

Utilizing the IISCA to Design a Successful PFA for Clients who are Novel to Clinicians

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Introduction

- Research conducted by Hanley et al. (2014) support treating severe problem behaviors in a televisable manner.
- Jessel et al. (2019)- demonstrated the use of a single session IISCA to identify contextual control of interfering behavior, supporting its use as an alternative for other functional analysis.
- The interview-informed synthesized contingency analysis is a tool used with caregivers to gain information on variables influencing challenging behavior so that they can be arranged the same way in the functional analysis.
- Differentiated results in the analysis allows clinicians to have a begin treatment efficiently following the interview.
- This study attempts to replicate findings that indicate contextual control can be established over interfering behavior in a safe manner using the practical functional analysis as informed by the IISCA for two clinicians with two novel clients that had no prior observation of the interfering behavior. Each analysis aims to demonstrate contextual control using synthesized contingencies for 5 to 10 replications within the analysis.

Methodology

Participants:

- Two male participants a 5-year-old and 7-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 IISCA's, 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.

Independent variable: Single-session IISCA.

- Control- Reinforcer Present Interval;
- Test- Reinforcer Absent Interval;

Dependent Variables: Rate of interfering behaviors (IB)

- Precursor, high-intensity, and dangerous behaviors.
- Data collected using IISCA app

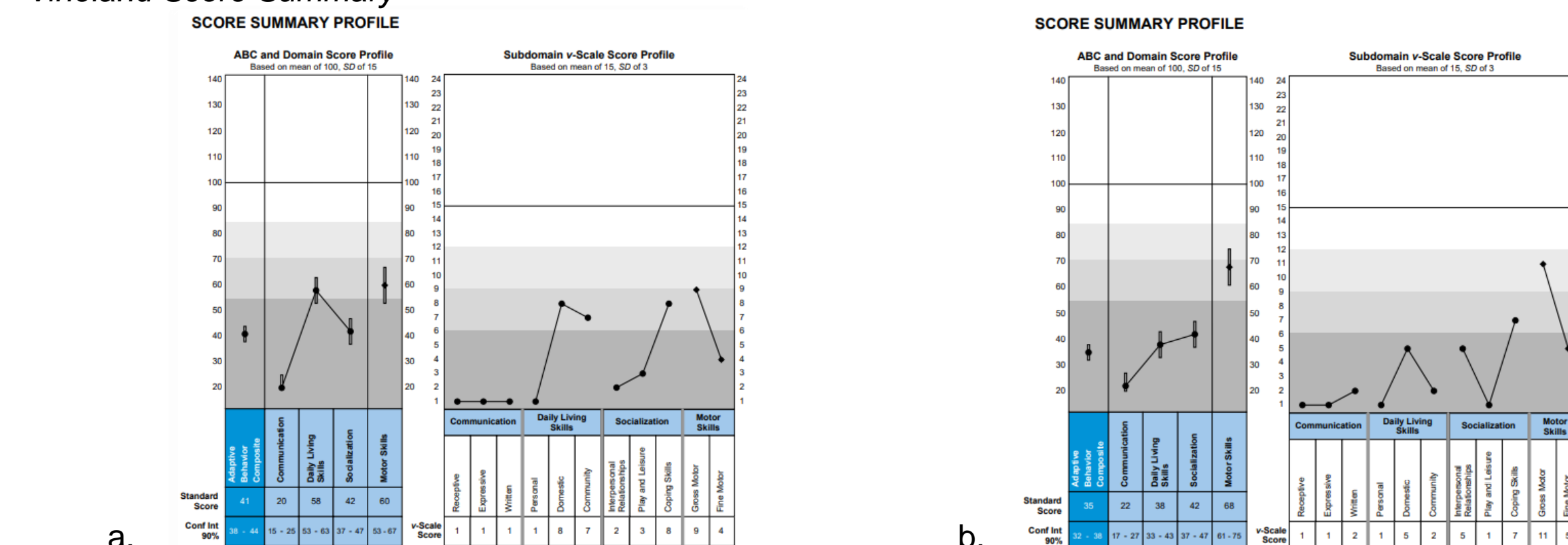
Procedure:

- Interview:
 - Conducted with the clients' technicians' and caregivers on the first week of the clinicians' meeting with them.
 - 20 questions regarding variables that evoke behavior, the topographies and magnitude of behaviors, and establish a reinforcing environment.
- Analysis:
 - Environment was set up with reinforcers identified in the interview (e.g., social attention, tangibles, absence of demands, free access to stereotypy).
 - Client was provided five minutes of uninterrupted synthesized reinforcement as baseline to get them happy, relaxed and engaged.
 - Test condition was initiated by introducing identified EO's.
 - Trial was terminated at the first instance of Jesse interfering behavior which included low level, low intensity behaviors (e.g., turning body away from the instructor in attempts to start eloping).
 - Control condition was re-established by presenting synthesized reinforcers.
 - This was repeated for 5-10 conditions to demonstrate control over the interfering behavior.

Results

Figure 1.

Vineland Score Summary



Note. Results of the Vineland assessment for each participant (a. Salazar; b. Ryan).

Table 1.

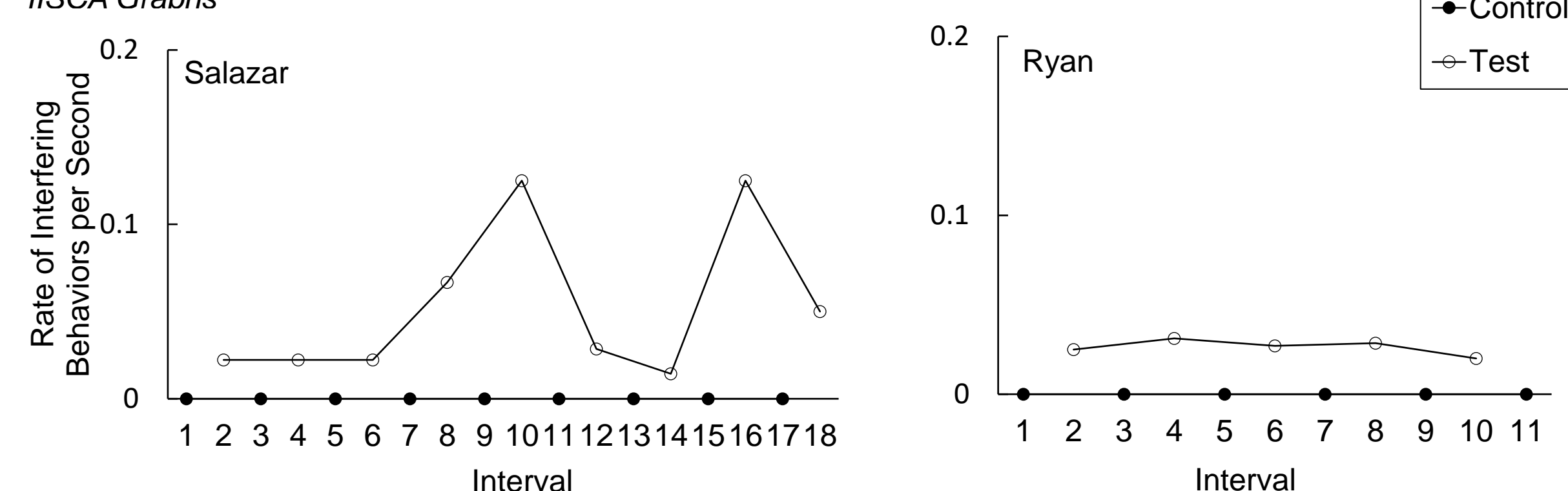
IISCA Basic Data Table

	Salazar	Ryan
Total Time	0:27:50	0:11:21
Time to First EO	0:08:43	0:03:42
IB in Test	9	5
IB in Control	0	0
Control Reached	Yes	Yes
AVG SR after the first EO	0:01:39	0:00:56
Total EO Time	0:04:12	0:02:58
Total SR Time	0:23:38	0:08:23

Note. Objective measures of the IISCA for each participant provided by the IISCA App.

Figure 2.

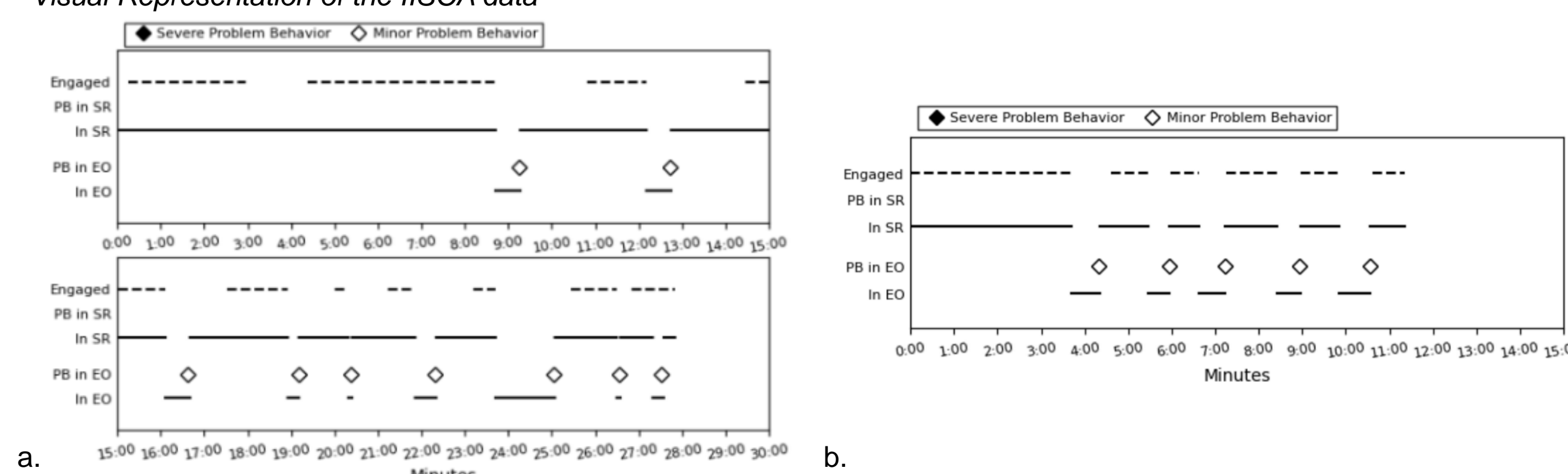
IISCA Graphs



Note. Rates of interfering behavior during the implementation of the IISCA for both participants.

Figure 3.

Visual Representation of the IISCA data



Note. Visual representation of differentiated results of the IISCA from the IISCA App (a. Salazar; b. Ryan).

Discussion

- The results of this study are like the research conducted by Jessel et al. (2019).
- The IISCA is an effective tool for clinicians to quickly and safely identify synthesized contingencies surrounding interfering behaviors to inform treatment.
- The analysis for both participants yielded differentiated results when presented with sequential conditions of synthesized reinforcement followed by intervals of the establishing operation with reinforcers absent.
- The low level of interfering behavior was especially notable. No high intensity or dangerous behaviors were observed.
- Information provided by in the interview successfully informed the development of reinforcer present and reinforcer absent conditions.
 - Clients were happy, relaxed, and engaged during the synthesized reinforcement condition and no interfering behaviors were observed during these intervals.
 - Effective evocative conditions were developed which evoked low intensity interfering behaviors. Safety was maintained throughout the entirety of each analysis.

Limitations:

- No IOA were conducted for data collection.
- Limited number of participants involved in the study.

Implications:

- This study provides evidence that demonstrates the utility of conducting IISCA's with novel clients and clinicians which allows for treatment of interfering behaviors sooner.
- Replications of this can be conducted to provide further data.

Future Research:

- Evaluate the amount of training in PFA the clinicians require to effectively implement the IISCA.
- Investigate the effectiveness of the treatment informed by the IISCA's with novel clients.

Acknowledgements

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References

- Hanley, G. P., Jin, C. S., Vanselow, N. R., & Hanratty, L. A. (2014). Producing meaningful improvements in problem behavior of children with autism via synthesized analyses and treatments. *Journal of Applied Behavior Analysis*, 47(1), 16-36.
- Jessel, J., Hanley, G., Ghaemmaghani, & M, Metras, R. (2019). An evaluation of the single-session interview-informed synthesized contingency analysis. *Behavioral Interventions*, 34: 62-78.