The Effects of Motivating Operations on the Transfer from Labels to Requests in Children Diagnosed with Autism

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Introduction

Children with autism have delayed communication skills compared to typically developing children. Teaching communication skills, therefore, is an important part of therapy. Two communication skills that are important in beginning therapy include learning to label and request items and activities.

Skinner (1957) described the request and the label as being functionally independent responses, suggesting that learning how to label an item may not automatically establish a request for the item. A recent study was conducted to investigate whether teaching one response (labeling) would result in the acquisition of the other response (requesting) without specifically teaching the requesting response. Wallace, Iwata & Hanley (2006) manipulated preferences of various items to test whether teaching to label a high-preferred (HP) item would result in requesting the item. Results from this study showed that teaching labeling of a HP item transferred to requesting the HP item.

The purpose of this study was to examine another variable under which a label to request transfer would occur. Participant motivation for a HP item was manipulated by conducting deprivation and pre-session exposure conditions.

Method

Participants
- Weston was a 5-year-old boy diagnosed with autism who received in-home applied behavior analysis (ABA) therapy 27 hours a week.
- Ariel was a 5-year-old girl diagnosed with autism who received in-home ABA therapy 27 hours a week.

Setting
- Weston’s sessions were conducted in a therapy room in his home and in a classroom at his day care center.
- Ariel’s sessions were conducted in a therapy room in her home.

Design
- A multi-element (alternating treatments) single-subject experimental design was used to determine whether differences existed between pre-session exposure and deprivation conditions (Barlow & Hayes, 1979).

Procedure
- Preference Assessment: A multiple stimulus without replacement preference assessment was conducted to determine relative preference for each item (DeLeon & Iwata, 1996). A minimum of 3 sessions were conducted to establish a high preferred (HP) item.
- Baseline and Label Training Condition: The HP item was held in front of the participant and the instruction “what is it?” was given. If the participant responded with a correct verbal response the experimenter provided praise. If the child did not respond or gave an incorrect response within 5 seconds, the trial ended. Mastery criterion occurred when participants correctly labeled the item on 100% of the trials over two consecutive sessions.
- Baseline and Request Test Condition: A bowl of the HP item was placed in front of the child. If the child correctly requested for the item, a piece of the item was given to the participant. A progressive ratio schedule of reinforcement (PR1) was used to deliver the HP item. Request tests were run under either a deprivation condition, which consisted of at least 24 hours of no access to the HP item, or a pre-session exposure condition, which consisted of providing a pre-determined amount of the item the participant could consume prior to the request test.

Treatment Integrity and Inter-Observer Agreement
- Treatment integrity was collected for 70% of the sessions for Weston and 35% of the sessions for Ariel. Treatment integrity was 100%.
- Inter-Observer agreement was collected for 70% of the sessions for Weston and 35% of the sessions for Ariel. Inter-Observer agreement was 100%.

Results

Ariel  Pre-session exposure  Deprivation

Sessions conducted | 5 | 4

Average number of requests | 0.33 | 5.3

Total (from all sessions) | 1 | 22

Weston  Pre-session exposure  Deprivation

Sessions conducted | 10 | 13

Average number of requests | 7 | 16

Total (from all sessions) | 71 | 212


Discussion

Neither participant was able to emit appropriate responses during baseline label training and the baseline request test. Following label training, both participants emitted a request response for the HP item, which suggests that the transfer from a label to a request did occur. In addition, there was an effect demonstrated by the manipulation of the participants motivation. Weston did not request for the item until a deprivation session occurred; Ariel also requested immediately during the deprivation condition.

The results from this study support previous research that has shown a label to request transfer (Wallace, Iwata & Hanley, 2006).

The current study has implications for teaching children with autism verbal communication skills. The results demonstrate one condition under which manipulating motivation could result in a label to request transfer.

For both participants responding decreased in the deprivation condition, future research should investigate why this decrease occurred.

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