

Idiosyncratic Modifications to the Skill-based Treatment Process

Batoul Dekmak, Jerry Idicula, & Edward Sanabria

Introduction

- Idiosyncratic variables in modified functional analyses have helped lead to differentiated outcomes. (Schlichenmeyer et al., 2013).
- Clinical judgement and its role in decision making may improve clinicians' ability to make idiosyncratic modifications. (Gunver, 2010).
- Looking at idiosyncratic variables may be required in order to achieve positive outcomes in SBT.
- This study evaluates the effectiveness of the treatment modifications with two learner profiles high rates of interfering behavior, increased boundary seeking, and low skill acquisition.
- These case studies provide an extension of a previous study that evaluated the progress that can be made with skill-based treatment (SBT).

Methodology

Participants:

- Two male participants a 5-year-old and 16-year-old. Both participants have an ASD diagnosis and limited language, one of the participants has an additional diagnosis of Christianson Syndrome.
- The two clinicians participating in the study were two BCBA's who have been practicing as BCBA's since 2019. The BCBA's have experience implementing PFA's and SBT since 2018.

Setting:

- The study took place in an ABA clinic in the Southeast Michigan area that serves clients with ASD.

Targeted Behaviors:

- Communication response, contextually appropriate behaviors, interfering behaviors.

Procedure:

- **Baseline:** Presence of dangerous/high intensity behaviors.
- **Skill-Based Treatment:**
 - **Reinforcement condition:** A context in which a learner is provided with all suspected reinforcers and is observably happy, relaxed, and engaged.
 - **FCR:** A communication response to replace interfering behaviors in the presence of EO's historically evoking IB.
 - **TR:** Delivery of all suspected reinforcers in the absence of interfering behavior for tolerating a denial signal from the implementor.
 - **CAB1:** Contextually appropriate behaviors related to relinquishing all reinforcers.
 - **CAB2:** Transitions away from reinforcers to an area of learning.
 - **CAB3:** Cooperate accurately to 1 to 4 easy instructions within 1 or more activities.
 - **CAB4:** Cooperate with increasing number of responses/units of time across activities.
 - **CAB5:** Cooperate with a terminal number of instructions/units of time within 1 or more activities.
 - **CAB6:** Completes terminal responses while being challenged.
- **Boundaries:** a rule set to maintain safety for those a part of the treatment process. Setting boundaries can lead to increases in interfering behavior due to the withholding of reinforcers.

Results

Figure 1.

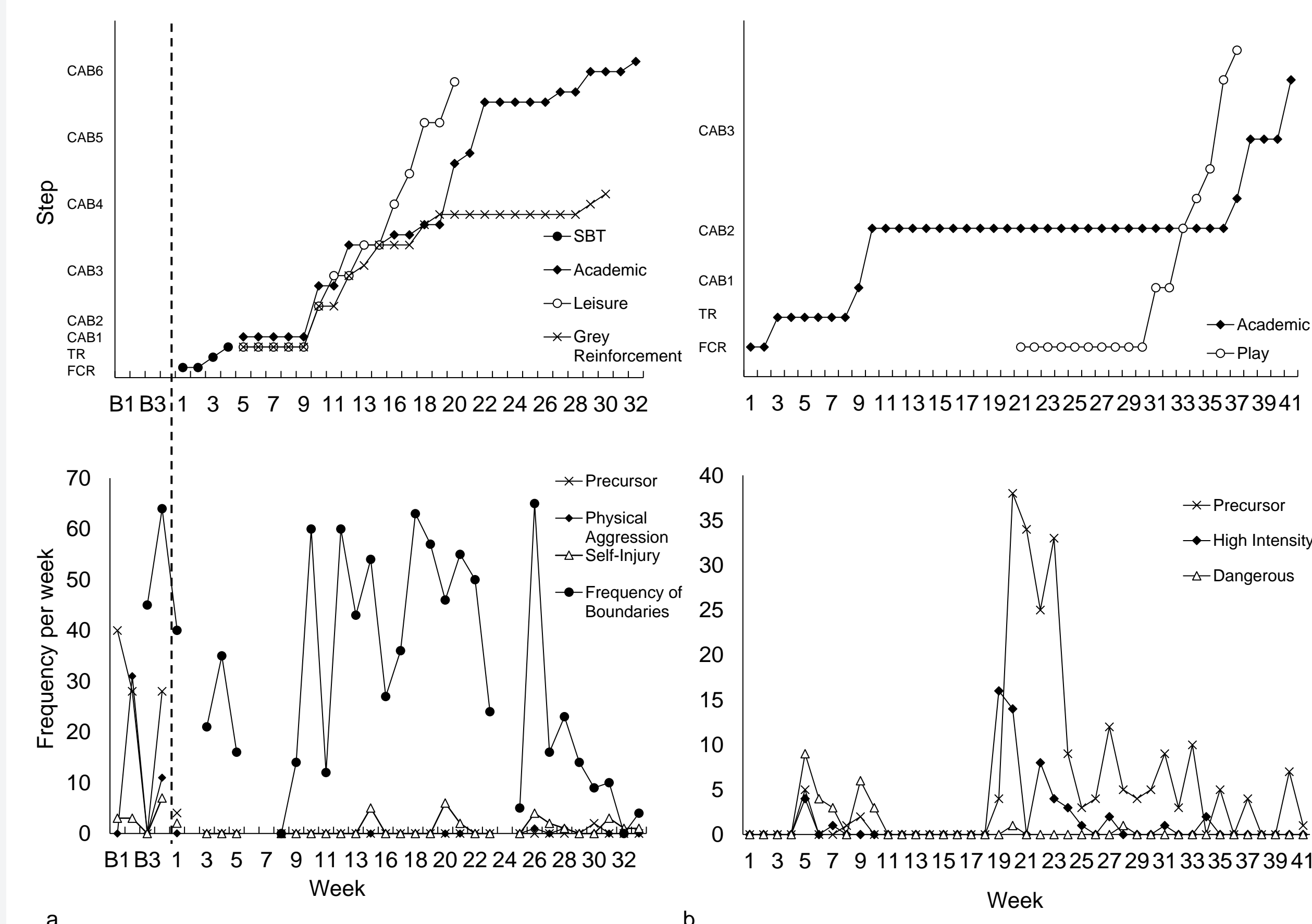
Idiosyncratic Modifications to the SBT process

Condition	Idiosyncratic Variables	Condition	Idiosyncratic Variables
SR	<ul style="list-style-type: none"> • Focus on enhancing quality of attention across all SR contexts. • Choice board in SR for available activities. 	SR	<ul style="list-style-type: none"> • Staying on the client's level during SR. • Allow him to fidget with iPad. • Do not place any expectations while he is with the iPad. • Treatment drift: engage during SR.
SBT	<ul style="list-style-type: none"> • Add micro shaping steps for attending to CAB2 • Prompt FCR if latency to emit is longer than 10 seconds. 	SBT	<ul style="list-style-type: none"> • Switching order of CAB 1 and CAB 2 • Keeping CAB 2D in rotation to intermittently reinforce referencing materials and waiting for instruction • Acknowledging perseverative request and escalating EO • Having him pause/play iPad • Treatment drift: minimal physical prompting should be used, give more time to response • Only have the relinquishing bucket come out when you are using it to relinquish items • Skipping over high five for TR and accepting absence of interfering behavior • CAB 2D label the items so he scans • Allowing him to opt in/out.
Boundary	<ul style="list-style-type: none"> • Implement set the boundary, tact and validate, empathize, allow non-judgmental time, and move on (STEAM). • Allow at least 10 seconds of non-judgmental time after boundary is set. • Implement teaching interaction procedure (Leaf et al., 2009). • Follow every boundary with 2 neutral/positive statements within 5 minutes of moving on phase. • Firm boundary added for inappropriate requests for attention. • Reflective practice with learner after a minimum of 10 minutes after moving on. 	Boundary	<ul style="list-style-type: none"> • Button staying stationary. • Only mouthing on chewy.

Note. Description of the adjustments required in each condition of treatment (a. Todd; b. Ryan).

Figure 2.

Interfering Behavior and Skill-based Treatment Graphs



Note. Frequency of interfering behavior per week and mastered steps during SBT sessions across multiple branches for both participants (a. Todd; b. Ryan).

Discussion

- The use skill-based treatment, boundary setting, and enhancing qualities of reinforcement can lead to decreases in interfering behavior and boundary seeking and an increase in skill acquisition.
- Preliminary results help indicate that responding to boundaries in the framework of STEAM with modifications to its components (i.e. duration of allowing non-judgmental time) aided in decreases of behavior.
- For one participant 'boundary seeking' decreased through treatment as CAB branches progressed into CAB6.
 - Increases in boundary setting correlate with increases in interfering behavior initially (e.g. extinction burst), but then lead to a decrease in behavior.
 - Boundaries and responding to boundary seeking with compassion supports the findings by Harb et al. (2023) and Alghaim et al. (2023).
- For both participants increases in interfering behavior and/or 'boundary seeking' correlate with plateaus in skill acquisition.
- Clinical judgement and modifications are a necessary skill for a clinician to possess to maintain progress in skill-based treatment and the reduction of interfering behaviors.

Limitations

- IOA data was not collected across either participants data.
- Treatment drift due to technician changes.
- Clinicians changed for both clients during treatment.
- Utilization inconsistencies in services for both clients.
- Modified variables are not indicated as phase change lines in graphs.

Future research

- Align data collection methods to track modifications and relate them directly to changes in the data using phase change lines.
- Log the different modifications required across additional clients and analyze common themes to inform future practice of SBT.

Implications

- Idiosyncratic variables that need to be adjusted rely heavily on clinical judgment and the presence of a BCBA.
- Evaluating the ability for a clinician to use clinical judgment and make modifications to idiosyncratic variables may help predict outcomes of treatment in SBT.
- Evaluate the degree to which RBT's can be trained to utilize clinical judgment to enhance treatment based on modifications of idiosyncratic variables.
- Evaluate the extent to which implementing a 'Foundational Plan' leads to certain levels of progress in Skill-based Treatment.
- Fluency in SBT requires training in the modification of the process and problem-solving skills to make adjustments according to the needs of the client and the available resources.