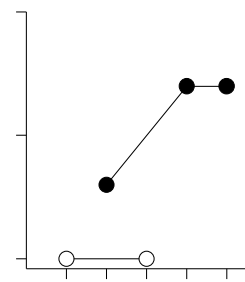
**Isolated** contingencies sometimes do not control behavior whereas **synthesized** contingencies do.

*This is not a paradox, just a classic example of an interaction without main effects*





**Synthesized**



Comparative analyses usually show that synthesized reinforcement contingencies influence problem behavior whereas isolated ones do not

**Whole contingencies have properties that sometimes cannot be found in the parts of the contingency**

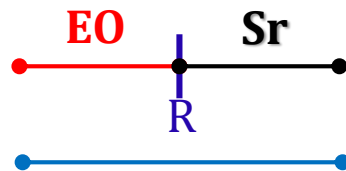
**Single tests of individual reinforcers are not capable of verifying the irrelevance of synthesized reinforcers**

# With single reinforcers, there is relatively short **motivational distance travelled** as child transitions from:

no skittle sliver      to      having a skittle sliver

work      to      no work

no attention      to      attention (reprimands)

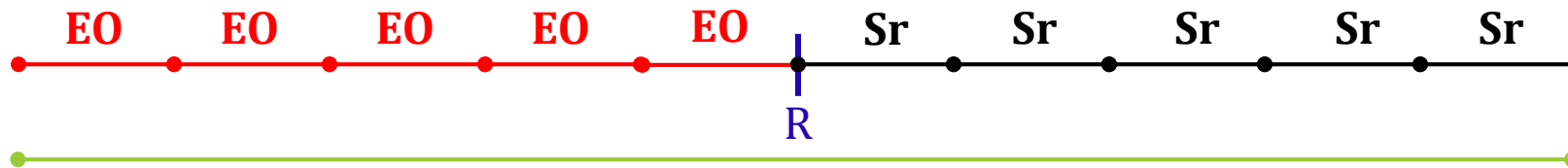


# With IISCA, there is relatively long **motivational distance travelled** as child transitions from:

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

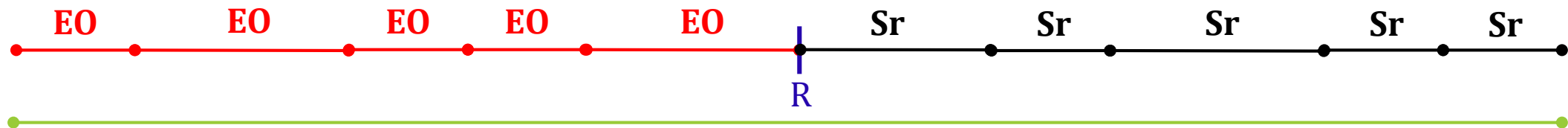
to

tangibles, mand compliance,  
all sensory reinforcers,  
high quality attention, and no work



With IISCA, there is relatively long **motivational distance travelled** as child transitions from:

*But, don't forget about possible interactions:*



*which probably creates even greater **motivational distance travelled***



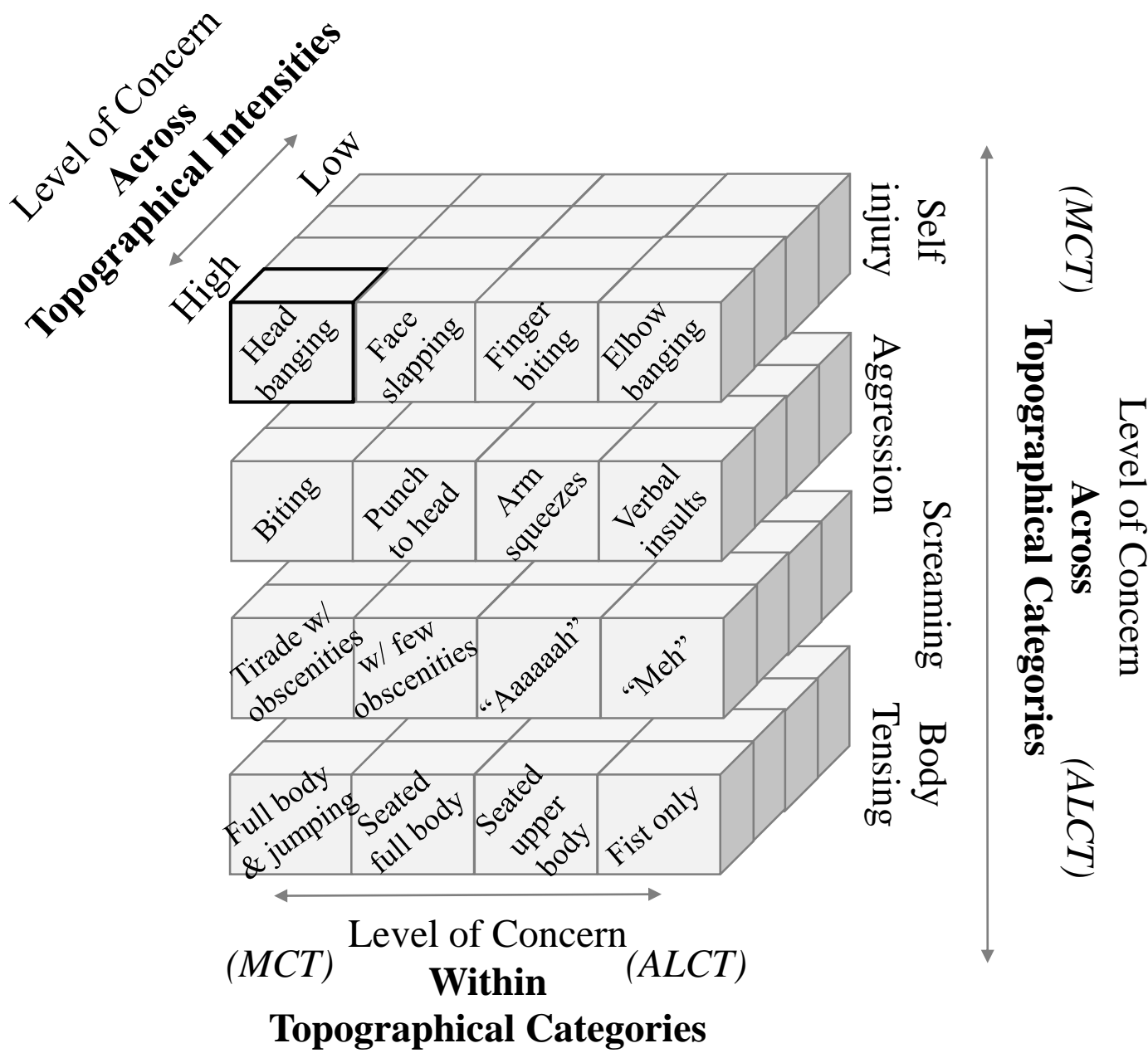
# UPDATED IISCA RECOMMENDATIONS

8. Provide:

all suspected reinforcers

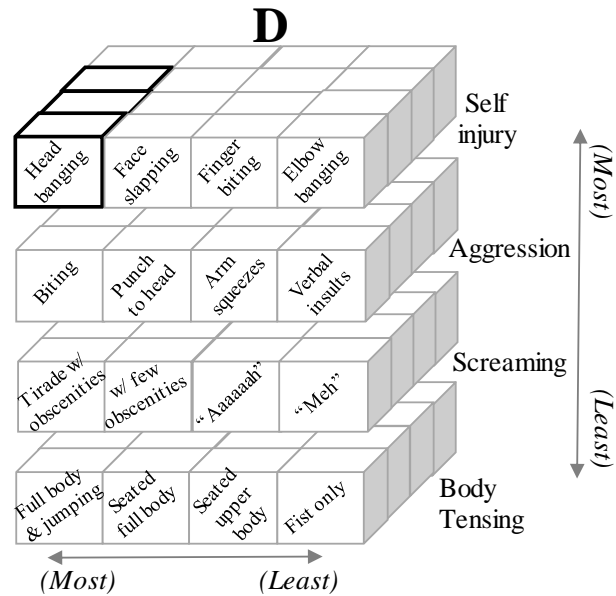
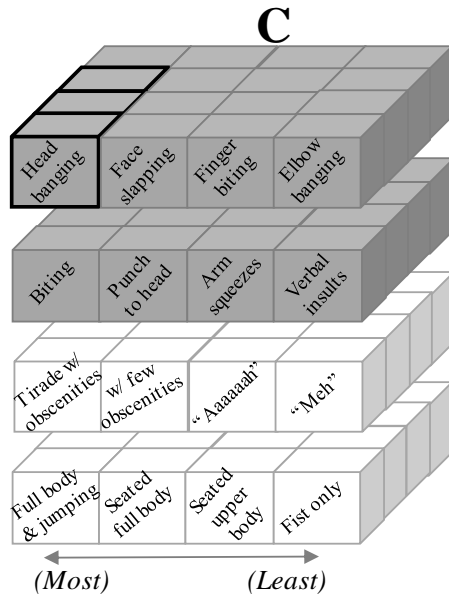
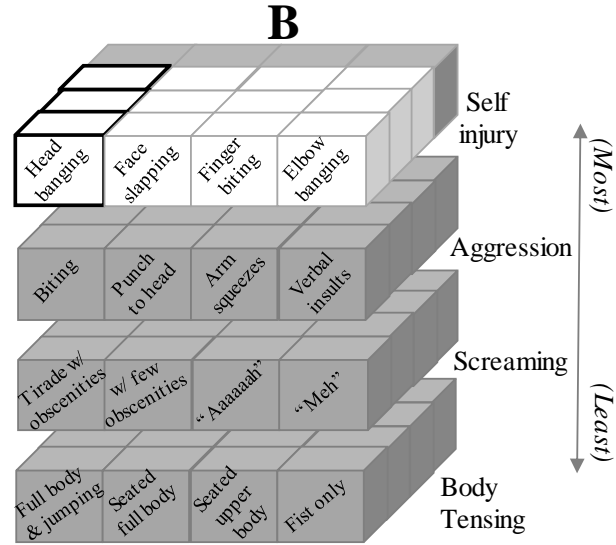
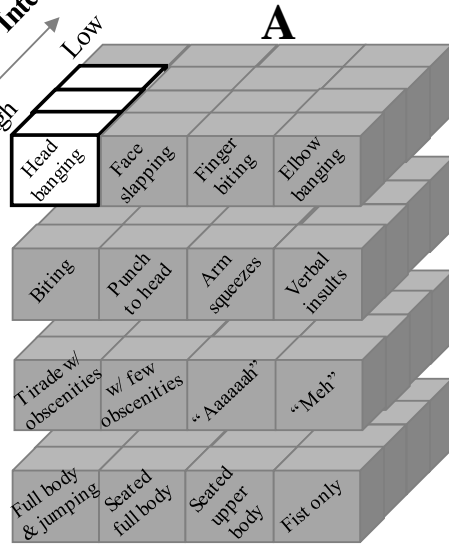
**immediately following**

**the first response suspected as being part of the response class**



This schematic provides a visual display of a possible repertoire of problem behavior whose members were reported by caregivers as co-occurring in the same evocative situations. If the primary concern of the caregivers is high-intensity head banging, a behavior analyst must then decide on the contingency class for their functional analysis, weighing the factors of risk, efficiency, and inference.

Level of Concern  
Across  
Topographical Intensities



Level of Concern  
Within Topographical Categories

Select the responses to  
be consequated in  
analysis:

**A**

**B**

**C or**

**D ?**

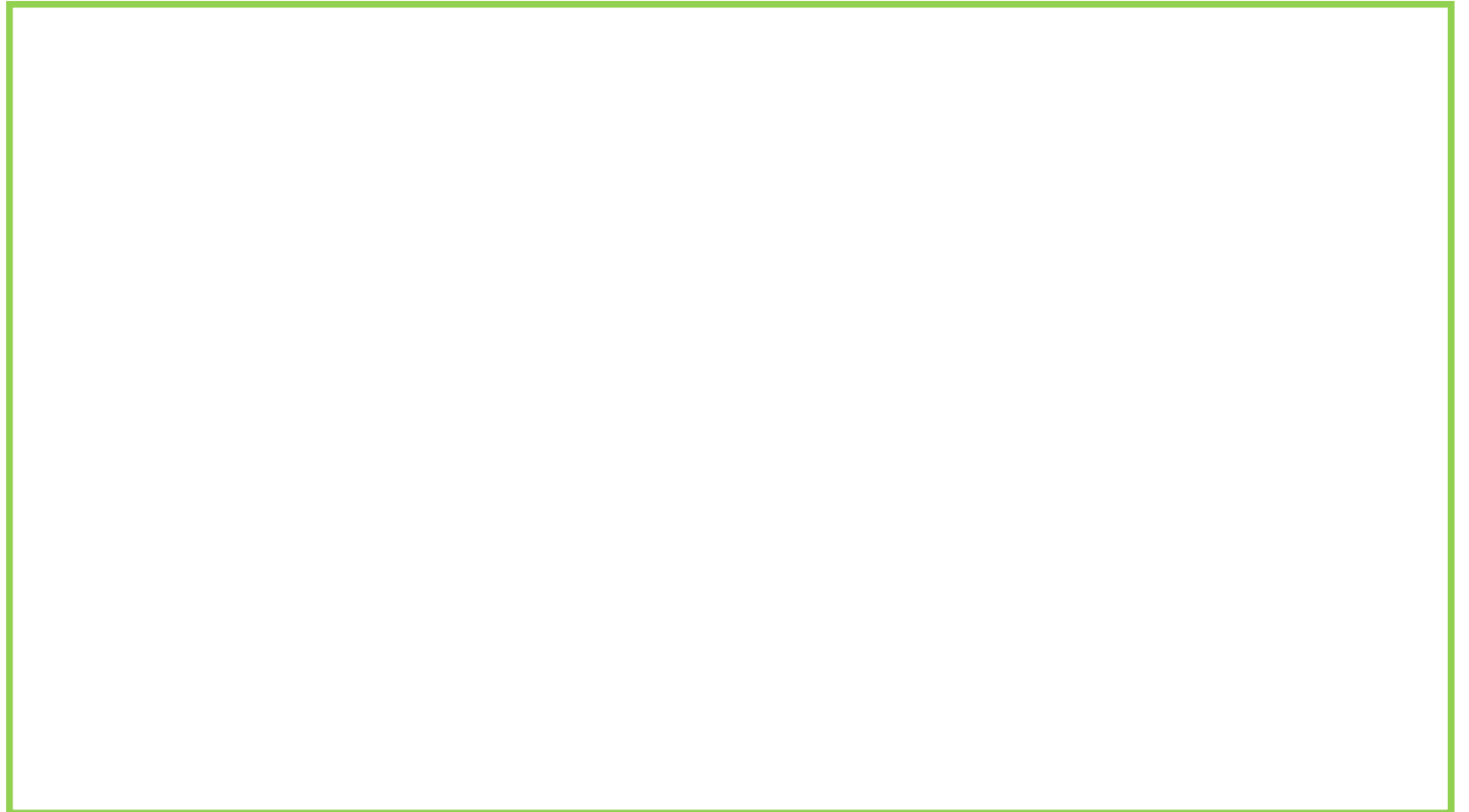
- Age: 5
- Diagnosis: Autism
- Language Level: Single word utterances
- Referred for: Self-Injury, Aggression,  
Property Destruction

Another example of  
**relatively closed contingency class**



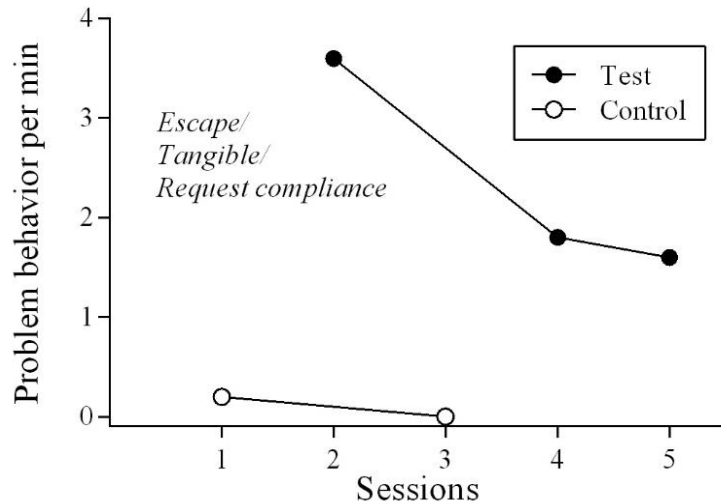
- Age: 5
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Another example of  
**relatively open contingency class**



That which you can safely infer from your functional analysis:

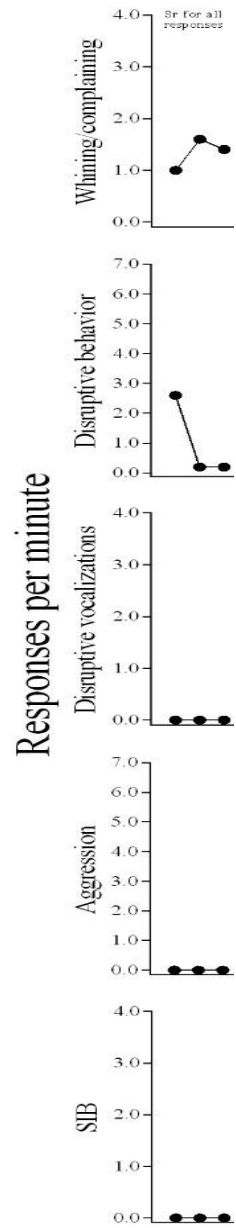
## ✓ Response class membership



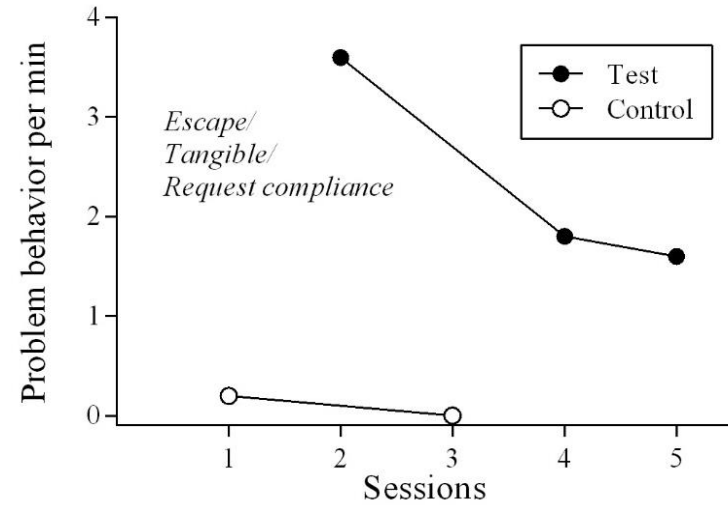
Problem Behaviors reported to co-occur (in order of concern)

- A. SIB
- B. Aggression
- C. Disruptive Behavior
- D. Disruptive vocalizations
- E. Whining/complaining

If control is shown over behavior E, for example, **and caregivers report that behavior A, B, C, D, & E co-occur in similar situations**, then we can infer that the reinforcers for behaviors A and E are the probably same

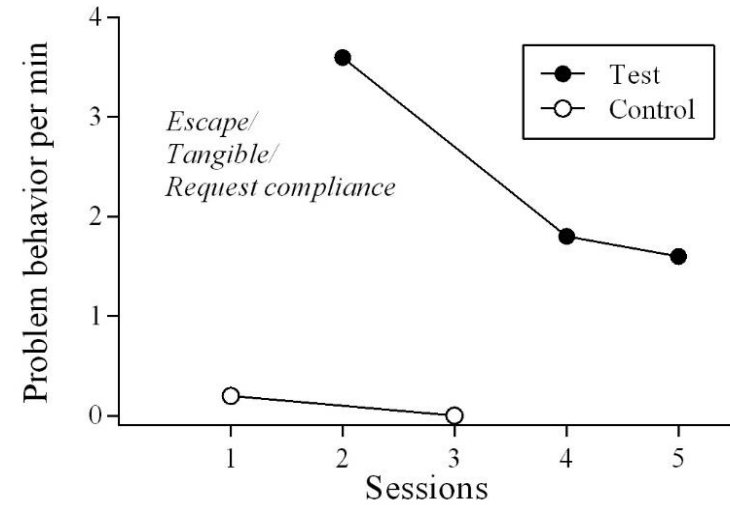
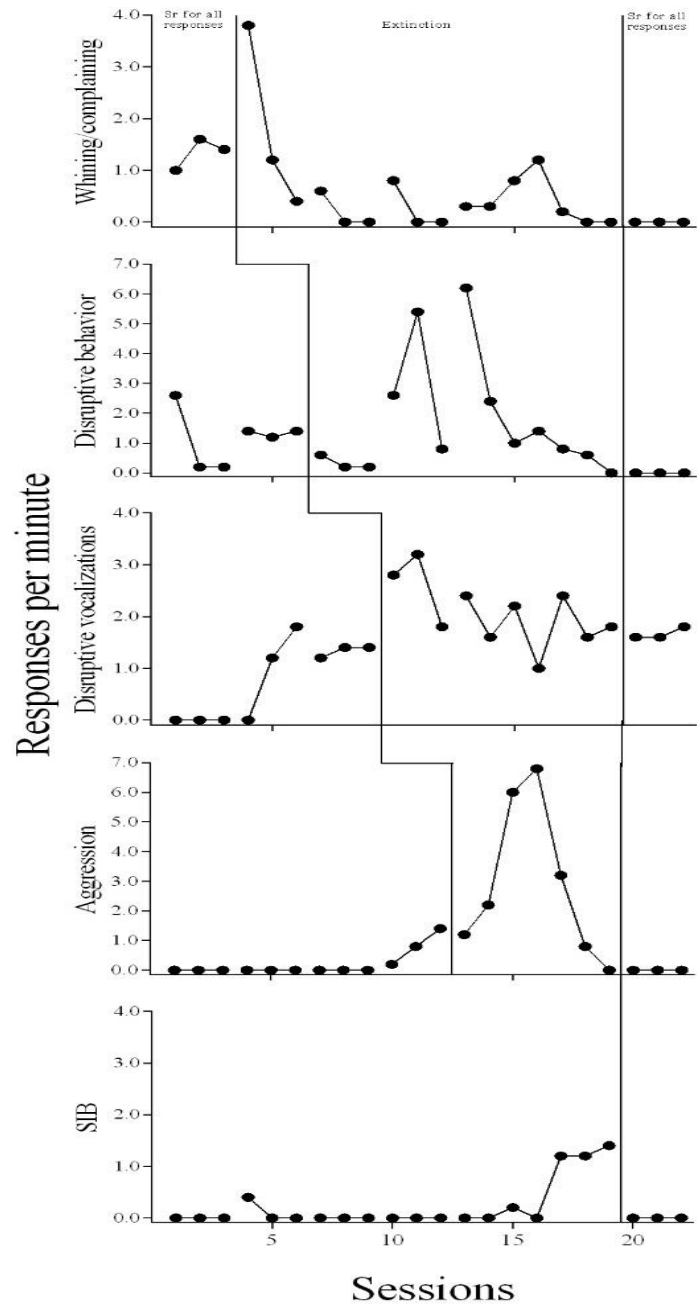


Sessions



Problem Behaviors reported to co-occur (in order of concern)

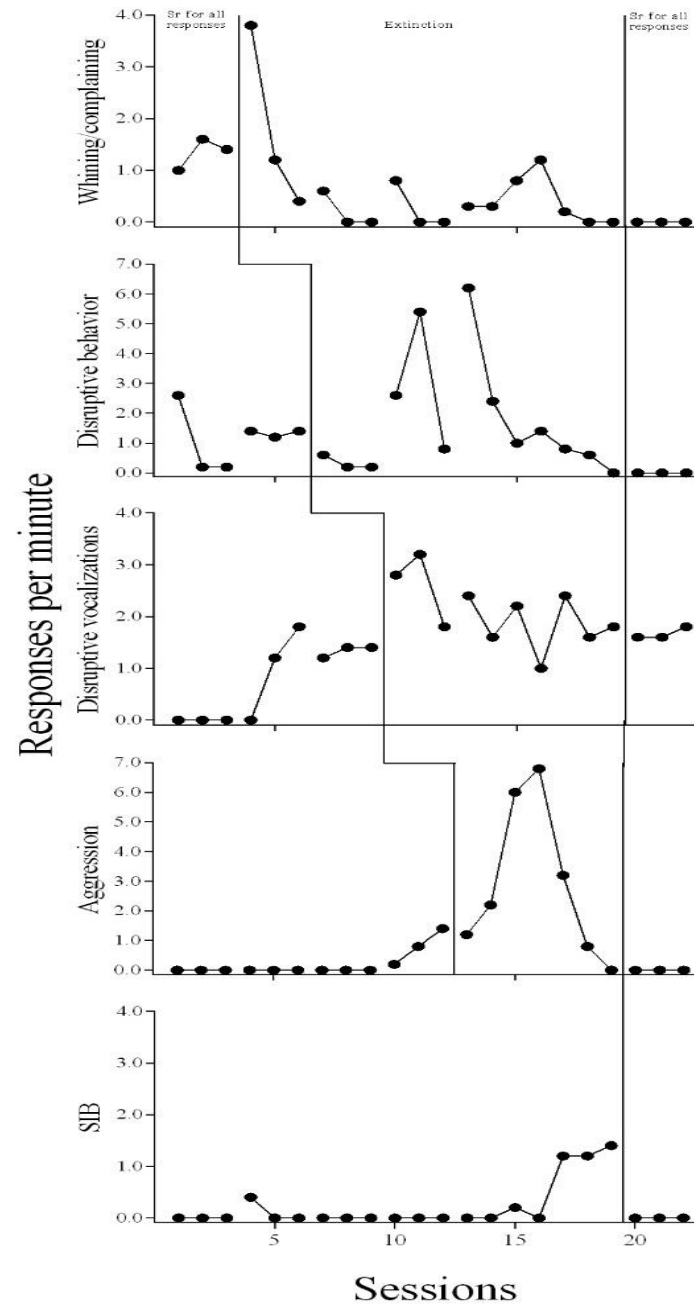
- A. SIB
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Problem Behaviors reported to co-occur (in order of concern)

- A. SIB
- B. Aggression
- C. Disruptive Behavior
- D. Disruptive vocalizations
- E. Whining/complaining





This analysis shows all forms of problem behavior are influenced by the same synthesized reinforcement contingency.

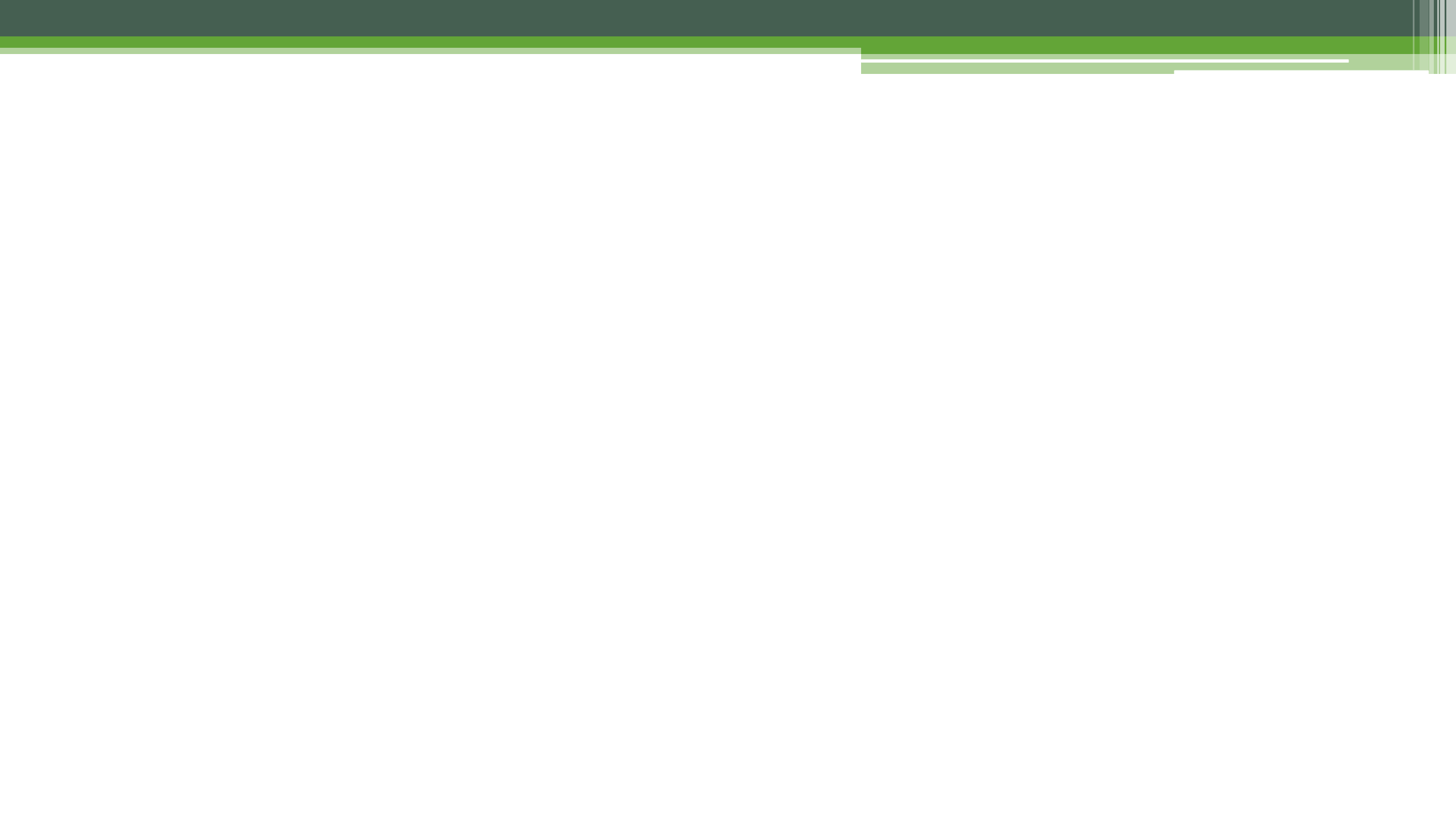
This happened for 9 of 10 consecutive analyses (Warner et al., 2018)

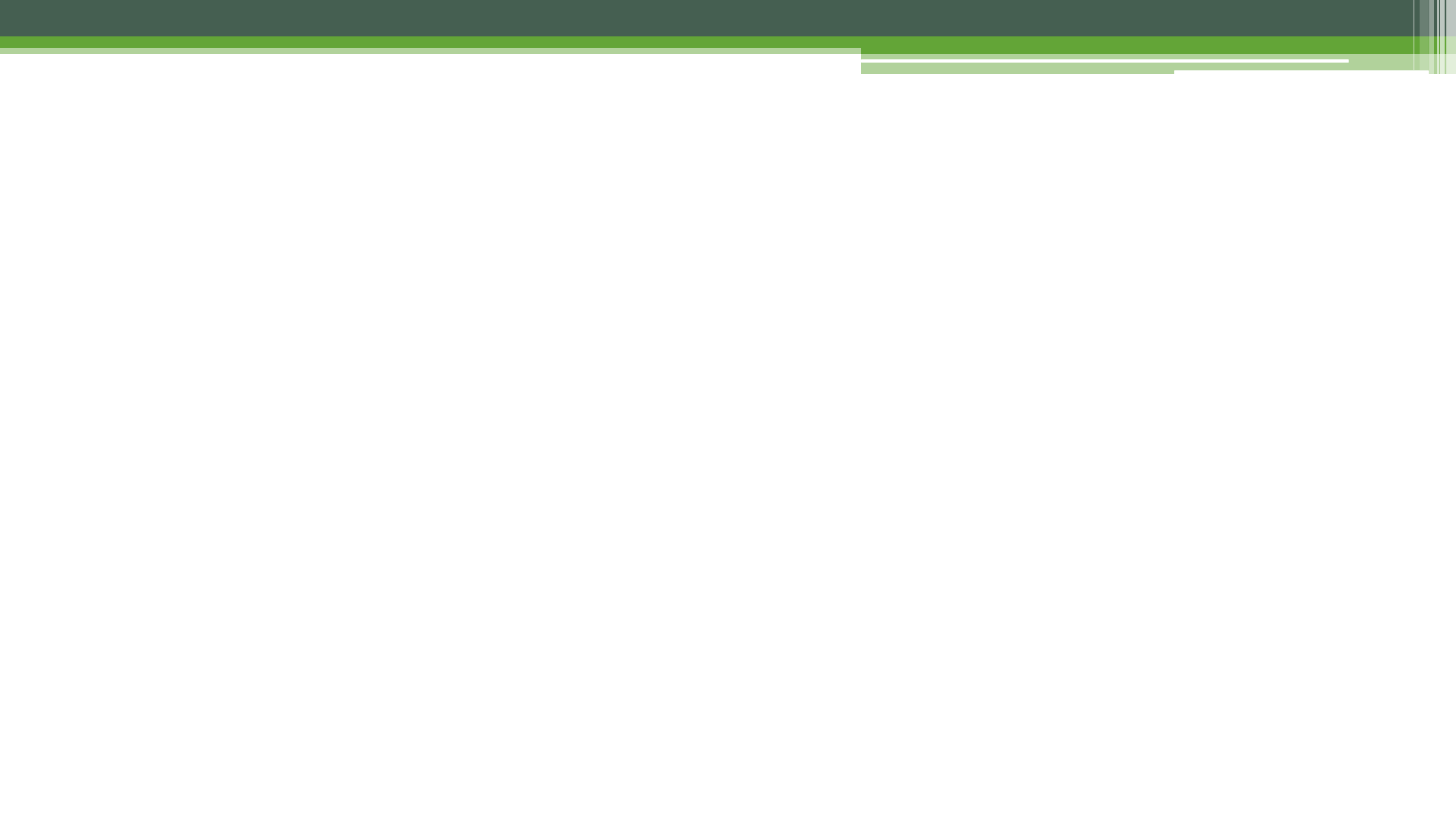
This also happens when others conduct progressive extinction analyses (Smith and Churchill, 2002, Borrero & Borrero, 2008, Herscovitch et al., 2009)

**Which is why it is a reasonable thing to make inferential leap.**

# UPDATED IISCA RECOMMENDATIONS

8. Provide all suspected reinforcers immediately following the first response suspected as being part of the response class
9. Be sure to clearly signal the delivery of the reinforcer with visual and audio cue
10. Implement the next EO after child/client has been HRE for at least 30 s (do not implement EOs every 30 s)





# UPDATED IISCA RECOMMENDATIONS

11. Progressively implement the EO each time; know this foreshadows the same actions you will take as you extend the CAB chains in treatment

Stand

Softly clap

Close space and stand with side to child/client

Give instruction to stop doing/moving & relinquish object/toy/game

- use 3-step (tell, show, help) if instruction may be misunderstood

- use 2-step (tell, help) prompting if only motivational issue

Give instruction to transition to table of high expectations (same prompting concept as above)

Give prompts to get ready to learn (and manage body position and stereotypy)

Teach while holding the highest of expectation

- (consider if attention needs to be minimized/diverted during instruction)

# UPDATED IISCA RECOMMENDATIONS

## 12. Make all decisions based on child/client behavior

e.g., when to implement SR (immediately following 1<sup>st</sup> PB)

when to implement EO (after at least 30 s of HRE)

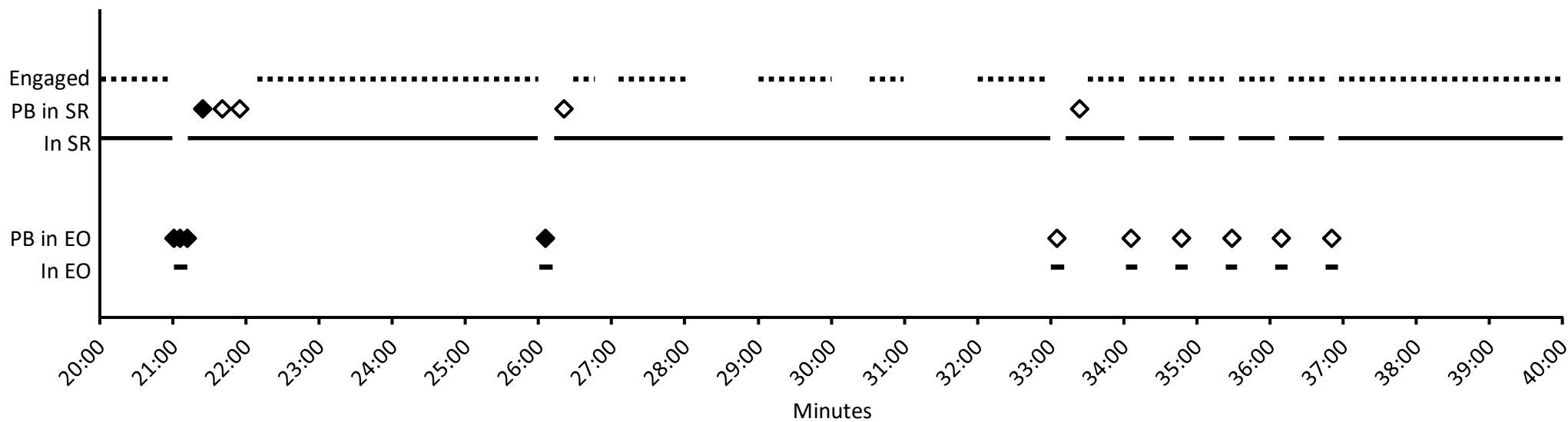
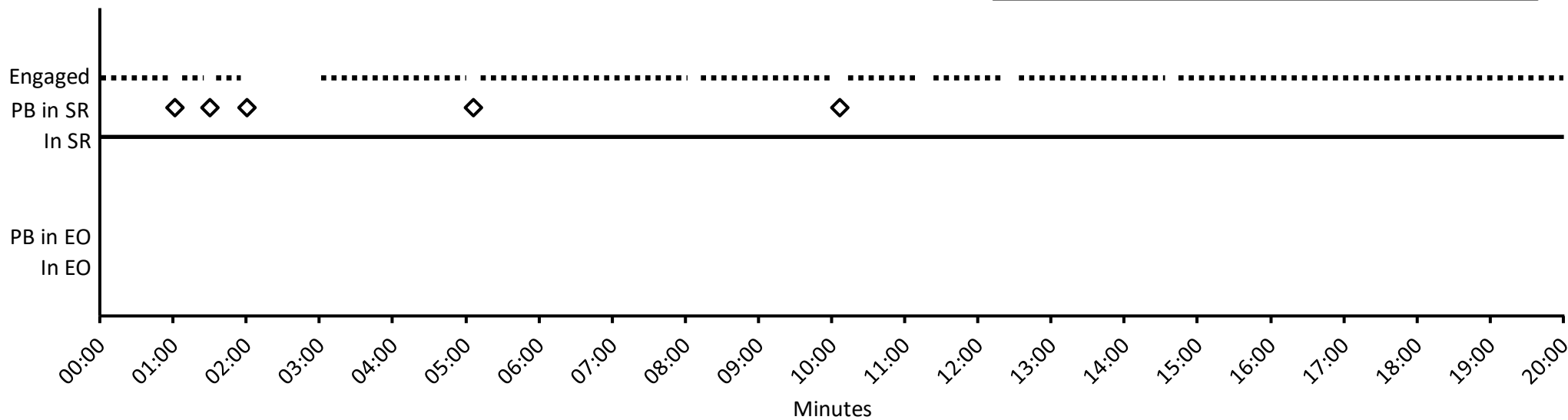
when to end analysis (after 5 quick turn offs with quick returns to HRE)

*do not make decisions based on mere passage of time:*

*e.g., 30 s of SR, 5-min sessions, 30 min analysis*

IISCA - Client Name

◆ Severe Problem Behavior    ◆ Minor Problem Behavior



# UPDATED IISCA RECOMMENDATIONS

13. All have authority to terminate the analysis at any time



# Active Response Opportunity

How can escalated and unmanageable severe problem behavior be prevented when conducting functional analyses of SPB?

**What are the hallmarks of an effective analysis?**

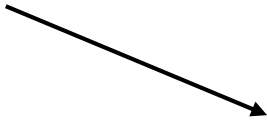
**In  
SR**

**Happy,  
Relaxed, &  
Engaged**

**In  
SR**

**In  
EO**

**Happy,  
Relaxed, &  
Engaged**



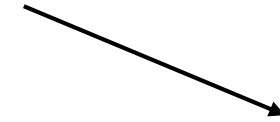
**PB Turned On Sometimes  
PB Turned Off Each Time**

**In  
SR**

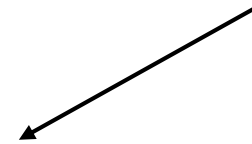
**In  
EO**

**When returned to SR**

**Happy,  
Relaxed, &  
Engaged**



**PB Turned On Sometimes  
PB Turned Off Each Time**



**Happy,  
Relaxed, &  
Engaged**

1. Was the analysis safe? (Anybody hurt or property destroyed?) and Dignified?
2. Was the entire analysis televisable?
3. Did problem behavior reduce in intensity & latency from EO during analysis?

In  
SR

In  
EO

When returned to SR

Happy,  
Relaxed, &  
Engaged

PB Turned On Sometimes  
PB Turned Off Each Time

Happy,  
Relaxed, &  
Engaged

- 1. Was the analysis safe? (Anybody hurt or property destroyed?) **YES**
- 2. Was the entire analysis televisable? **YES**
- 3. Did problem behavior reduce in intensity & latency from EO during analysis? **YES**

In  
SR

In  
EO

When returned to SR

- 1. Was the analysis safe? (Anybody hurt or property destroyed?) **YES**
- 2. Was the entire analysis televisable? **YES**
- 3. Did problem behavior reduce in intensity & latency from EO during analysis? **YES**

Happy,  
Relaxed, &  
Engaged

PB Turned On Sometimes  
PB Turned Off Each Time

Happy,  
Relaxed, &  
Engaged

Teach an SFCR

**In  
SR**

**Happy,  
Relaxed, &  
Engaged**



**In  
EO**

**Complied with instruction to relinquish reinforcers (CAB 1)  
Complied with instruction to transition (CAB 2)  
Complied with instructions to complete tasks (CABs 3-6)  
while being held to high expectations**



**In  
SR**

**Happy,  
Relaxed, &  
Engaged**

**In  
EO**

**Complied with instruction to relinquish reinforcers (CAB 1)  
Complied with instruction to transition (CAB 2)  
Complied with instructions to complete tasks (CABs 3-6)  
while being held to high expectations**

**Modify EO,  
continue analysis**

**Teach an SFCR**

# Two Paths of Success

In  
SR

Happy,  
Relaxed, &  
Engaged

In  
EO

Complied with instruction to relinquish reinforcers (CAB 1)  
Complied with instruction to transition (CAB 2)  
Complied with instructions to complete tasks (CABs 3-5)  
while being held to high expectations

PB Turned On Sometimes  
PB Turned Off Each Time

When returned to SR

Happy,  
Relaxed, &  
Engaged

Modify EO,  
continue analysis

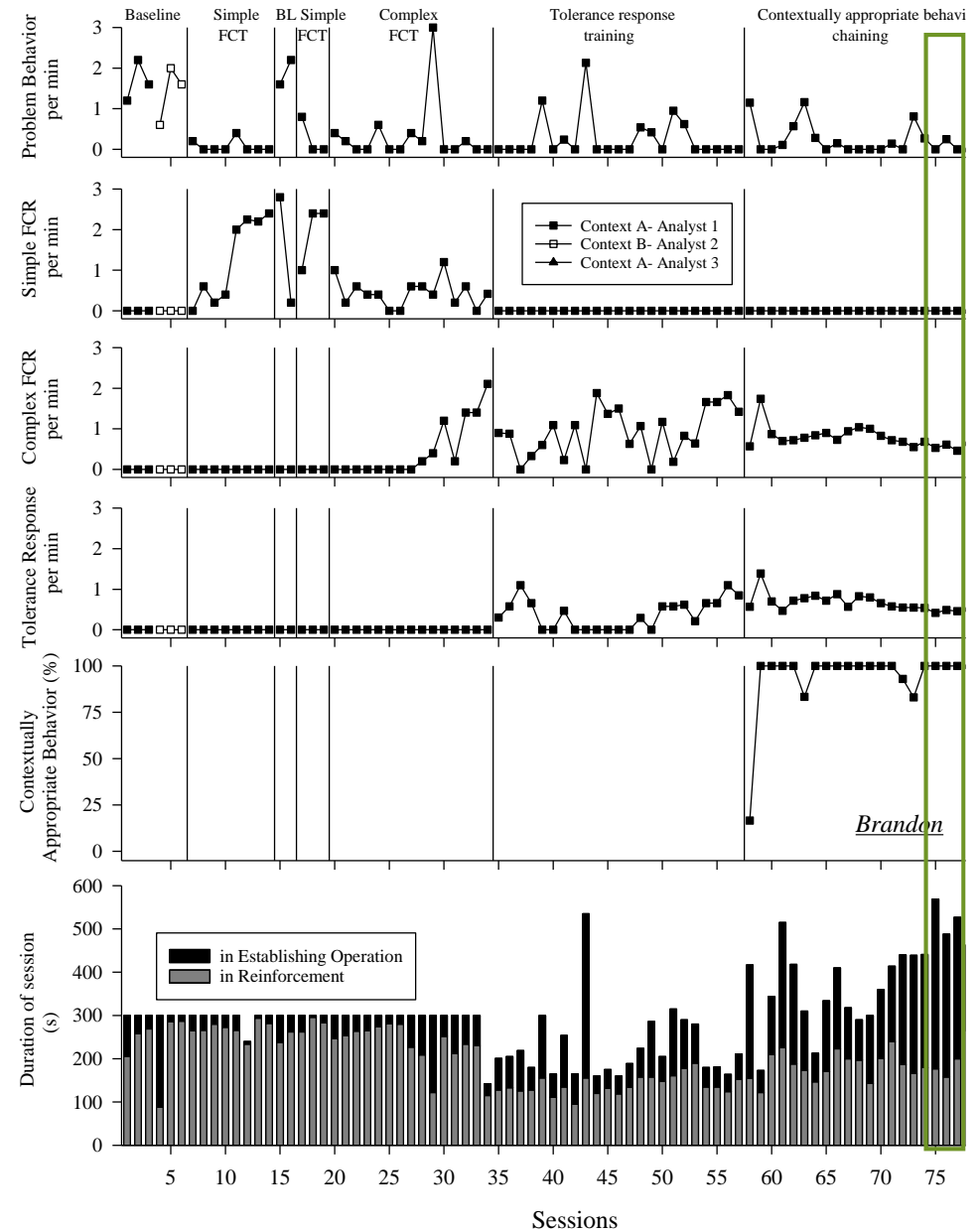
Teach an SFCR



# **Overview of the skills-based treatment**

# Brandon / Treatment after CAB Chaining

- Age: 4
- Diagnosis: None
- Language Level: Speaks in Short Sentences
- Referred for: Aggression, Meltdowns, Noncompliance



## Diego / Treatment session after CAB chaining

- Age: 11
- Diagnosis: Autism
- Language Level: Speaks in Short Sentences
- Referred for: Self-injurious behavior, Aggression, Property Destruction

\*The skills of **functional communication**, **delay/denial toleration**, and **contextually appropriate behavior** are shaped via intermittent and unpredictable delivery of the same synthesized reinforcers during the same synthesized establishing operations.

Effects are extended to relevant people implementing in relevant contexts over relevant time periods.

Effects are socially validated.

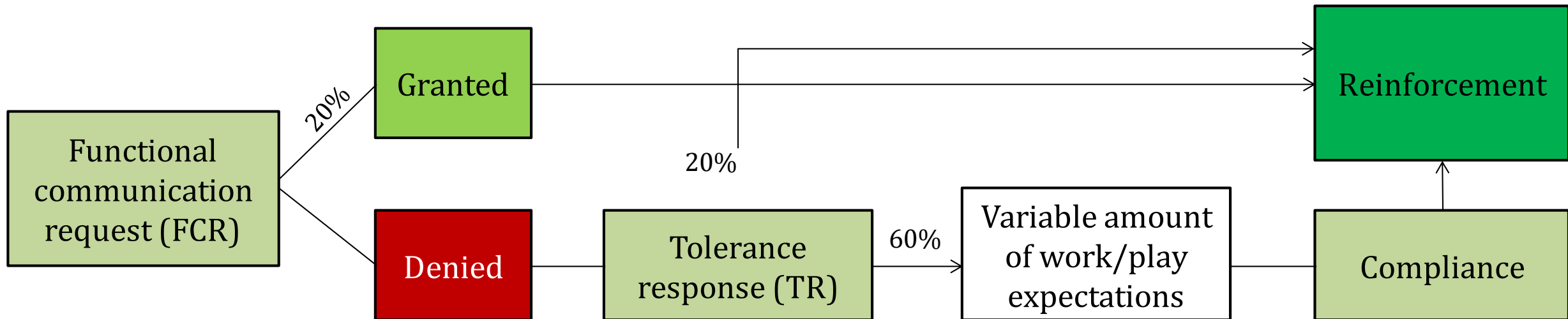
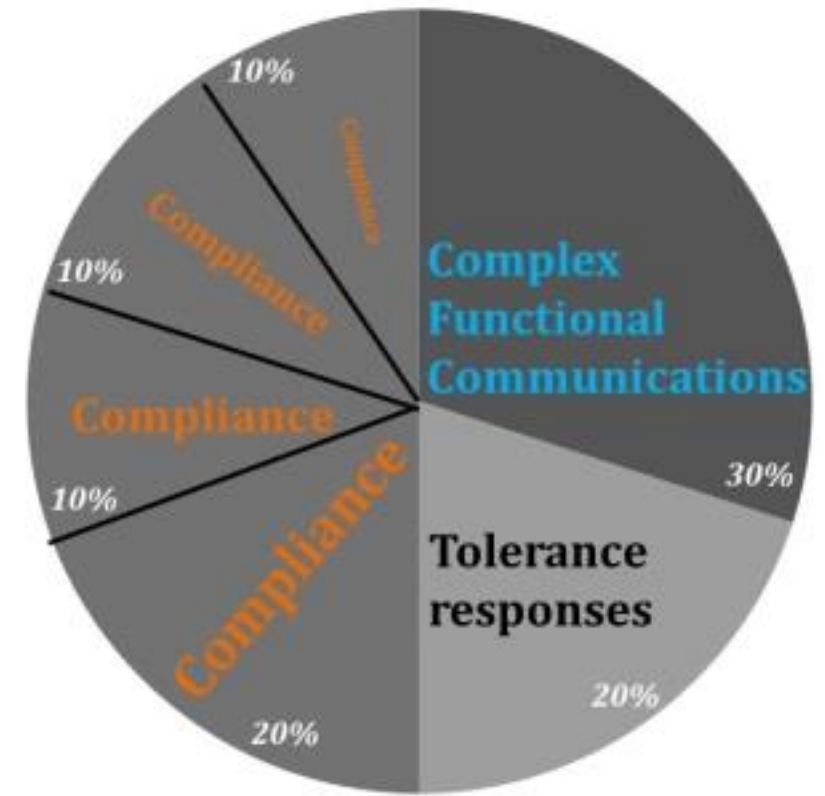
# TREATMENT

- 15 years old
- ASD diagnosis
- Fluent speech
- Severe Problem Behavior:
  - Outbursts: Screaming, dropping to the floor
  - Property destruction: throwing classroom items/moving furniture
  - Self-injury: Face slapping, head banging
  - Aggression: kicking, pushing

# What is the treatment????

Intermittent and unpredictable reinforcement of life skills:

- Functional Communication
- Delay/denial toleration
- Compliance



*Take Home Point:*

What is required for a Meaningful Outcome?

**Personalized & Synthesized Reinforcement Contingencies**

*and*

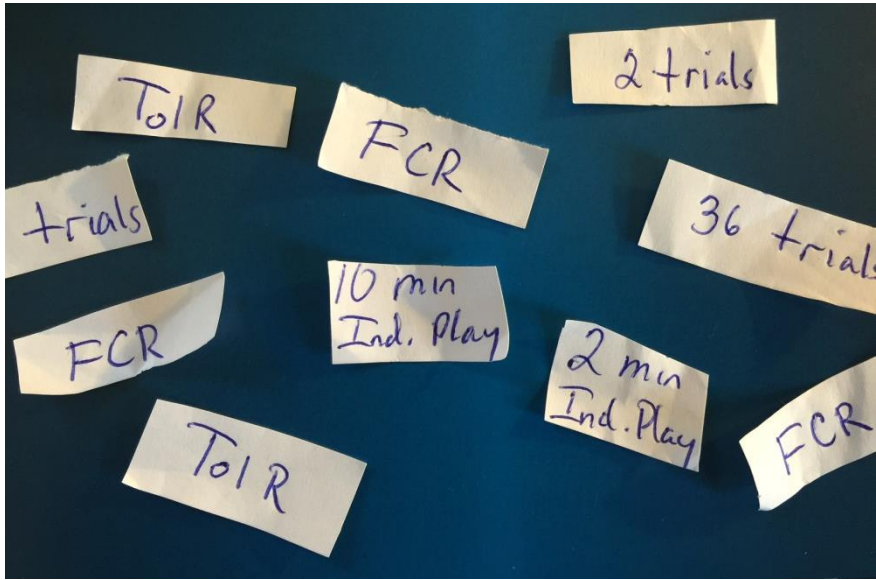
**a progressively developing,**

**skill-Based treatment process that**

**relies on unpredictable and intermittent reinforcement**

*to maintain effects*





## Treatment Implementation

1. Put these in your pocket
2. Pull one out while child is experiencing their reinforcers
3. Keep it to yourself
4. Require that behavior next time

### \*Materials not needed:

Laminate  
Laminating machine  
Glue guns  
Vis a vis markers  
Velcro  
Tokens  
Token boards  
Timers  
Stickers  
Candies  
Anything that was not already in  
the child's environment!

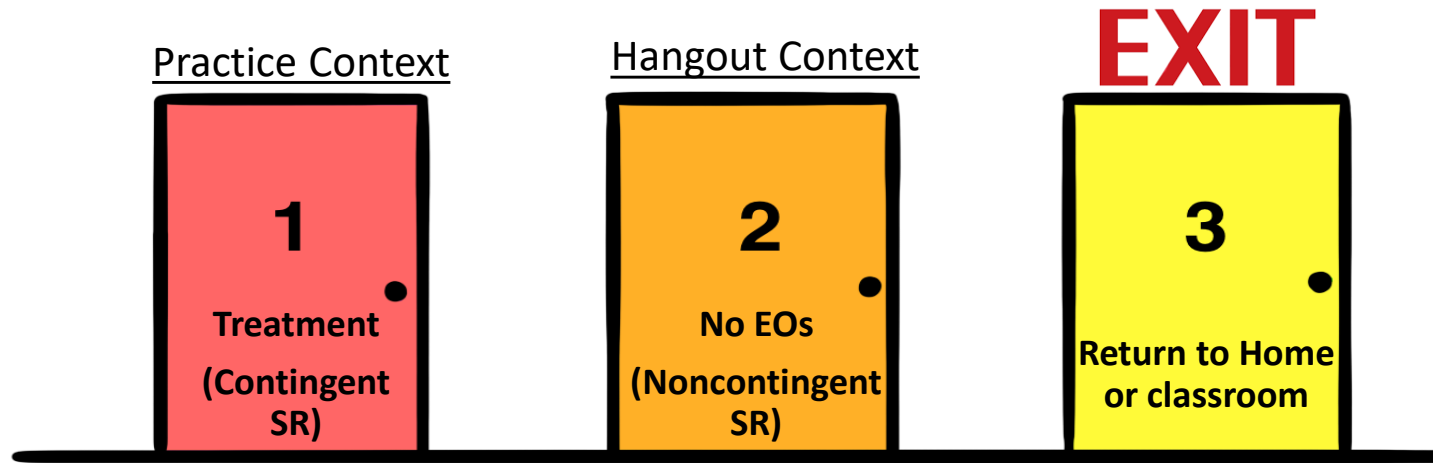
# App called "Names in a Hat"



# App called "Roundom"



# Enhanced Choice Model for Minimizing Escalation Potential and Physical Management



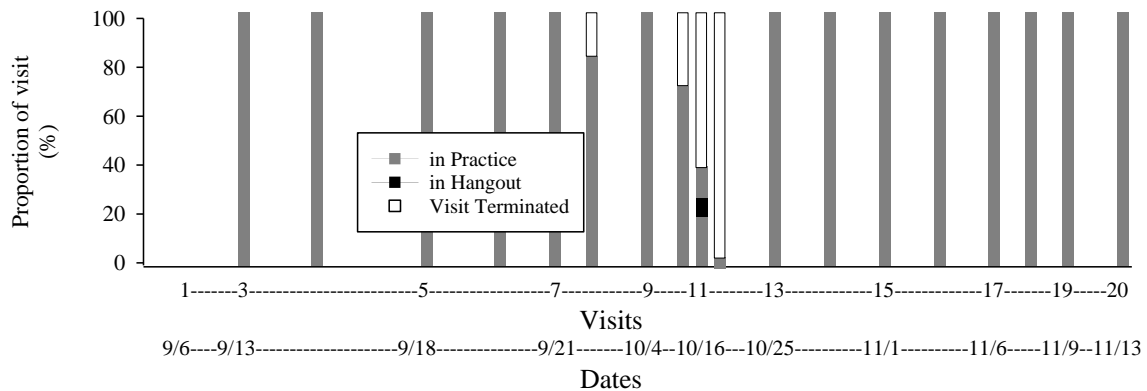
Modifications to Hanley et al. (2014)

1. Choice to **Practice**, **Hangout** or **Leave** always available
2. General transparency on objectives / reflection at end of each practice period
3. Choices offered during CAB chaining
  - Dunlap et al., 1994; Moes, 1998; Powell & Nelson, 1997
4. Extinction of problem behavior never involves physical guidance of any sort
  - Piazza, Moes, & Fisher, 1996

# TREATMENT

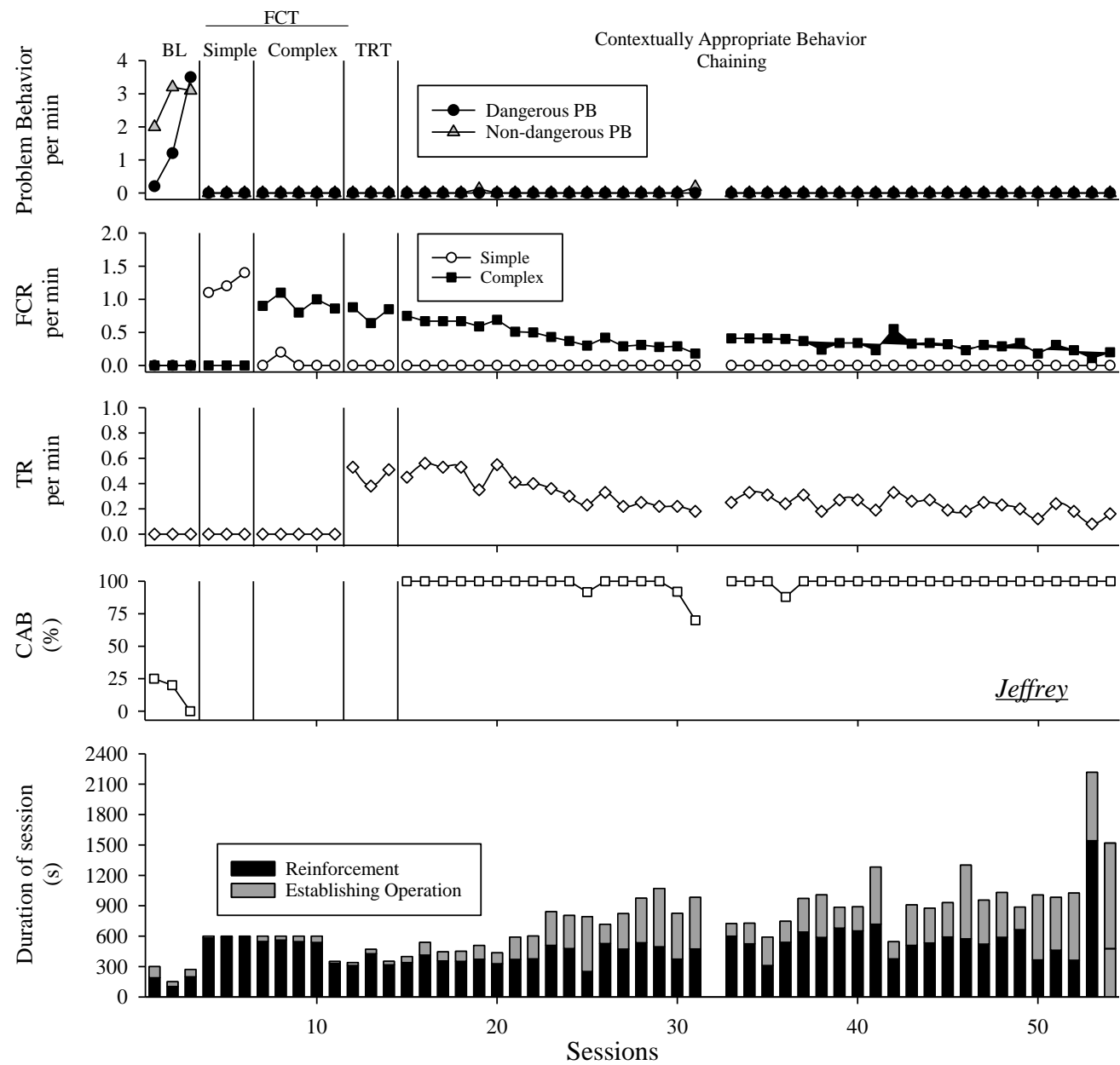
Jeffrey

CAB  
Chaining



# TREATMENT within Enhanced Choice Model - Jeffrey

**LIFE SKILLS CLINIC**  
AT WESTERN NEW ENGLAND UNIVERSITY



## Parent feedback (following transfer to home)

1. Rate the extent to which you are satisfied with the amount of improvement seen in Jacob's problem behavior in our clinic.

1 2 3 4 5 6 7  
Not Satisfied Highly Satisfied

2. Rate the extent to which you are concerned about Jacob's ongoing problem behavior at home.

1 2 3 4 5 6 7  
Not Concerned Highly Concerned

3. Rate the extent to which you have found the assessment and treatment provided by our team helpful to your home situation up to this point.

1 2 3 4 5 6 7  
Not helpful Very Helpful

4. Rate the extent to which you feel confident applying the same strategies you have seen in our clinic, when addressing Jacob's problem behavior at home.

1 2 3 4 5 6 7  
Not Confident Very Confident

## Parent feedback (following transfer to home)

5. How comfortable were you **taking away Jacob's preferred activities (e.g., electronics) and asking him to do something else (e.g., clean up, do his homework)** BEFORE visiting the clinic?

1      2      3      4      5      6      ~~7~~

Not comfortable

Very comfortable

6. How comfortable are you **taking away Jacob's preferred activities (e.g., electronics) and asking him to do something else (e.g., come to dinner, do his homework)** now (AFTER visiting the clinic)

1      2      3      4      5      6      7

Not comfortable

Very comfortable

7. How comfortable were you **taking Jacob to public places** BEFORE visiting the clinic?

1      2      3      4      5      6      7

Not comfortable

Very comfortable

8. How comfortable are you **taking Jacob to public places** now (AFTER visiting the clinic)?

1      2      3      4      5      6      7

Not comfortable

Very comfortable



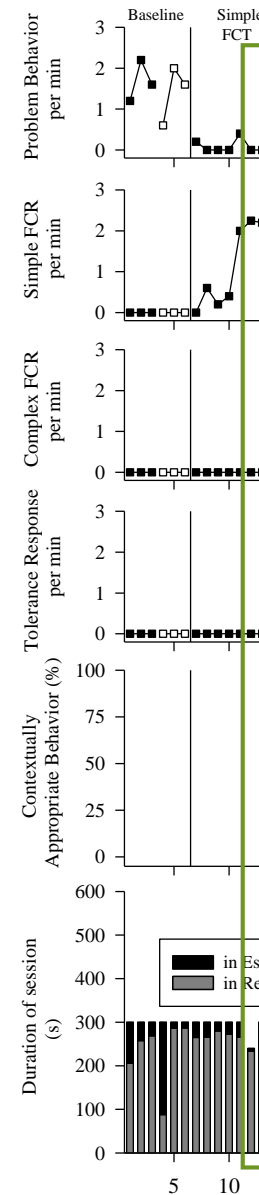


# **Detailed review of the skills-based treatment**

- ✓ The treatment is implemented in the most challenging context that is sufficiently convenient to repeatedly arrange
  - Referred to as the “two Cs” of context
  - **FIRST THINGS FIRST**  
Distinct contextually appropriate behavior is shaped in other relevant contexts only following success in the initial context

# Brandon / Simple FCT

- Age: 4
- Diagnosis: None
- Language Level: Speaks in Short Sentences
- Referred for: Aggression, Meltdowns, Noncompliance



## TIPS:

1. Select initial FCRs that are:

- Low effort
- Promptable
- Novel
- Omnibus

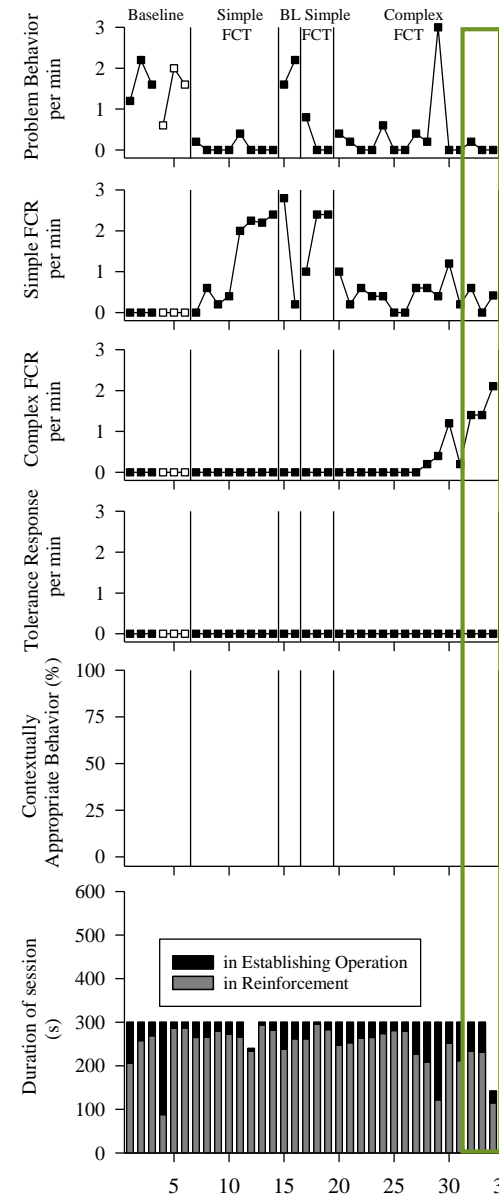
2. Initially prompt prior to when PB was evoked in the analysis.

3. If PB occurs, prompt the FCR and reinforce the prompted response

*\*See page 2 of SBT Notebook*

# Brandon / Complex FCT

- Age: 4
- Diagnosis: None
- Language Level: Speaks in Short Sentences
- Referred for: Aggression, Meltdowns, Noncompliance



## TIPS:

### Shape until FCR contains:

An obtaining a listener response (e.g., “Excuse me”)

A generative autoclitic frame (e.g., “May I have \_\_\_\_\_”)

A social nicety

Proper tone, pace, volume, articulation

See Ghaemmaghami et al. (JABA, 2018)

*\*See page 2 of SBT Notebook*

# FCT – Raj

Age: 5 Diagnosis: Autism Language Level: Single word utterances

Referred for: Self-Injury, Aggression, Property Destruction

**TIP:**

**Or at least be sure  
the cFCR has some  
“intentionality”**

# FCT – Cole

Age: 8 Diagnosis: Autism Language Level: Fully Fluent Speech  
Referred for: Self-Injury, Aggression, Property Destruction



**But once FCR is shaped until it contains:**

An obtaining a listener response (e.g., “Excuse me”)

A generative autoclitic frame (e.g., “May I have —”)

A social nicety

Proper tone, pace, volume, articulation

.....

# FCT – Cole

Age: 8 Diagnosis: Autism Language Level: Fully Fluent Speech

Referred for: Self-Injury, Aggression, Property Destruction

**It is sometimes differentiated into specific mands prior to tolerance training:**

- *An obtaining a listener response*
- *A break response*
- *An access to preferred toys response*
- *An attention recruitment response*

# Active Response Opportunity

What are the four most important considerations when selecting the initial FCR?

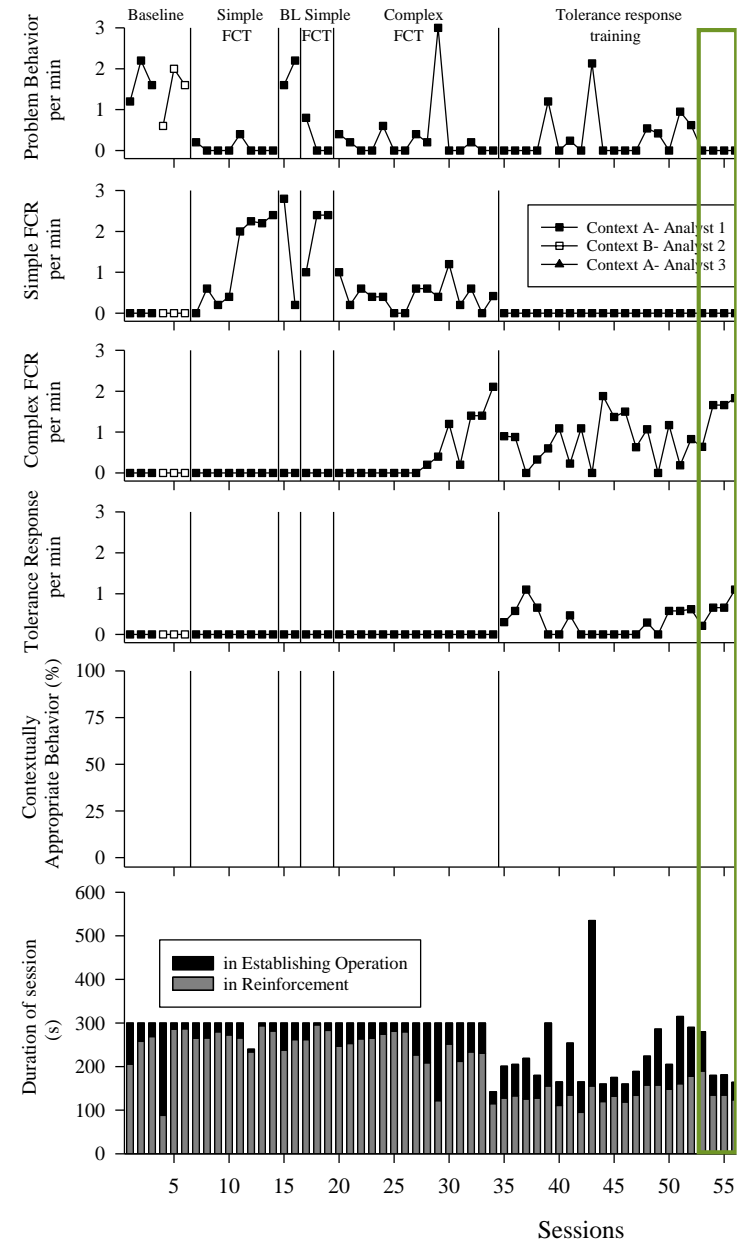
If you were to only make one change from sFCR to cFCR, what would it be?



# Brandon / TRT

*\*See page 2 of  
SBT Notebook*

- Age: 4
- Diagnosis: None
- Language Level: Speaks in Short Sentences
- Referred for: Aggression, Meltdowns, Noncompliance





Complex FCR

Progressing EO  
to evoke FCR

Simple FCR

**Step # Description**

- 1 Conducted interview**
- 2 Attended training**
- 3 Designed and initiated analysis**
- 4 Obtained zero problem behavior and high engagement in control context of functional analysis**
- 5 Adequately controlled problem behavior in analysis with an interview-informed, synthesized reinforcement contingency**
- 6 Developed protocol for out-of-practice-sessions time**
- 7 Initiated treatment within practice sessions (agreed on prompting procedures and responses to problem behavior in practice sessions)**
- 8 Completed simple functional communication training (FCT)**
- 9 Completed complex FCT**
- 10 Completed tolerance training**

**Step # Description**

**11 Designed contextually appropriate behavior (CAB) branches**

**12 CAB 1: Gained instructional control of stopping ongoing activity & relinquishing all positive reinforcers**

**13 CAB 2: Gained instructional control of transitioning to alternative area and readying to listen/learn**

**14 CAB 3: Gained instructional control of a few (1-3) responses/time units of cooperation within a single, relevant activity**

**15 CAB 4: Gained instructional control of a few responses/time units of cooperation within multiple relevant activities**

**16 CAB 5: Gained instructional control of 1 to 10 or more responses/time units of cooperation w/in multiple activities**

**17 CAB 6: Gained instructional control of 1 to 10 or more responses/time units of cooperation w/in multiple activities while being challenged**

# **Wicked important tips when developing Contextually Appropriate Behavior (CABs)**

- 1. Start by gaining instructional control over relinquishing positive reinforcers.**

**7. Describe the initial contextually appropriate behaviors (CAB 1). These are the behaviors that will be instructed following tolerance responses and strengthened via the termination of the delay (i.e., access to the synthesized reinforcers).**

**CAB 1: Instructional control of stopping ongoing activity & relinquishing all positive reinforcers**

**Example:**

- a) “Pause the game please.”
- b) “Hand me the iPad.”
- c) *prompt or wait for the look to you*

# **Wicked important tips when developing Contextually Appropriate Behavior (CABs)**

- 1. Start by gaining instructional control over relinquishing positive reinforcers.**
- 2. Then gain instructional control over transitioning and readying to listen/learn**

**CAB 2:** Instructional control of transitioning to alternative area and readying to listen/learn

- a)
- b)
- c)
- d)

Examples:

***To table-top academics:***

- a) stand up
- b) walk to that table
- c) sit up in the chair
- d) hand in lap

***To participate in gym games:***

- a) turn to me
- b) walk over there
- c) get ready like this  
(model stance)

***To play alone:***

- a) stand up
- b) walk over there
- c) take a seat



# Wicked important tips when developing Contextually Appropriate Behavior (CABs)

1. Start by gaining instructional control over relinquishing positive reinforcers.
2. Then gain instructional control over transitioning and readying to listen/learn
3. Then gradually increase the average amount of *behavior* (not just time) required to terminate the delay

**CAB 3:** Instructional control of a few (1-3) responses/time units of cooperation within a single, relevant activity

*Activity:*

**CAB 4:** Instructional control of a few (1-3) responses/time units of cooperation within **multiple** relevant activities

*Activity:*

*Activity:*

*Activity:*

**CAB 5:** Instructional control of **1-12+** responses/time units of cooperation w/in multiple activities

*Examples:*

*To table-top academics:*

- a.) Show me the \_\_\_\_\_
- b.) Show me the \_\_\_\_\_
- c.) Show me the \_\_\_\_\_

*To participate in gym games:*

- a) Catch
- b) Throw to me
- c) Put ball in basket

*To....*

*Consider this progression from 1, 2, 3:*

- a. 1, 3, 5
- b. 1, 3, 6, 10
- c. 1, 3, 6, 10, 12+

# Wicked Important Guidelines when Developing Contextually Appropriate Behavior (CABs)

1. Start by gaining instructional control over relinquishing positive reinforcers.
2. Then gain instructional control over transitioning and readying to listen/learn
3. Then gradually increase the average amount of *behavior* (not just time) required to terminate the delay
4. Terminate the delay for various amounts of behavior (sometimes expect very little behavior sometimes request larger or more complex types of behavior during the delay)

## Wicked Important Guidelines

### Contextually Appropriate Behavior

1. Start by gaining instructional control over reinforcers.
2. Then gain instructional control over listen/learn
3. Then gradually increase the average delay required to terminate the delay
4. Terminate the delay for various amounts of (even very little behavior sometimes requires some behavior during the delay)
5. Probably best to not signal how much behavior or what type of behavior is required to terminate the delays

*In case it is not apparent:*

**Shorties never go away.**

**This is the way we keep hope alive!**

**CAB 6:** Instructional control of 1-12+ responses/time units of cooperation w/in multiple activities **while being challenged**

**Surprise Shorties are a must!**

*Examples:*

- a) Require more complex/conditional discrimination
- b) Interrupt correct performance
- c) Change activity or rules of activity
- d) Require completion in new, different way
- e) Issue vague instructions
- f) Program for missing items from task
- g) Introduce unknown tasks

# Active Response Opportunity

Gradually increase the \_\_\_\_\_ (not \_\_\_\_\_)  
required to terminate the delay

Terminate the delay for \_\_\_\_\_

Best to not \_\_\_\_\_

# Process steps and Data sheet review

Questions?



# **Dosage considerations when implementing SBT**



# Shaping Models

Light dosage approaches (approx. 8-12 weeks to full day treatment)

*Implementation by BCBA:* at least 1hr/day for 4/days week

*Collaborative approach:*

Implementation by 1 parapro/staff at least 1hr/day for 4/days week

High dosage approaches (approx. 1-3 weeks to full day treatment)

*Implementation by BCBA:* 4-5hrs/day for 5/days week

*Collaborative approach:*

Implementation by 1 parapro/staff 4-5 hrs/day for 5/days week  
with two daily 30 min check-ins by BCBA for 4 days/week

\* requires consideration of out-of-session programming: (a) business as usual or (b) NCR

---

**Step # Description**

**18 Completed shaping of 2 CAB branches**

**19 Completed shaping of 3 CAB branches**

**20 Transferred effects to new people**

**21 Transferred effects to new locations**

**22 Transferred effects across extended periods**

**23 Achieved social validation of outcome**

---

# Transfer Rules of Thumb

At least 3/4 overlap between situation in which behavior is excellent and the next situation; with situations exemplified by:

**CAB Expectations,  
People,  
Places,  
Time**

Two 5-trial sessions with excellent behavior, move to next situation

# **General and durable elimination of severe problem behavior is still elusive for some who implement PFA and SBT processes**

- Past functional analytic priorities/practices are difficult for many to shed
- Developing a replacement repertoire requires time, expertise, or expert supervision, and the ability to problem solve as skills are developed
- Transferring positive effects from one or a few people and one or a few contexts

**to all people and all contexts**

is still a formidable challenge

# Meaningful Outcomes Project

## FTF Behavioral Consulting

funded by Michigan Department of Health and Human Services

### Project Goals:

- To create meaningful improvements in the quality of life for children/adolescents residing in Michigan who are diagnosed with an autism spectrum disorder (ASD) and who engage in severe problem behavior (SPB; self-injury, aggression, property destruction, and/or elopement)
- To build capacity in Michigan program personnel to conduct practical functional assessment and skill-based treatment processes for meaningful address of severe problem behavior exhibited by children and adolescents diagnosed with an ASD

# Meaningful Outcomes Project

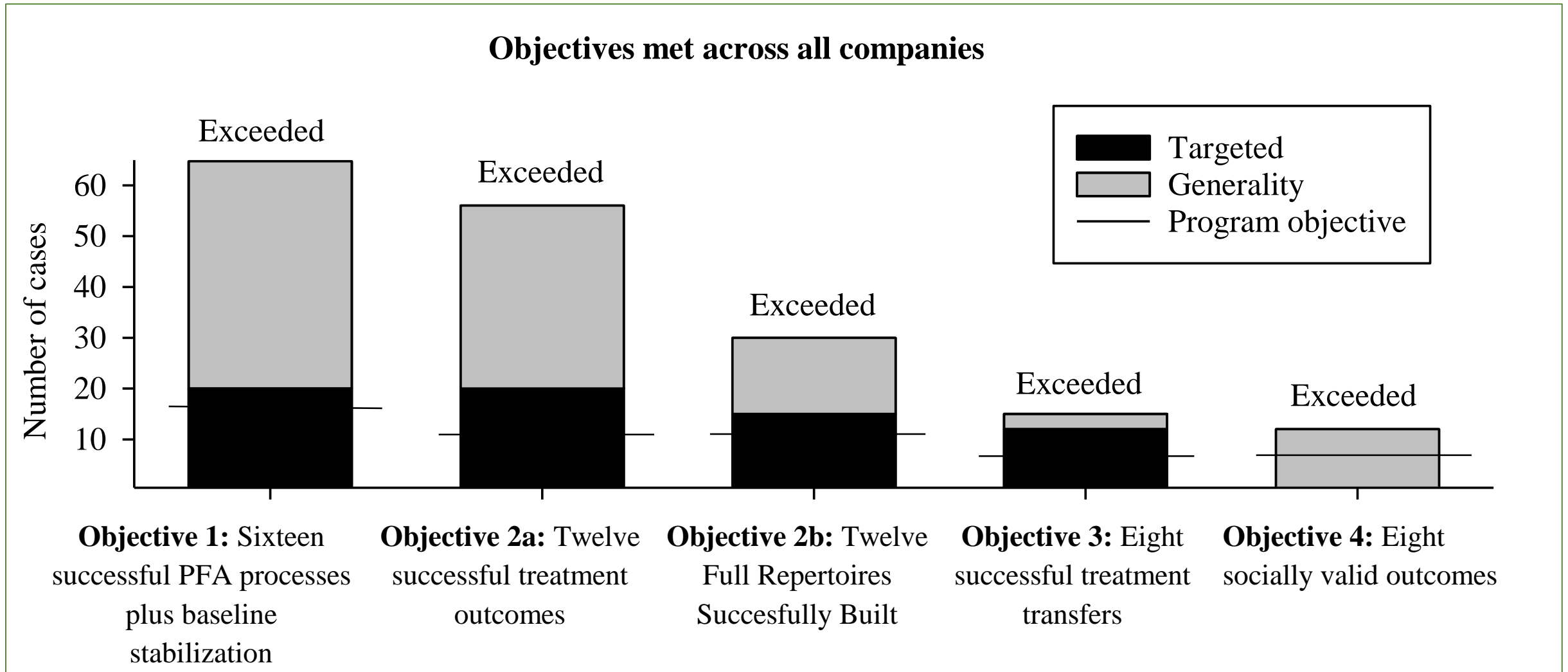
## FTF Behavioral Consulting Group MI DHHS

### Project Parameters

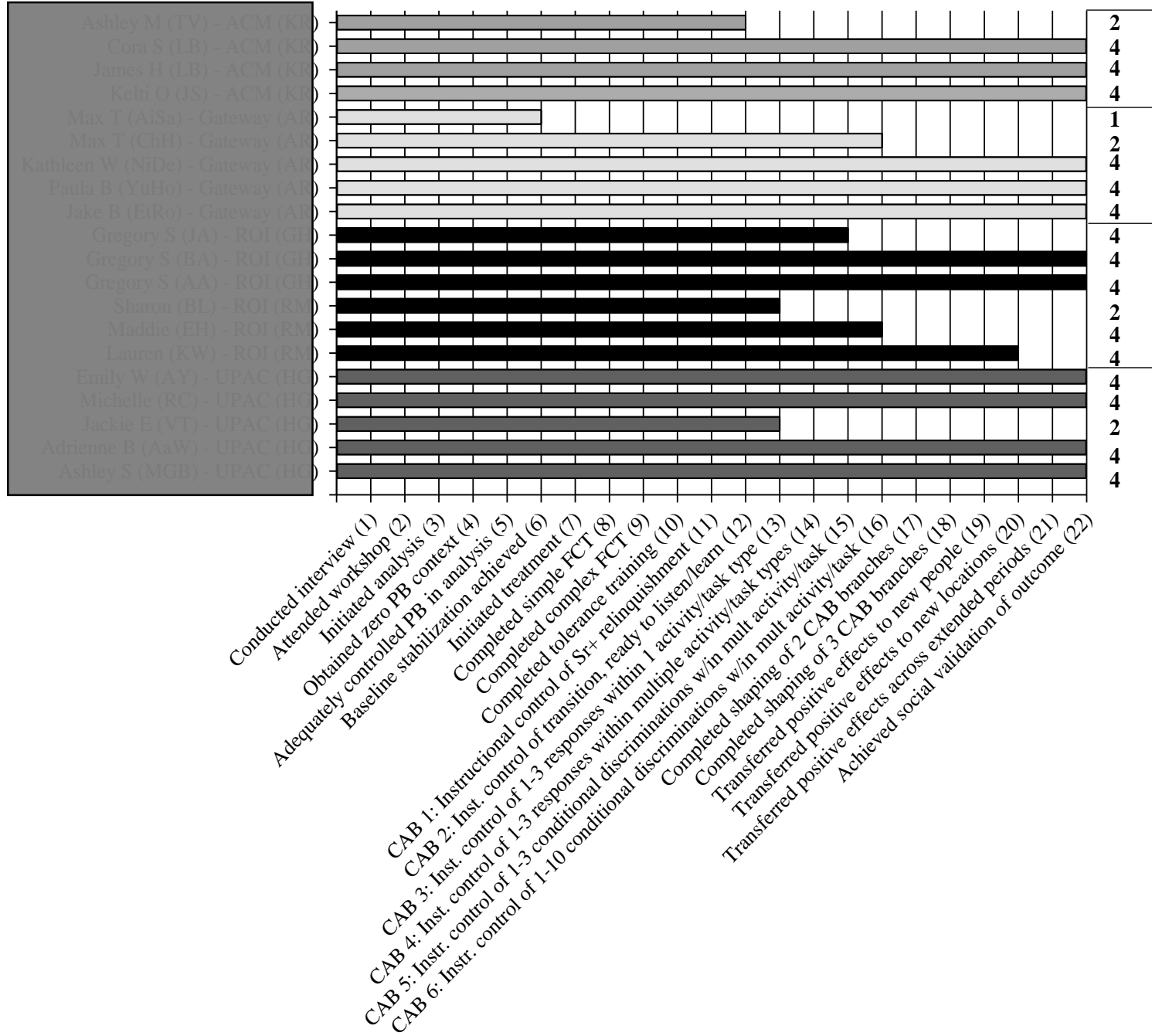
- Twenty MI children/clients diagnosed with an ASD who engaged in severe problem behavior were enrolled in this project.
- Direct implementation by BCBAs/BCaBAs/RBTS employed by four Michigan organizations
- *Training and support provided by 5 FTF behavioral consultants*
  - 1 day of on-site training
  - 1 day of supported implementation,
  - Weekly 1-hour distance-support meetings for 4-5 months
    - 3-4 clients reviewed in each meeting

# Meaningful Outcomes Project

## FTF Behavioral Consulting Group MI DHHS



# Meaningful Outcomes Project





# Meaningful Outcomes Project

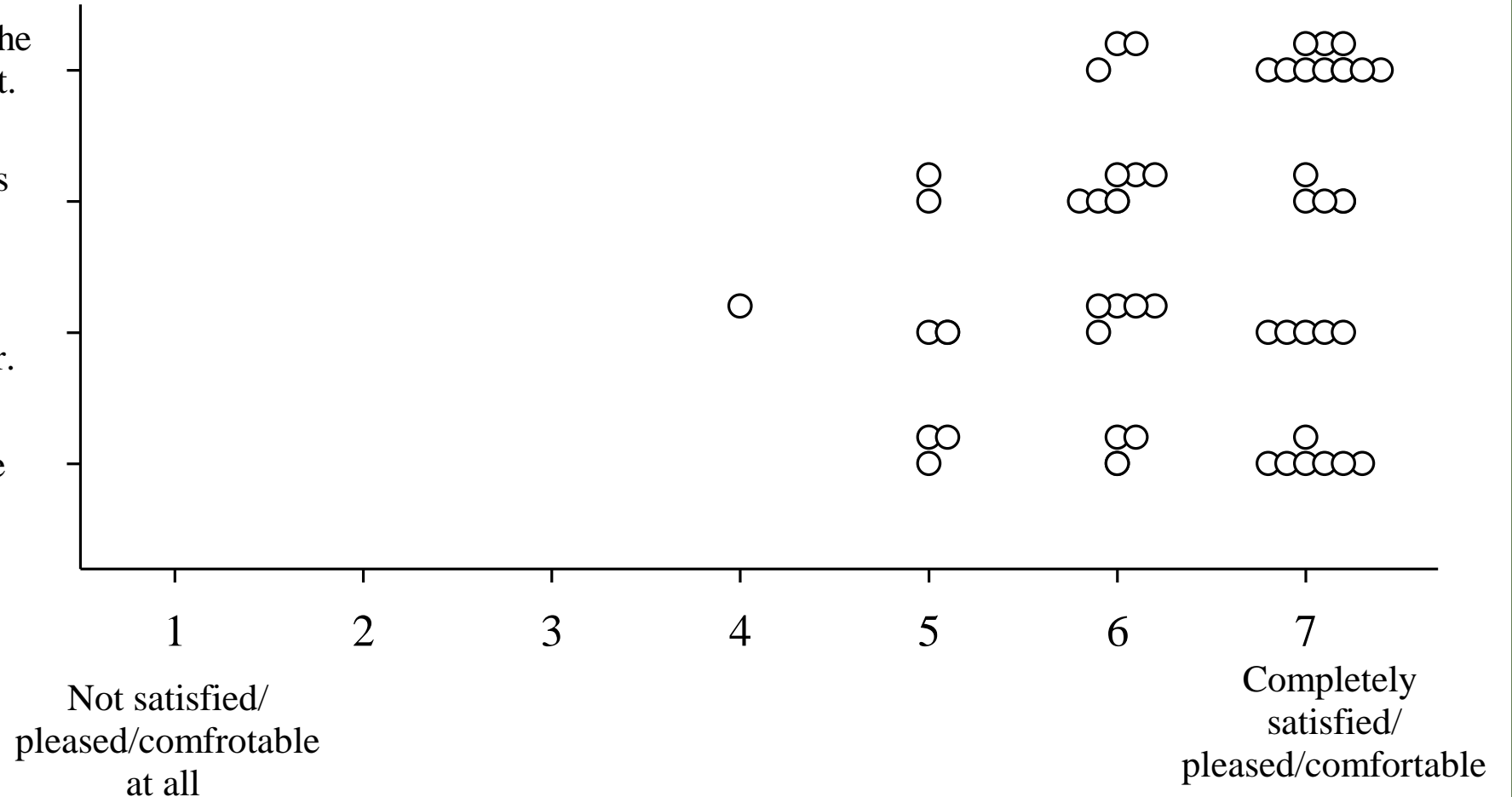
Rate the extent to which...

...you feel comfortable implementing the treatment at this point with your client.

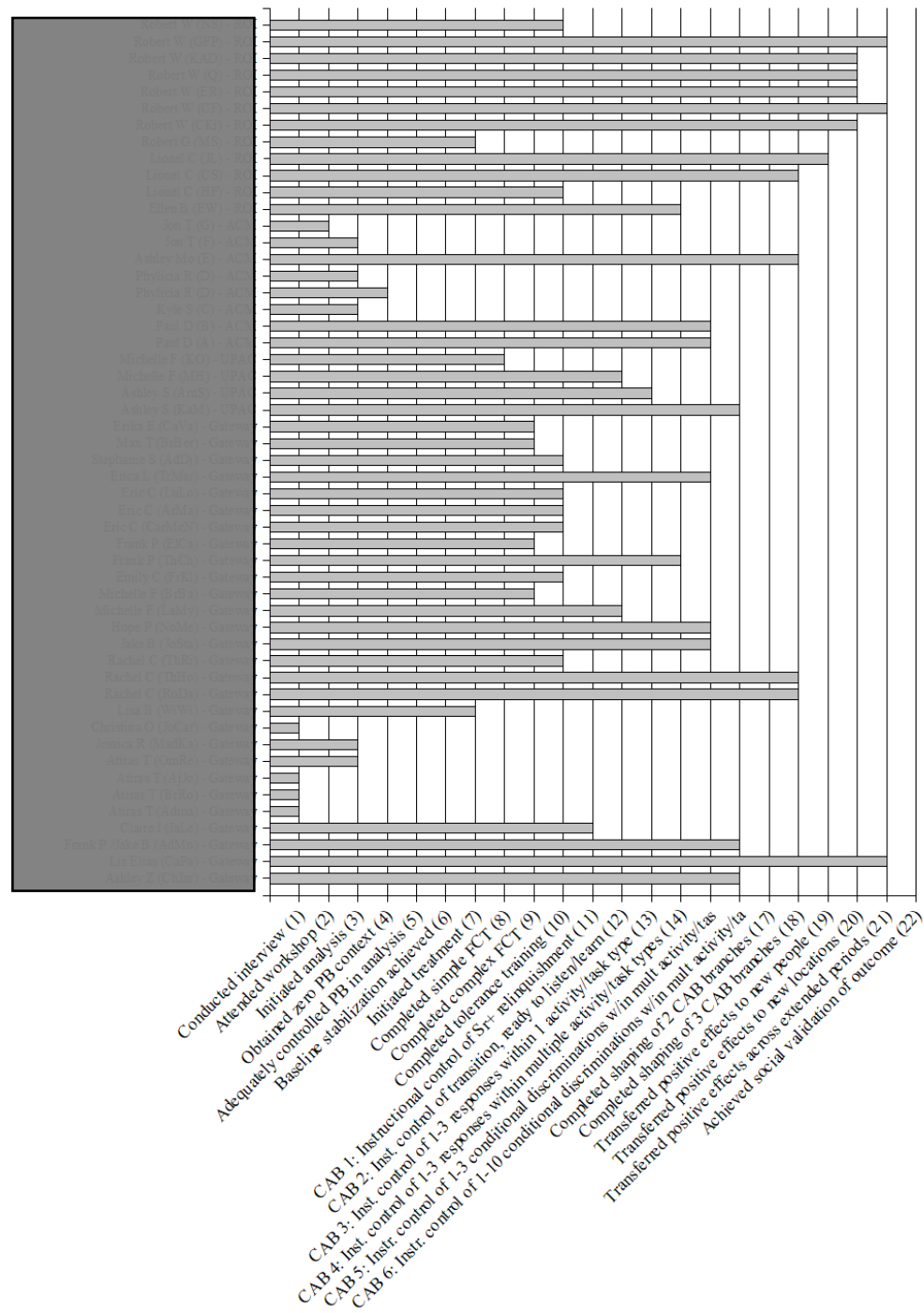
...you are please with the skills your client has learned.

...you are satisfied with the reduction in problembehavior.

...you are satisfied with the outcomes of treatment.



# Meaningful Outcomes Project



## FTF Implementation Support

*Option 1: On-site support on day of IISCA(s)*

*Option 2: Real-time, distance-based support via Zoom on day of IISCA(s)*

*Option 3: Delayed, distance-based support via Zoom following review of IISCA(s) uploaded to Dropbox*

*For all options:*

*2.5 hours for 1 client;*

*5.0 hours for 2 clients,*

*7.5 hours for 3 clients*

## FTF Distance-Based Consultation

1. PhD-level BCBA Consultant from FTF meets with three analysts (and/or teachers) for one hr/week (same time each week); one case per analyst
2. FTF hosts the Zoom mtgs and provides Dropbox folders for each client/analyst dyad
3. Better support provided when
  - (a) meeting note, (b) data sheet, and (c) two short edited videos are uploaded by consultee for review by consultant prior to weekly meeting
4. Twelve meetings are scheduled

## Five Hidden Themes Exposed

- 1. Have professional humility**
- 2. Hold high expectations but find satisfaction in daily gains**
- 3. Trust the universal preference for “yearning and earning”**
- 4. Know that “free to do as one pleases but not alone” is SR**
- 5. Craft your whole process to be televised**

# Thanks for listening.

*For implementation assistance go to:*

**[www.practicalfunctionalassessment.com](http://www.practicalfunctionalassessment.com)**

**Facebook: “BCBAs using the IISCA”**

**[www.ftfbc.com](http://www.ftfbc.com)**



**FTF Behavioral**  
CONSULTING

*Improving Outcomes through Research-Based Innovations*