Language Discrimination Using Bilingual Picture Exchange for Culturally & Linguistically Diverse Children with Autism Spectrum Disorders

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Gaps in Research/Practice

>20% of families in the U.S. speak a non-English language as their primary mode of communication (Dietrich and Hernandez, 2022)

<10% of CLD learners with a developmental delay receive any support in their native language (Lim et al., 2018)

Limited native language support for CLD learners with ASD and I/DD impairs participation in culture (del Hoyo Soriano et al., 2023)

- **>40% of learners with a developmental delay** communicated only in English
- **<5% of neurotypical/typically developing** children spoke English as their primary language

ABA for CLD Learners

Native language support in programming is critical

- Skill acquisition (Lang et al., 2011)
- Communication training (Padilla Dalmau et al., 2011)

Relatively limited work incorporating language/culture into practice (Waits et al., 2023)

- Multilingual forms of Functional Communication Training (FCT; Neely et al., 2020)
- Extensions of FCT with language discrimination strategies (Banerjee et al., 2022)

Research is steadily growing, primarily for **sequential bilingual** communication training practices

Research Aims

1) Simultaneous teaching of language-specific Functional Communication Responses (FCRs)

- Mand response from the majority culture
- Mand response from family culture

2) Emergence of language-specific FCR under control of relevant cultural stimuli

- FCRs in single-/mixed-language contexts
- *How and when* learners come to demonstrate functionally bilingual repertoires

Study Methods & Procedures

Two autistic boys from Spanish-speaking families (Juan/Luis)

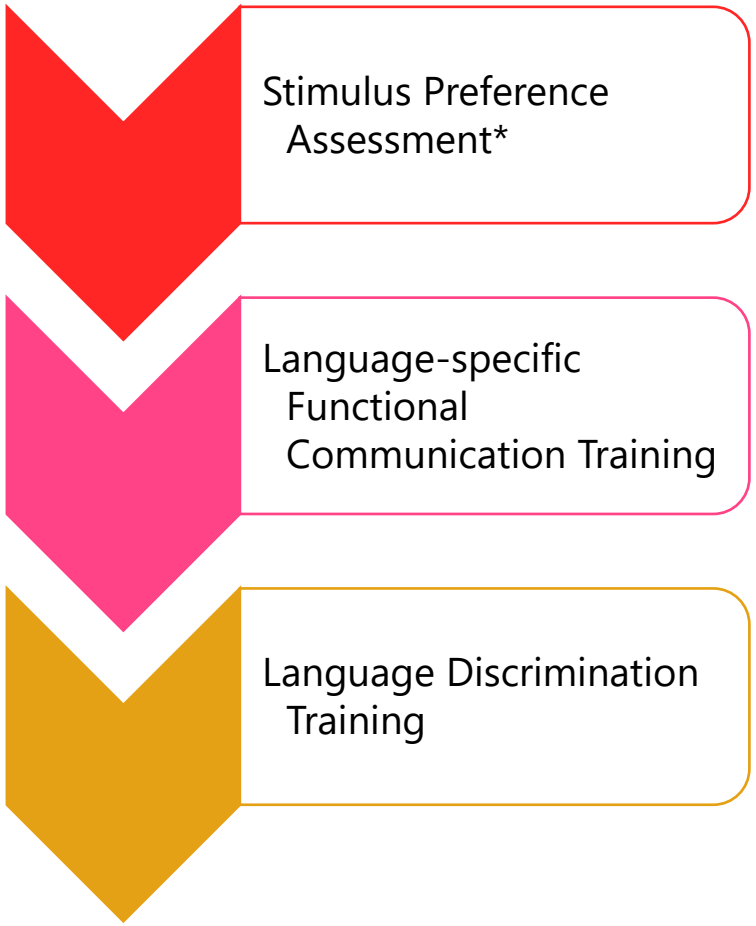
- Juan: four-year-old Mexican-Honduran male
- Luis: four-year-old Dominican male
- Both attending a center-based ABA program

Multiple Baseline Design across objects

- English/Spanish FCRs for preferred items
- FCRs evaluated in single-/mixed-language contexts

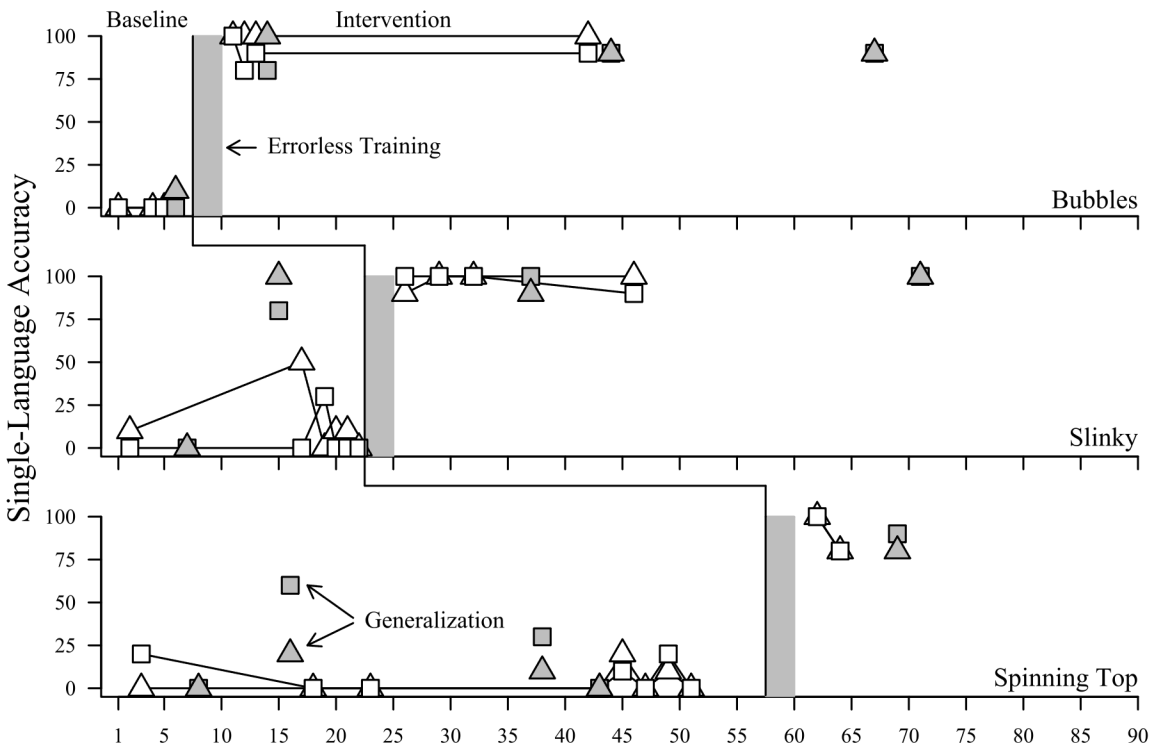
Core Procedures across Contexts:

- Time Delay prompt fading (initial and discriminated responding)
- Probes across partners (generalization) and contexts (i.e., emergence of trained/untrained language discrimination)

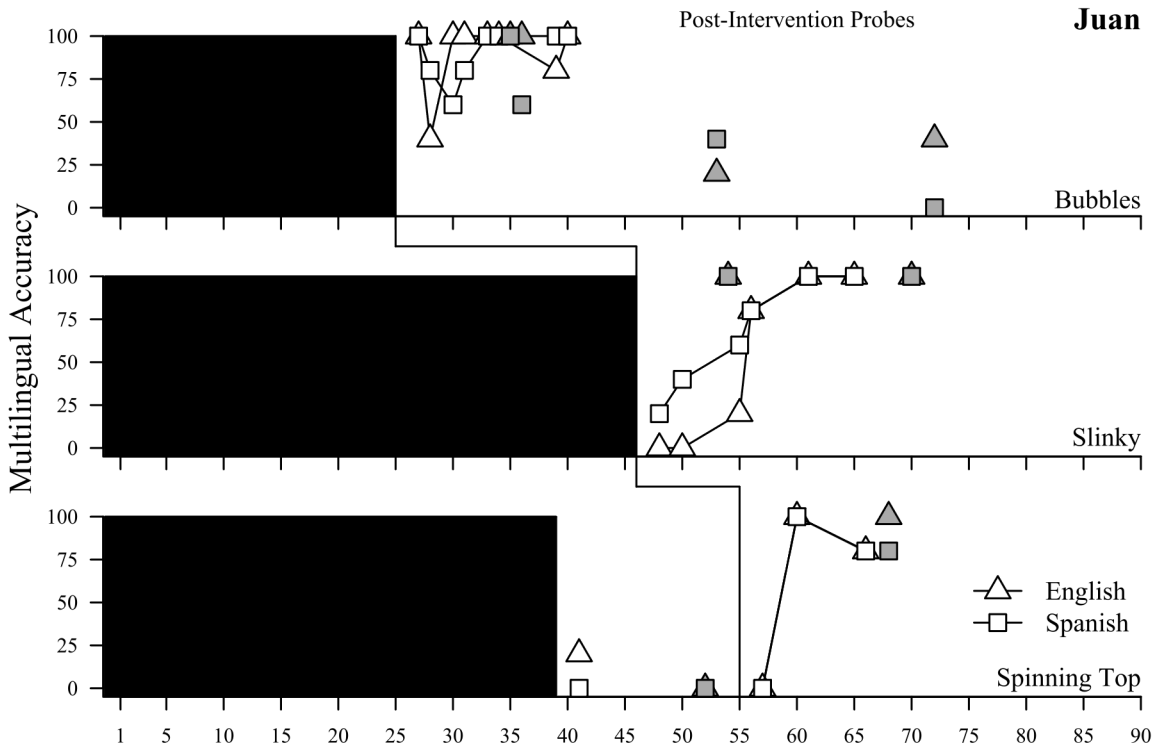


* Materials/targets designed with input and feedback from families (e.g., images, language, etc.)

Communication Outcomes for Juan

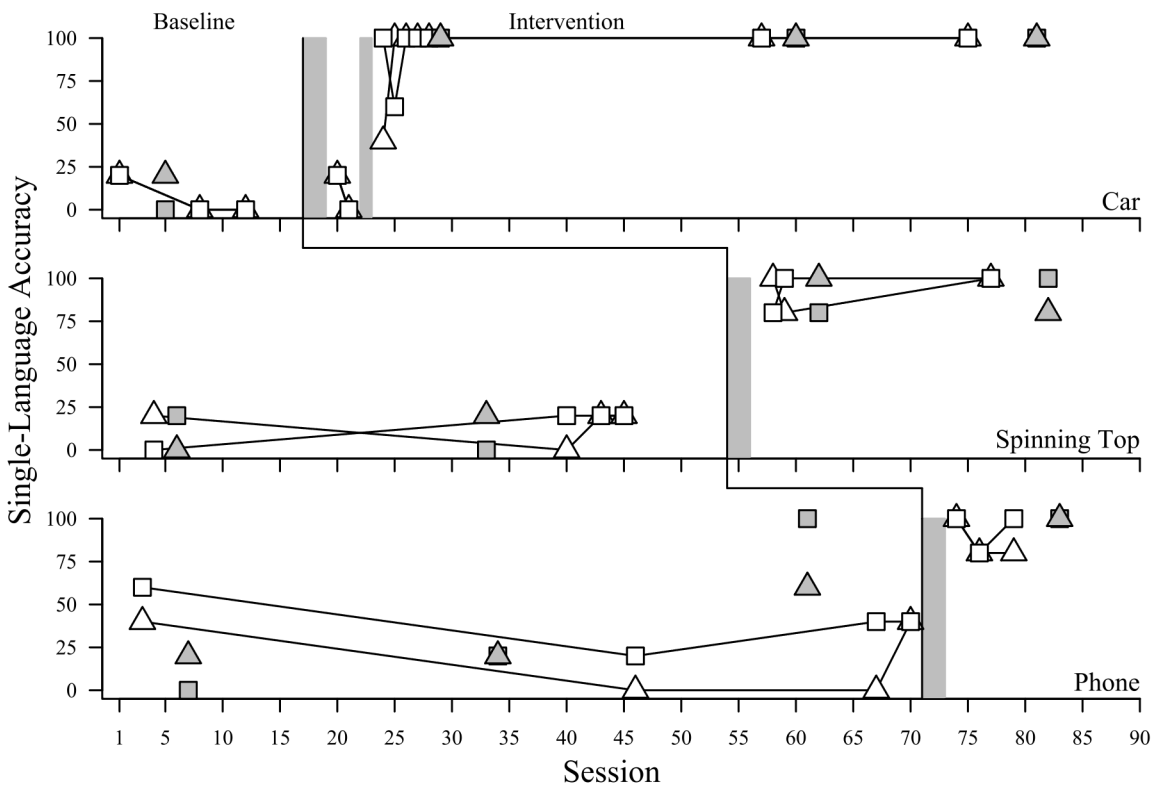


Single-language Context (Block Trials)

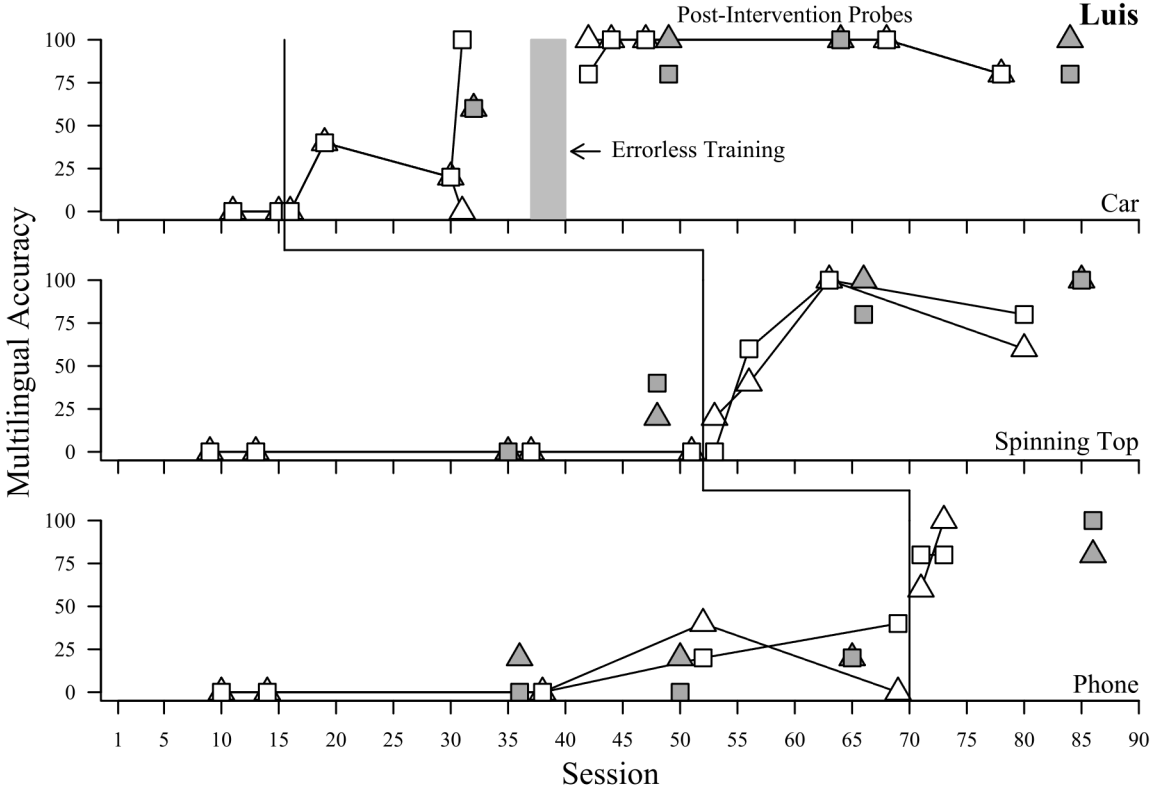


Multilingual Context (Mixed Language Trials)

Communication Outcomes for Luis



Single-language Context (Block Trials)



Multilingual Context (Mixed Language Trials)

Key Takeaway Points

Outcomes were positive for a simultaneous bilingual communication training approach

- Matches findings from the broader literature
- Didn't need to delay/defer to one specific language

Variability in how and when language-specific responses came under relevant sources of control

- Some may not need programming at all
- Some may only require brief support
- Possible others would require much more

Practices such as FCT are a good starting point for expanding upon culturally responsive programming

Some Future Directions

Greater emphasis on both vocal and non-vocal forms of functional communication

Increasing involvement and agency of families in the design/evaluation of culturally relevant supports

Development and expansion of guidelines for assessing and including culturally relevant stimuli

Discrimination training for contextual features beyond the language used

Questions?

Study References

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