

The Foundational Plan: Preliminary Outcomes of Scaling a Tier-One Intervention

Kaitlin Rodrigues, Katelyn Tillotson, Edward Sanabria & Hillary Laney

Introduction

- The Foundational Plan (FP) is tier one component of a Response-to-Intervention (RTI) model aimed at improving treatment implementation and reducing barriers to learning skills, including interfering behavior (Hughes & Dexter, 2011).
- The FP is designed to set a therapist and client up for success by thoroughly outlining the steps taken to build high levels of trust and rapport through antecedent and consequence interventions.
- Through the implementation of FPs, data has supported it as a successful standalone intervention for some clients with significant drops in high intensity and dangerous behaviors.
- Large-scale implementation of ABA begins by tying behavioral science to outcomes that are highly valued by society, decreasing interfering behavior is socially valid (Horner & Kittelman, 2021.)
- The purpose of this study is to show the outcome of large-scale adoption of foundational plans on high intensity and dangerous interfering behavior across multiple clinicians (BCBAs) and clients.

Methodology

Participants

- 7 total clients who participated in the study were all diagnosed with Autism Spectrum Disorder (ASD). Three female clients ages were 7, 6 and 5 years old. Four male clients ages were 4 and 3 years old.
- There were five Board Certified Behavior Analysts participated. The length of time they had been credentialed varied from 1-7 years. The clinicians' positions in the company varied and consisted of: Clinical Director, Clinical Leadership Resident and Supervising Clinician.

Setting

- The study took place in an Applied Behavior Analysis (ABA) clinic in Greenwood, Indiana that serves young children with an ASD diagnosis.

Targeted Behaviors

- Total Count per Hour of High Intensity and Dangerous Interfering Behavior.

Procedure

The Clinicians received training on the Foundational Plan in one of two formats:

- Two-hour synchronous company wide training on FP from Vice President of Functional Assessment and Treatment. This was a web-based training.
- Four weeks of FP development via synchronous training with a Director of Skill Based Treatment (SBT) and asynchronous fidelity checks with feedback and FP approval.

OR

- An 8-hour synchronous in person FP workshop. At the end of the 8 hours the goal was for each clinician to have completed two FPs.
- Continued mentorship and asynchronous fidelity checks with feedback from Clinical Lead Resident and/or Clinical Director and FP approval.
- Clinicians prioritized writing FPs for Clients with most intense/frequent high intensity and/or dangerous behavior first.
- Center wide training provided to Registered Behavior Technicians (RBTs) on STEAM. (Set the boundary, Tact the environment, Empathize and validate, Allow nonjudgmental time, Move on)
- The Clinicians reviewed the FP with the Clients' RBTs.
- Implementation of Foundational Plan in every therapy session. This included therapy session with Client's assigned RBTs and substitute RBTs.

Methodology (cont.)

Figure 1
Components of the Foundational Plan



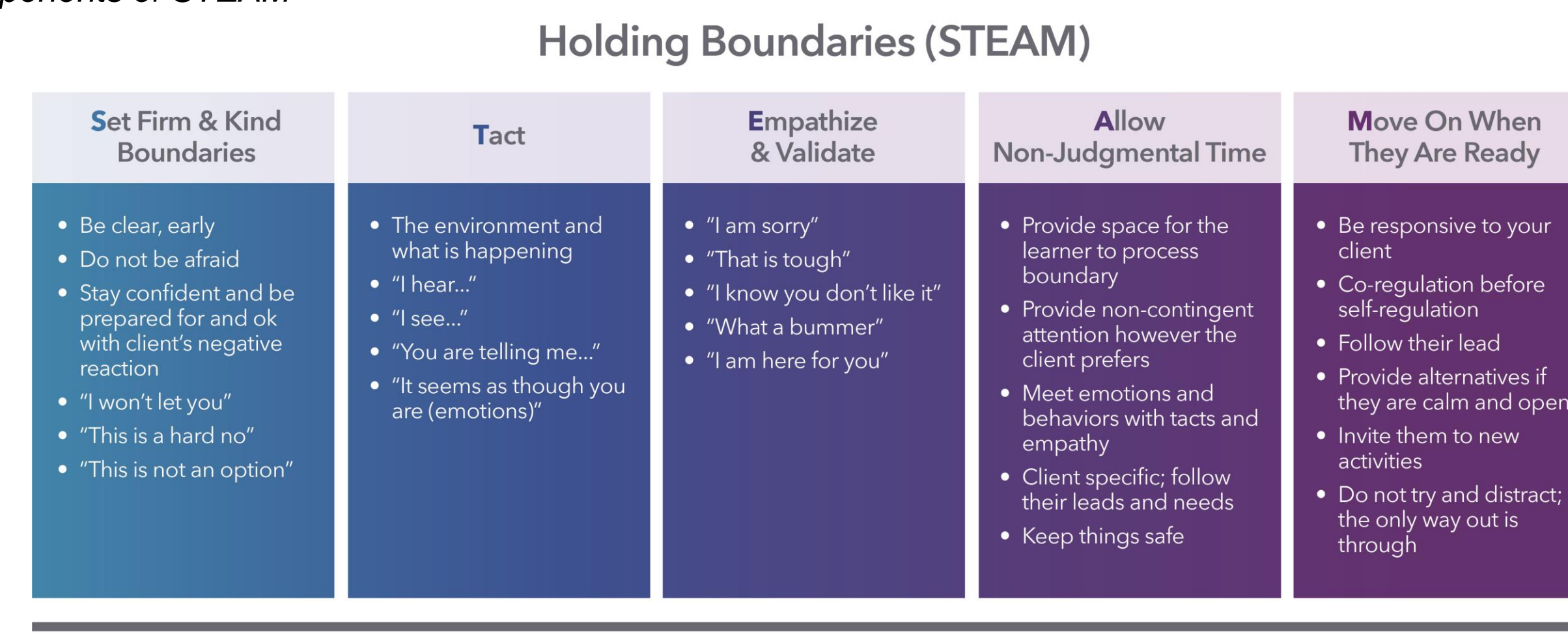
Note. Each component of a FP is provided with global considerations and directions for individualization for the client.

Table 1
Topographies of Interfering behavior included in aggregate data

Topographies
Self Injurious Behavior
Physical Aggression
Tantrum
Property Destruction
Elopement
Disrobing
Mouthing
Spitting
Biting Others
Biting Objects
Meltdown Tantrum
Ingesting Non-Edible Items
Unsafe Climbing

Note. 13 topographies reported by clinicians

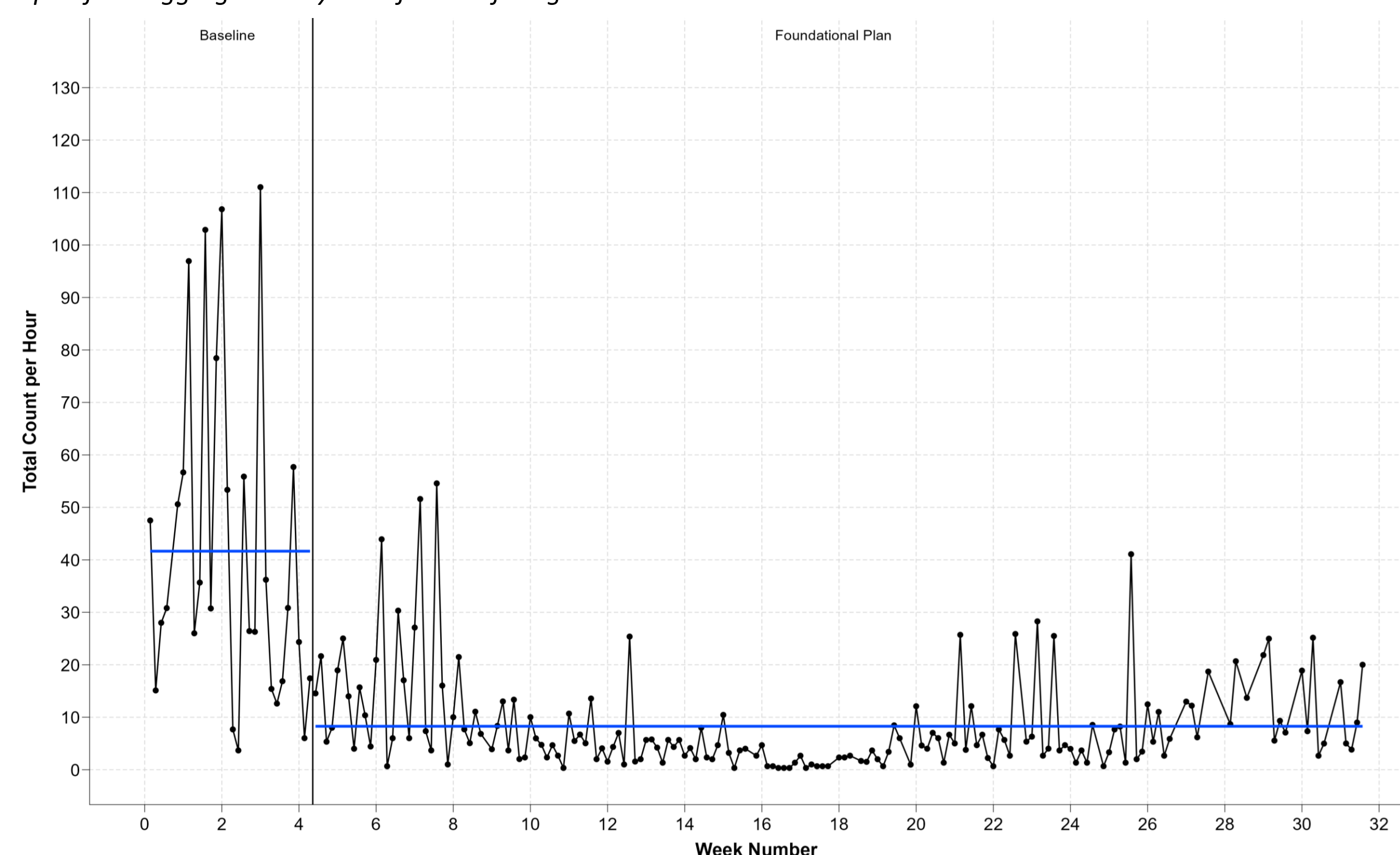
Figure 2
Components of STEAM



Note. Outline, description and examples of each component of the STEAM process used when holding boundaries in the FP.

Results

Figure 3
Graph of the aggregate daily data for interfering behavior across clients



Note. Total count per hour of High Intensity and Dangerous Behaviors per day across 7 clients and 5 clinicians. A range of 1-13 topographies of behaviors were observed across 221 days.

Results (cont.)

Table 2
Descriptive statistics of aggregate data

	Baseline (30 days)	FP (190 days)
Avg. # of topographies	8.1	4.56
Total Range	3.3-111	.33-54.5
Avg. total count/hour	41.6	8.3
Avg. mean count/hour	4.4	1.5

Note. Average number of topographies, total count/hour, mean count/hour, and total range for data across baseline and intervention phases.

Discussion

- Across clinicians, with varying levels of experience, the data from this study shows implementation of the Foundational Plan is an effective Tier 1 intervention for reducing clients' rate of high intensity and dangerous interfering behaviors.
- Through implementing the Foundational Plan, High Intensity and Dangerous interfering behavior was reduced by an average of 36 instances per hour per day across 7 clients who were supervised by 5 different clinicians.
- The model of training provided was effective in achieving meaningful outcomes in the reduction of interfering behaviors across multiple topographies
- Not only did the level of interfering behaviors decrease substantially, but the number of observed topographies was also reduced by 44%.

Limitations:

- IOA data was not taken on implementation of the foundational plan or the data collection of interfering behaviors.
- All the clinicians in this study were mentored by the same Clinical Lead Resident and their Foundational Plans were edited by her.

Future Research:

- To further support the hypothesis that the Foundational Plan is a scalable intervention, the subject number should be increased.
- Component analysis of the various parts of the FP to determine if some components or combination of components are more effective than others.
- Compare the frequency of changes to the Foundational Plan and the rate of high intensity and dangerous behavior, to see if there is a positive correlation, identify if there is an average frequency of change that leads to the most significant decrease in interfering behavior and train clinicians on this.

Implications

- The Foundational Plan is a scalable Tier 1 intervention that decreases High Intensity and Dangerous interfering behaviors (of varying topographies) across clients of different ages and skill sets who are supervised by different clinicians. Most important were the methods in which these outcomes were attained: through compassionate, values and client centered intervention focused on therapeutic alliance, client dignity and respect.
- The Life Skills Autism Academy has rolled out a mentorship program to ensure every clinician receives training in the development and implementation of the FP.
 - Behavior Technician training is also being developed to ensure alignment both with the Registered Behavior Technician credential and with the values and components of the FP