



Investigating the Preference for Simultaneous Prompting and Constant Prompt Delay Procedures in Teaching Skills to Children with Autism

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Introduction

- A variety of prompting procedures, including simultaneous prompting and constant prompt delay, have been used to teach new skills to children with autism.
- Research has shown that both procedures can be used effectively to teach a variety of skills. No research to date, however, has assessed whether children with autism have a preference for either procedure.
- The use of a concurrent chains procedure has been used to evaluate children's preference. For example:
 - Hanley, Piazza, Fisher & Maglieri (2005) conducted a study that evaluated preference for FCT without punishment vs. FCT with punishment.
 - Slocum & Tiger (2011) evaluated preference between forward chaining and backward chaining.
- The purpose of this study was to use a concurrent chains procedure to assess preference for both prompting procedures for young children with autism.

Method

Participants and Setting

- Three male and one female participants, all diagnosed with autism. Participant ages ranged from 3 to 9 years old.
- Data collection took place during regular therapy hours in the children's homes and at an autism clinic located on a mid-western university campus.

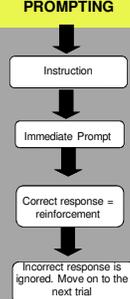
Pre-Experimental Assessments

- Color Preference Assessment.** Based on the procedures described by Heal, Hanley & Layer (2009), a color preference assessment was conducted prior to evaluation of preference for prompting procedures. The color preference assessment was conducted to eliminate bias for the colors associated with the initial-link of the concurrent chains preference assessment.
- Multiple-Stimulus Without Replacement Preference Assessment.** Based on the procedure described by DeLeon & Iwata (1996), six potential reinforcers were presented to the participant. After selecting an item, the participant had access to the item for 20s. Once 20s had passed, the item was removed from the participant and not presented again for the remainder of the assessment. The MSWO assessment continued until all items were chosen or 30s passed without the participant selecting an item.
- Efficiency Assessment.** Prior to each experimental session, the participants selected a leisure item from an array of 3 preferred items so the quality of reinforcement was identical across prompting conditions (Slocum & Tiger, 2011). Preferred items were the first three the participant chose during the MSWO assessment and were only available for the children during research to prevent for satiation.

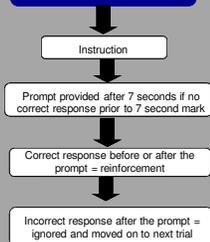
Procedure

- Following the baseline condition, the preference assessment of prompting procedures began. Each of the three conditions were paired with a color card. Each time the child chose a color card, the corresponding procedure was used to teach the child a skill. The preference assessment began with three forced-choice sessions, one for each prompting procedure and one for the control condition. Three forced-choice condition blocks took place for every four free-choice condition blocks (Slocum & Tiger, 2011).
 - The purpose for having forced condition blocks each day was so the child experienced all three conditions in the same day.
 - Having three forced condition blocks per day resulted in more exposure to the three conditions and therefore potentially better discrimination between the procedures and their corresponding color cards.
- Simultaneous Prompting Conditions.** When the child selected the color card representing the simultaneous prompting procedure, the therapist delivered the instruction at the beginning of each trial and delivered a controlling prompt immediately after the instruction for all trials in the experimental session. A correct response resulted in 10-15 seconds of reinforcement. An incorrect response was ignored (Head, Collins, Schuster & Ault 2011) and the instructor moved onto the next trial.
- Constant Prompt Delay Conditions.** When the child selected the color card representing the constant prompt delay procedure, the therapist, for the first trial for each target, delivered a controlling prompt immediately after the instruction, which resulted in a correct response and access to a reinforcer. For second and subsequent trials, the controlling prompt was delivered at a set interval of 7 seconds.
- Control Conditions.** When the child selected the color card representing the control condition, no prompting procedures took place. Every response from the participant, correct or incorrect, was ignored and resulted in no reinforcement.

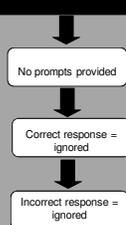
SIMULTANEOUS PROMPTING



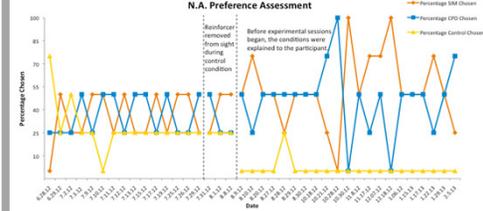
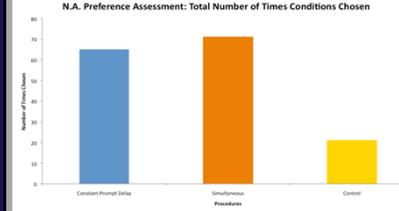
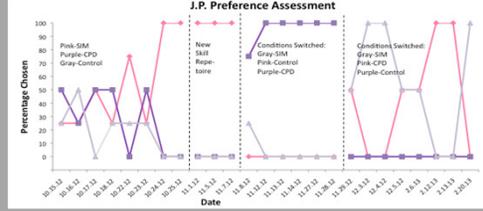
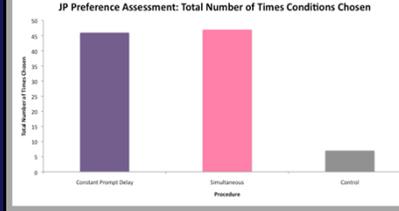
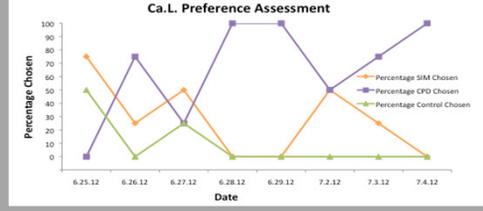
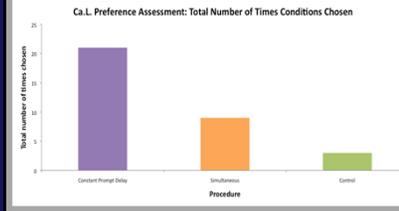
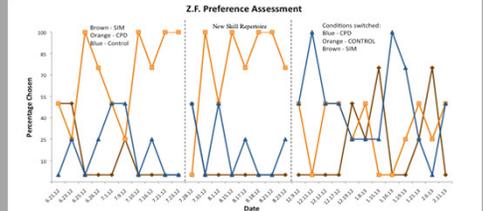
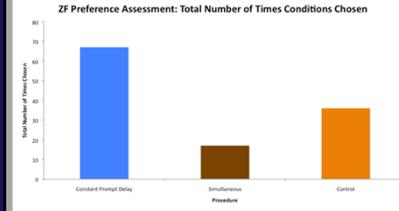
CONSTANT PROMPT DELAY



CONTROL



Results



Discussion

- The results of the current study suggest a preference for the constant prompt delay for two of the four participants. Results showed the other two participants were indifferent to the two prompting procedures.
- All four participants showed a preference for one or both prompting procedures compared to the control condition.
- The color cards were switched for two participants after they showed a preference for a particular procedure. In both cases preference for a prompting procedure became less consistent. One possible explanation is that the participants were not able to discriminate the changes in color cards, although considerable data were collected in both cases.
- In the third phase of the study for N.A., the experimenter explained the prompting procedure and the consequence for selecting each colored card at the beginning of each session. This was done because the participant did not appear to be discriminating between the three conditions and was thought to have the receptive language necessary to understand the conditions. The data in this phase show an immediate reduction in selection of the control condition.
- Several limitations to the study include not conducting a color switch for two of the participants, and the use of the same three colors (instead of three novel colors) when conducting the color switch.