

Effects of Bilingual Tact Instruction for a Child with Communication Impairment

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INTRODUCTION

- Instruction is often delivered only in English to children with disabilities who are bilingual despite similar language development between bilingual and monolingual children (Hambly & Fombonne, 2012; Reetzke, et al., 2015).
- Prior research has shown that participants respond better to and prefer instruction that is presented in their home language (Lang et al., 2011; Padilla Dalmau et al., 2011; Rispoli et al., 2011).
- Purpose of the present study: To expand findings of Lang and colleagues (2011) by directly evaluating the effects of tact training in English and in two languages (English and Portuguese).

METHOD

Participant and Setting

- 1 male student, 6 years 8 mos old; educational diagnosis of communication impairment
- Large vocabulary; difficulty with articulation
- VB-MAPP: maximum score across all milestones
- PPVT-4: 5.7 age equivalence
- EOWPVT-4: 9.11 age equivalence
- Setting: Classroom/home workspace

Experimental Design and Independent Variable

- Adapted Alternating Treatments Design
- Bilingual condition (Set A) and English only condition (Set B) presented in quasi-random fashion
- Figure 1 shows images presented for each stimulus set

Dependent Variable

- Correct independent tact response; e.g., "basket" within 10 seconds following the experimenter's instruction



Interobserver Agreement (IOA)

- Collected for $\geq 26\%$ of each phase
- Pre-Test Probes ($M = 100\%$)
- Pre-Generalization Probes ($M = 100\%$)
- Training ($M = 94.4\%$, range = 77.8 – 100%)
- Posttest Probes ($M = 100\%$)
- Post-Generalization Probes ($M = 100\%$)
- Follow-up Probes ($M = 100\%$)

RESULTS

Figure 3. Paulo's number of correct tact responses with the bilingual condition (in English), the bilingual condition (in Portuguese), and the English only condition during pretest, posttest, pre/post generalization, and follow-up probes.

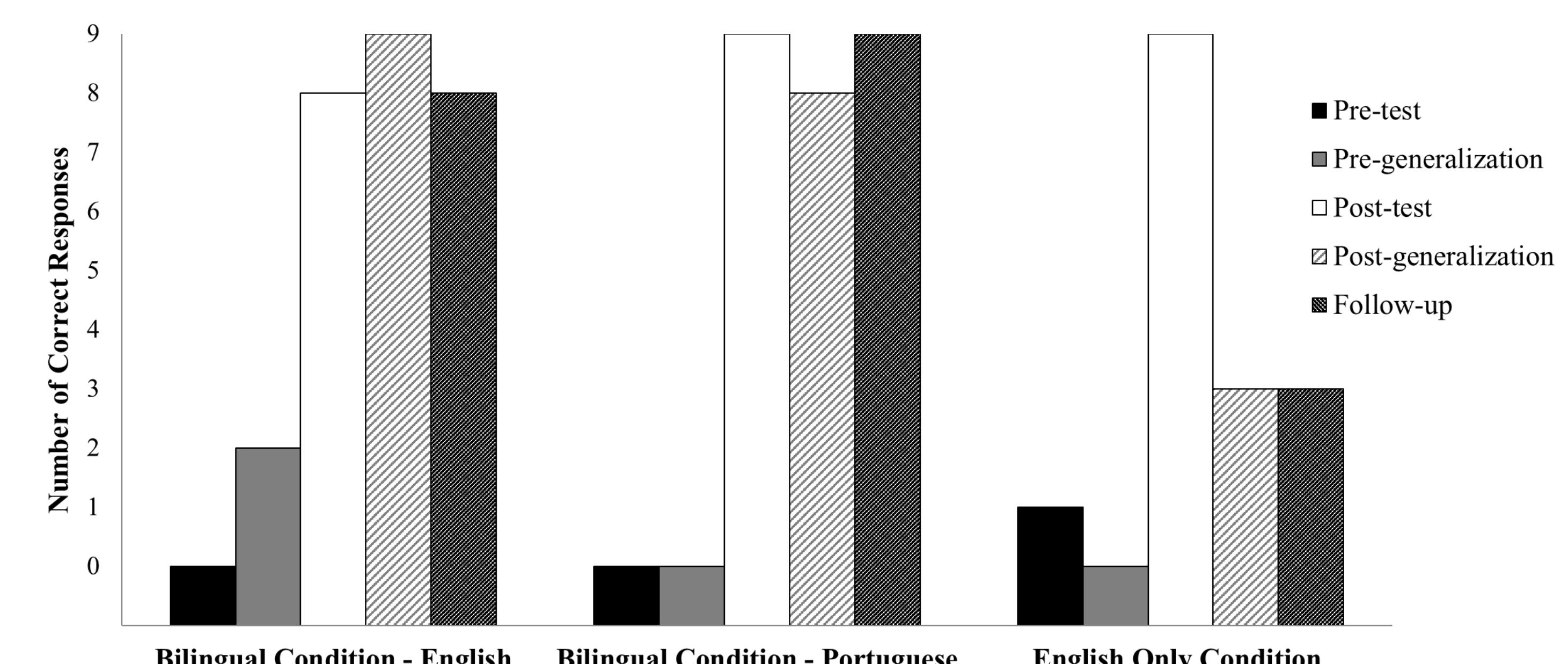


Figure 4. Tact training results for Paulo. Open squares represent correct responses for the bilingual condition (English and Portuguese) and closed squares represent correct responses for the English only condition.

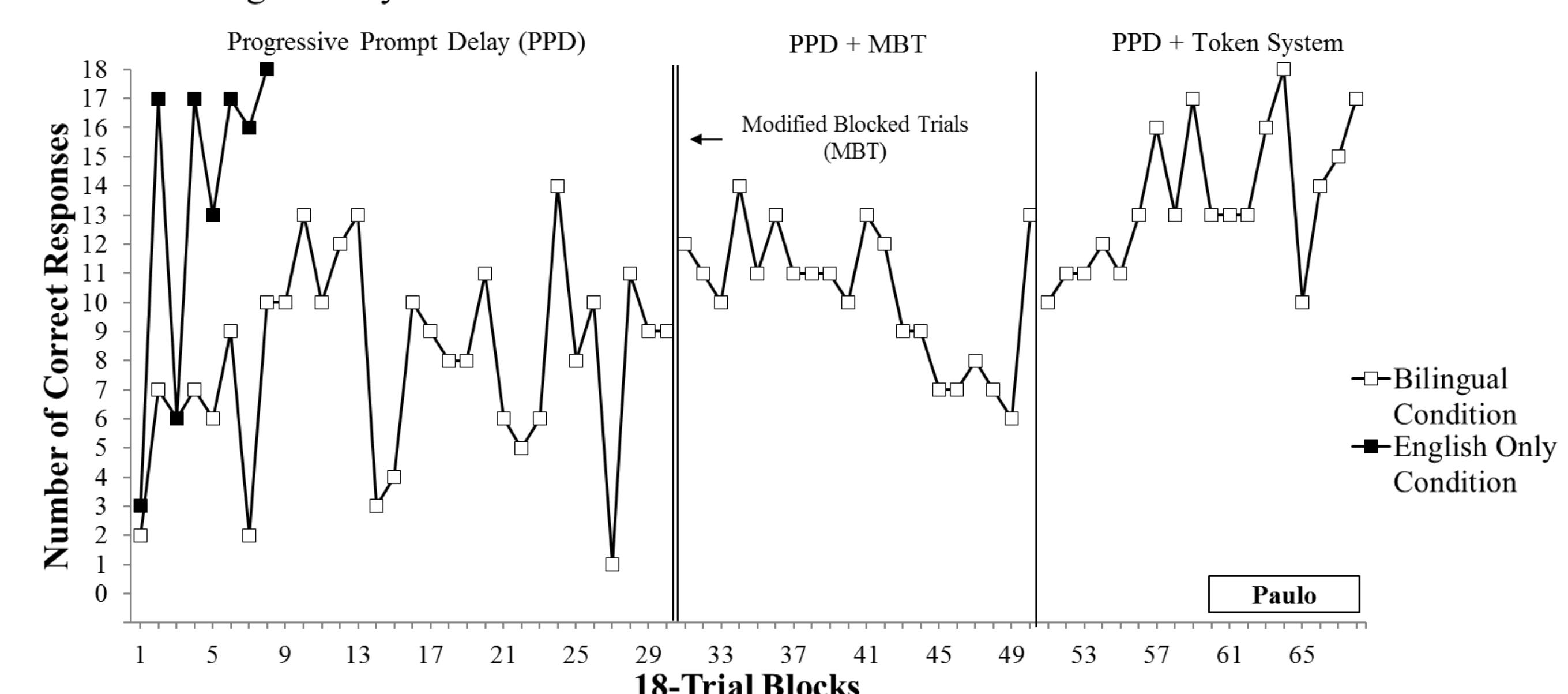
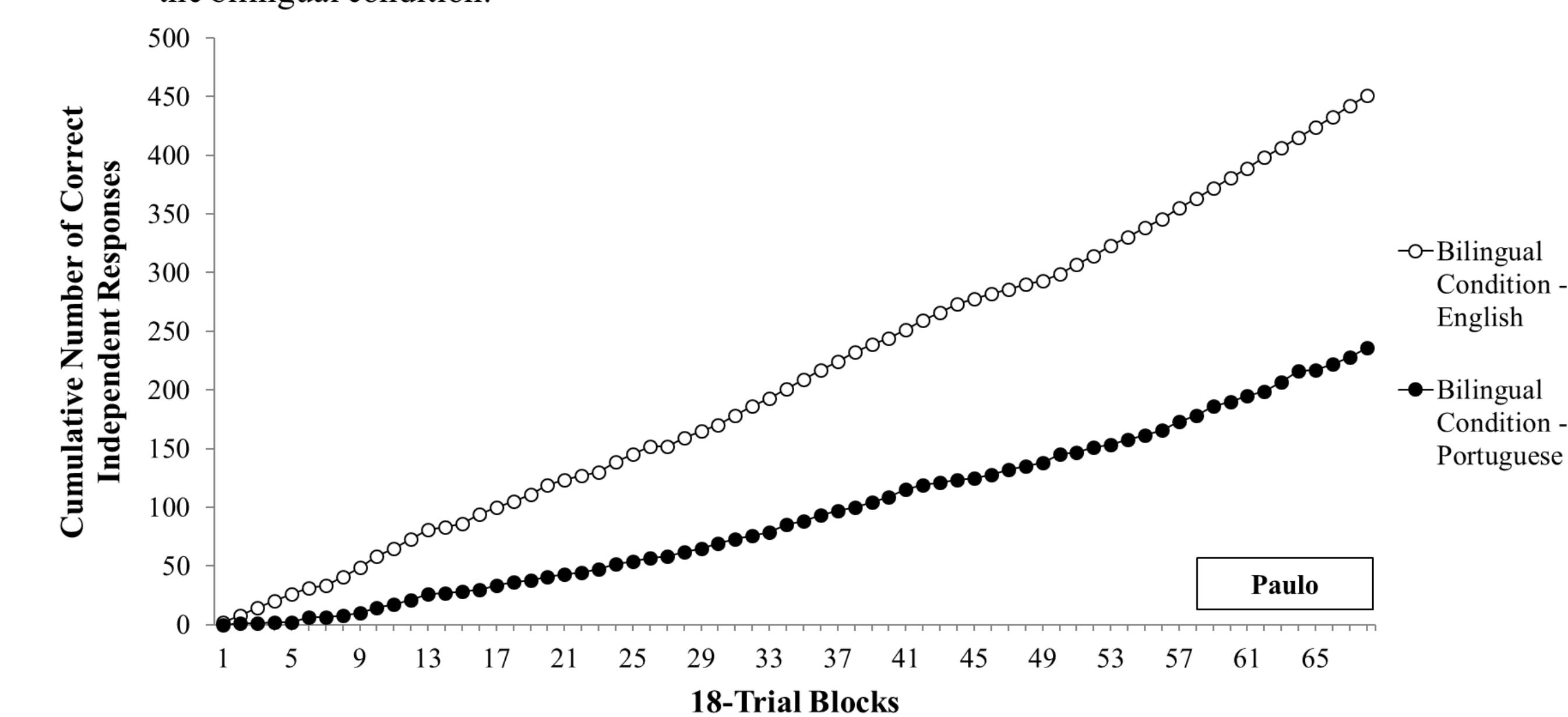


Figure 6. Cumulative number of correct independent responses for Paulo during tact training with the bilingual condition. Open circles represent correct independent responses in English for the bilingual condition and closed circles represent correct independent responses in Portuguese for the bilingual condition.



SELECTED REFERENCES

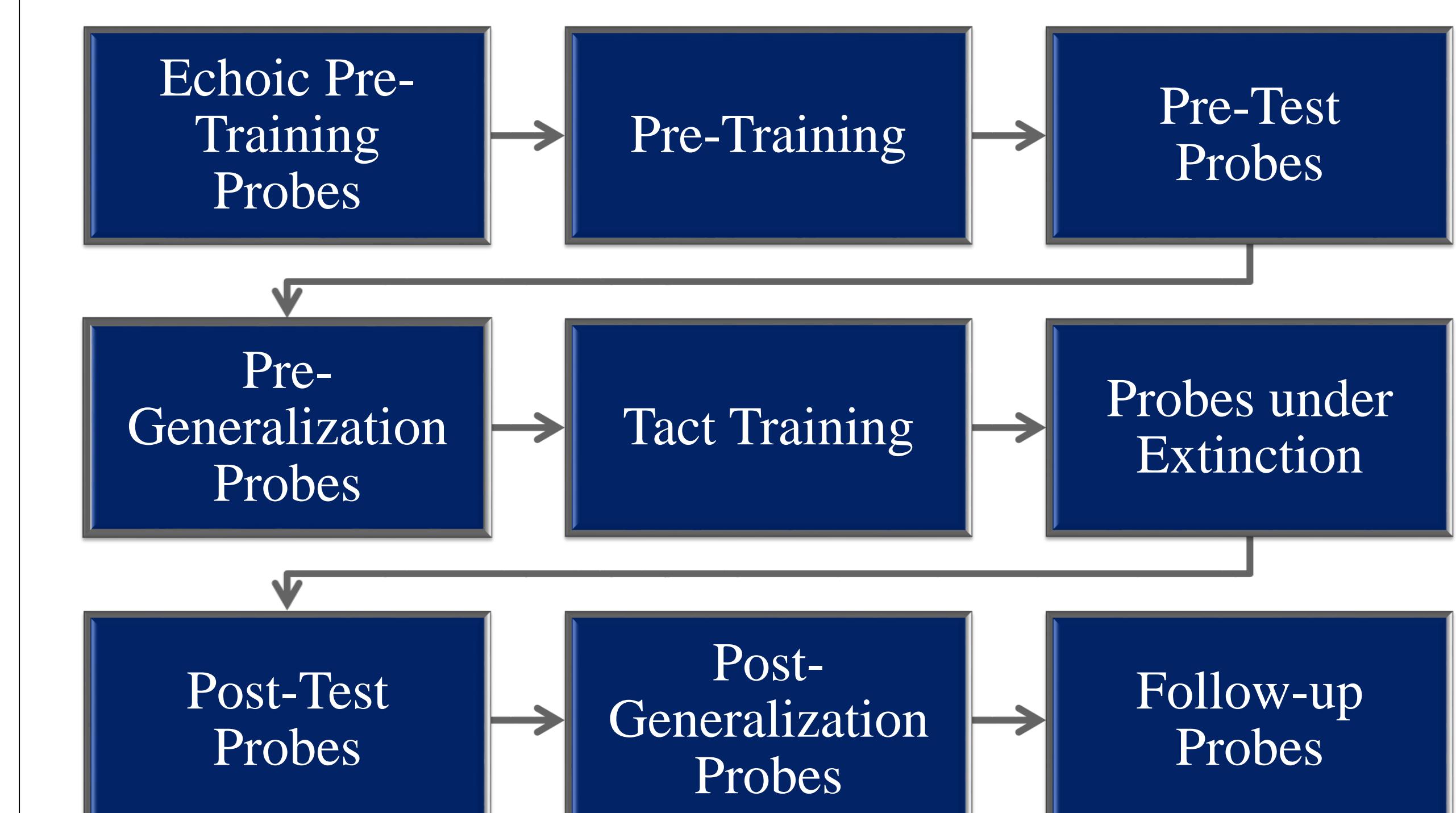
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METHOD (CONT'D)

Figure 1. Stimuli presented for Set A and Set B.



Figure 2. Flow chart of experimental conditions.



DISCUSSION

- Fewer trials to criterion during English only instruction condition when compared to bilingual instruction condition.
- All tacts acquired to criterion levels following tact and remedial training.
- Nearly twice as many total correct independent responses in English than in Portuguese, during bilingual instruction condition.
- Greater generalization and maintenance of acquired tact responses for stimuli following bilingual instruction.

Implications for Future Research

- The effects of training in the home language alone remain unknown.
- Results may not be generalizable to children in this population with a different history of language exposure.
- Future research should be conducted to address limitations of this study.