The Effects of Reinforcer Value on Manding in the Presence of Competing Stimuli

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Abstract
The purpose of this multiple baseline across participants design study is to explore the effects of manipulating reinforcer value on manding in the presence of competing stimuli. Participants include four children with autism spectrum disorders (ASD) with various communication topographies (e.g., vocal, picture exchange, American Sign Language, and speech-generating devices). Upon determining reinforcers, the interventionist places the reinforcer of higher value in a jar with the lid randomized to be tightened or loosened, and the reinforcer of lower value in a jar with the lid loosened. This study aims to teach participants to persist in manding for help to access the most preferred reinforcer. Data on requesting help to access the highly preferred item are collected for each of the 10-min sessions that occur four times per week. Data are graphed and analyzed visually. There is no current research on the systematic introduction of multiple preferred items on the persistence in requesting help for students with ASD. This study will add to the body of literature on teaching requesting to individuals with ASD. Additionally, this teaching strategy may be taught to preservice teachers as way to teach students with ASD to make a choice and persist, both of which are critical components of self-determination (Wehmeyer, 1998).

Supporting Research
- Students need motivation to mand (Cooper, Heron, & Heward, 2007).
- However, students have difficulty self-determination skills, such as (Adami, Falcomata, Muething, & Hoffman, 2017).
- Most studies addressing the effects of explicit instruction on requesting for students with ASD involve introducing one preferred item at a time (Carnett, Bravo, & Waddington, 2017; Goetz, Gee, & Sailor, 1985).
- When more than one preferred item is introduced, the rates of requesting typically decrease (Boyle, Ortman, Bechman, Ahold, & Keenan, 2016; Hagopian, Kuhn, Long, & Rush, 2005).
- To date, no studies have systematically looked at the effects of reinforcer value and the role of introducing multiple reinforcers on requesting.

Research Questions
- The purpose of this study is to examine the effects of reinforcer value of frequency of manding when it is needed.
- Specifically, the research question is: what are the effects of manipulating reinforcer value on requests for help in the presence of multiple reinforcers?

Method

Research Design
- Single-case, multiple baseline across participants design

Participants
- 4 children with ASD, ages 5-9, with various communication topographies

Setting
- ABA Therapy clinic for children with autism

Dependent Variable
- Accurate manding, defined as asking for help when needed or not asking for help when not needed

Experimental Conditions

Pretraining
- Only one jar present
- Ensure children know when and how to ask for help

Baseline
- Two jars are present with the first and second most preferred reinforcers

High-Low Preference Stimulus Pairing
- Two jars are present with the most and least preferred reinforcers.

High-Mid Preference Stimulus Pairing
- Two jars are present with the most and third preferred reinforcers.

High-High Preference Stimulus Pairing
- Two jars are present with the first and second most preferred reinforcers.

Preference Assessment
- Before each session, a multiple stimulus without replacement preference assessment is conducted (Carr, Nicolson, & Higbee, 2000).

Intervention
- Two jars are present
- One jar’s lid is loosened and contains the reinforcer of less preference.
- The second jar’s lid is randomized to be loosened or tightened and contains the highest value reinforcer.
- The side of presentation (left or right) is randomized to prevent bias in picking one side.

Current Results

Discussion
- Teacher Education
- Preference assessments can be used to to find reinforcers for students who cannot easily express needs and wants.
- This strategy can be used to teach persistence in children with ASD
- This strategy can be used to enhance choice making opportunities for children with ASD.

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