

Utilizing Behavior Skills Training to Teach Antecedent Strategies and Intraverbals to Bilingual Parents of a Child with Autism through Parent-Implemented Intervention

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ABSTRACT

A culturally responsive treatment package was created for a family from Nepal. Within the assessment period, the parents reported the most socially significant goal was recalling distressing events and answering safety questions. During initial observations, it was noted that the child did not have the prerequisite skills to report events; therefore, an intraverbal program was implemented to build the child's verbal repertoire. This study employs a single-subject design to utilize behavior skills training (BST) and parent-implemented intervention (PII) to teach bilingual parents an intraverbal intervention with antecedent strategies for an emergent bilingual child. Due to the family's cultural and linguistic background of Nepali, additional considerations included adapting fill-in intraverbal questions, learning style, feedback preferences, and expectations versus current needs. Initial findings indicate that the application of BST to teach bilingual parents the intraverbal treatment package results in the acquisition of increased communication skills.

METHODS

Participants:

- *Child*: Eight-year-old male diagnosed with autism, intellectual disability and speech impairment
- *Parents*: Father and Mother from Nepal

Setting:

- Hybrid: BCBA via HIPPA-compliant Zoom platform; participants in person with RBT

Design:

- Single-subject: ABC design

Dependent Variables:

Child

- Intraverbal intervention: percent of accurate intraverbals

Parents

- First-then: percent of steps completed independently
- Intraverbal intervention: percent of steps completed independently

Independent Variable:

- PII to teach the use of a first then-board and intraverbals using BST

Interobserver Agreement (IOA):

- IOA was collected for 100% of sessions
- Parent Data: Average of 93% agreement, ranging from 72%-100%
- Child Data: Averaged of 97% agreement, ranging from 83%-100%

PROCEDURES

- *Assessments*: A functional assessment interview, Vineland-3, and VB-MAPP intraverbal assessment were conducted.
- *Preparation*: Task analyses, visual supports, cultural adaptations (e.g., animal sounds), and data collection sheets were created to implement this treatment package.
- *Mastery criteria*: An 80% mastery criteria was established for all parent and child opportunities across all treatment phases.
- *Baseline*: Three baseline sessions were conducted to assess parent implementation and child accuracy of intraverbals. The third session of baseline included assessing the use of a first-then board.
- *Parent Training*: Four parent training sessions included a nine-step first-then procedure and a three-step intraverbal procedure. Both interventions were taught to parents using BST until mastery across three consecutive sessions was met.
- *Intervention*: Instructions and modeling were provided at the beginning of each session. Parents then implemented the first-then and intraverbal intervention with coaching and feedback from therapists via Bluetooth headphones. Intervention is currently in progress, and three 45-minute sessions have been completed thus far.
- *Maintenance*: Three maintenance sessions will be conducted following mastery of intervention.

RESULTS

Child:

- *Baseline*: The child correctly responded to an average 59% of opportunities
- *Intervention*: Currently, the child has two nonconsecutive sessions above the mastery criteria of 80%. The intervention will continue until mastery is met.

Cultural and linguistic considerations were kept in mind for teaching intraverbals to the parents of an eight-year-old emergent bilingual child. Preliminary results from this study demonstrate that the use of BST through PII to teach antecedent strategies and intraverbals are effective.

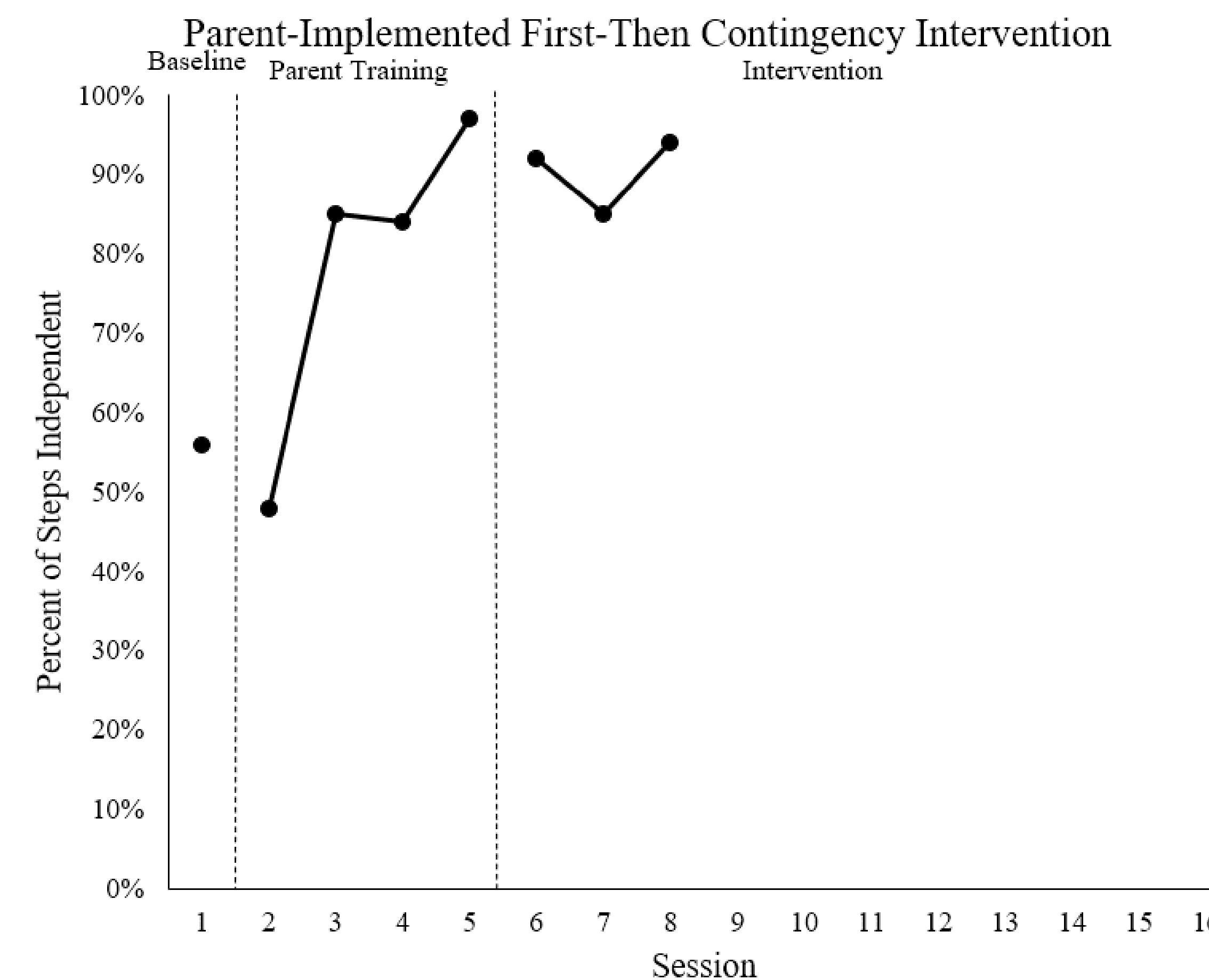


Figure 1 displays the parents' average percentage of independent steps during an antecedent intervention (i.e., first-then contingency) across baseline, parent training, and intervention.

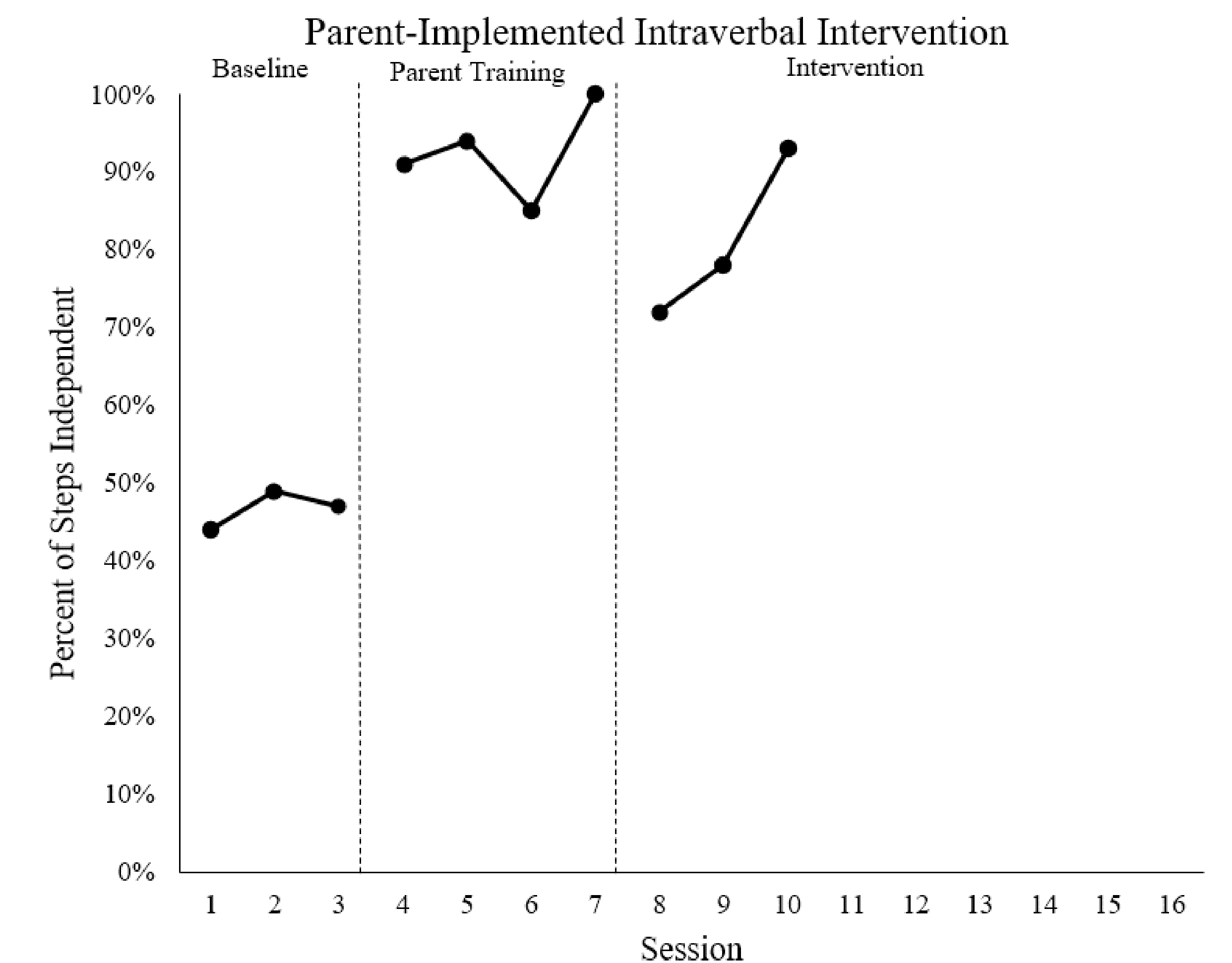


Figure 2 displays parents' average percentage of independent steps during an intraverbal program across baseline, parent training, and intervention.

Parents

- *Baseline*:
 - First-then: Parents completed an average 56% of steps independently
 - Intraverbal intervention: Parents completed an average 47% of steps independently
- *Parent Training*:
 - First-then: Parents correctly implemented steps of intervention at 80% or higher across three consecutive sessions.
 - Intraverbal intervention: Parents correctly implemented steps of intervention at 80% or higher across four consecutive sessions.
- *Intervention*:
 - First-then: Parents correctly implemented steps of intervention at 80% or higher across three consecutive sessions.
 - Intraverbal intervention: Parents correctly implemented the steps of intervention 80% or higher across one session. This intervention will continue until mastery is met.

LIMITATIONS AND FUTURE RESEARCH

- *Client barriers*: immigration status, health concerns, housing concerns, low SES, language barriers
- *Limitations*: feedback due to hybrid approach (e.g., in-person vs Zoom)
- *Future Research*: replicating this study with multiple participants across various cultural backgrounds with similar communication deficits and/or cultural barriers

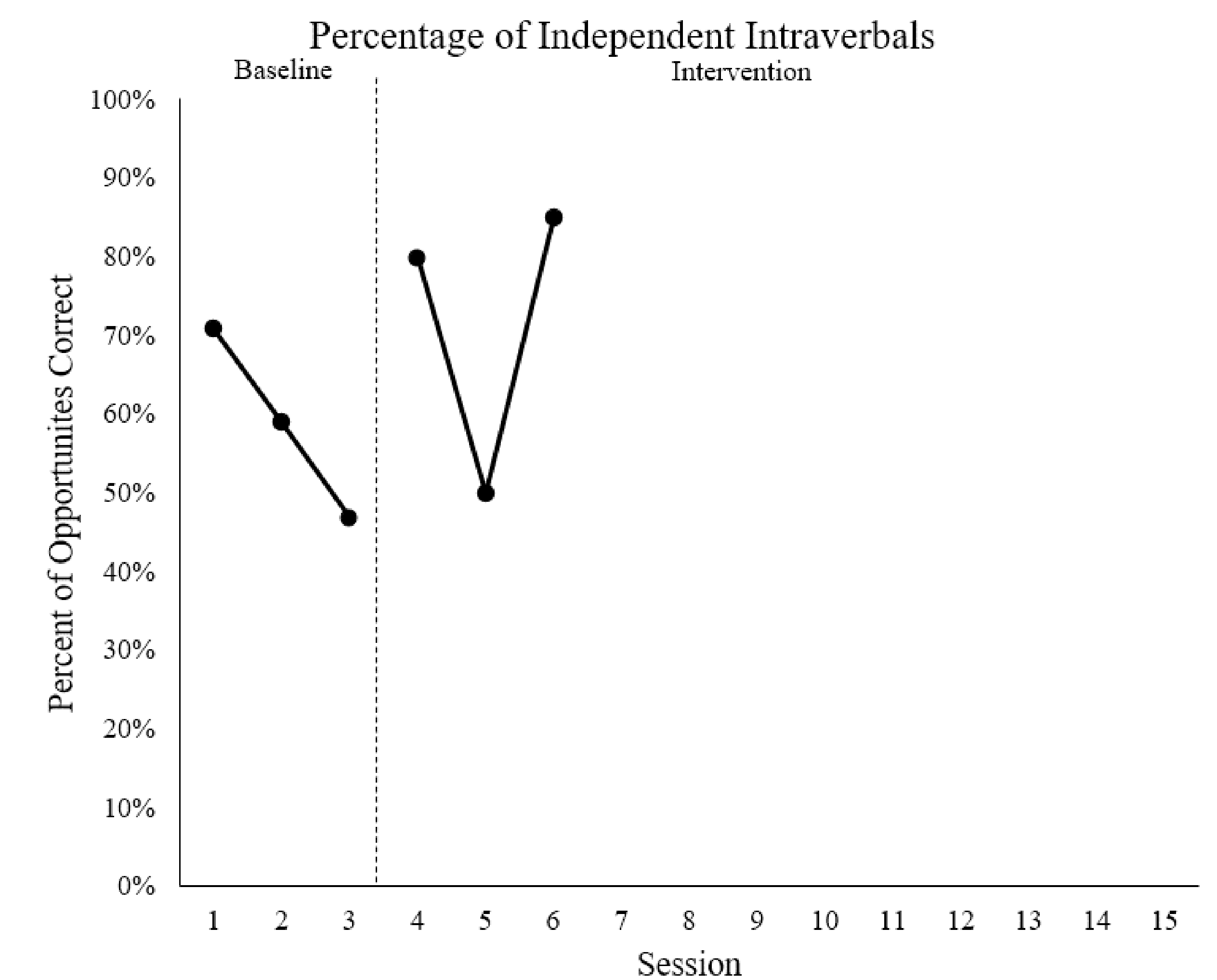


Figure 3 displays their child's percentage of independent intraverbals across baseline and intervention.

