Tolerating the Denial and Delay to Reinforcement

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Abstract

The goal of the current study was to improve a teenager's tolerance to the denial and delay of reinforcement. During ABA sessions, the individual mastered and maintained Functional Communication Responses (FCRs), using a variety of spontaneous phrases across all motivational states. However, problem behavior re-emerged when those FCRs were not honored or available. With training, the individual acquired the skills necessary to demonstrate tolerance when mands were not honored, reinforcers were delayed, and additional responses were required prior to accessing reinforcement.

Introduction

Single-subject and meta-analyses support the short term efficacy of behavioral interventions to treat problem behavior displayed by individuals on the autism spectrum (Hanley, Jin, Vanselow, and Hanratty, 2014). Hanley, Jin, Vanselow, and Hanratty (2014) described an effective, comprehensive, and parent-validated functional assessment and treatment process for the severe problem behavior of individuals with autism. This process involved training FCRs, and subsequently implementing delay and denial tolerance training. In the final phase, the treatment is extended to the natural environment and to relevant situations identified by families. The current study replicated the procedure for delay and denial tolerance training and treatment extension to the natural environment in a home-based-treatment setting.

Method

PARTICIPANT:
- Jessie – 13.8 year-old girl diagnosed with autism, mild mental retardation, ADHD, mixed expressive language disorder, encopresis and enuresis
- 6 hours of in-home ABA services per week delivered by a BCBA
- FCRs targeted formally prior to this intervention
- FBA suggested positive and negative reinforcement maintain problem behavior in the form of access to attention, escape from aversive social situations, escape from aversive tasks and activities, and automatic reinforcement.
- FA of insults suggested access to attention in the form of shocked facial expressions, mild reprimands, and statements of disapproval maintains this topography of problem behavior.

INDEPENDENT VARIABLES:
- Honoring FCRs contingent on tolerance response (TR), extinction contingent on problem behavior

SETTING:
- Client's home

DEPENDENT VARIABLES:
- Percentage of correct responses, rate of combined problem behavior

PROCEDURE:
- Phase 1: Maintenance of FCRs and near zero rates of problem behavior
- Phase 2: target politeness, volume, and complexity
- Phase 3: Emit tolerance response (TR)
- Phase 4: Emit TR + 5 seconds of compliance
- Phase 5: Emit TR + 10 seconds of compliance
- Phase 6: Extend to natural environment

DATA COLLECTION:
- Trial-by-trial: BCBA scored each opportunity to engage in the TR as either correct (i.e., emit TR based on current target in the absence of problem behavior) or incorrect (engage in problem behavior or otherwise required prompting to emit the TR).
- Problem Behavior: BCBA collected frequency data on insults, cursing, sexual remarks, sexual gestures, and inappropriate touching.

Results

Closed circles represent percentage of correct responses (primary y-axis). Bars represent rate of combined problem behavior (secondary-y axis). Across all phases, Jessie acquired the skills necessary to demonstrate tolerance to the delay and denial of reinforcers. These skills extended to the natural environment with formal training. Problem behavior maintained at low rates (with the exception of 2/27/15). Baseline rate of combined problem behavior in January 2014 ranged from 4.5 – 48.5 responses per hour (not displayed).

Conclusion

The teaching procedure outlined by Hanley, Jin, Vanselow, and Hanratty (2014) was effective. The procedure was effective in the absence of pre-determined ratios of honoring vs. denying FCRs (e.g., 3:5 ratio of denial).

LIMITATIONS:
- Future work is necessary to generalize these skills across parents and caregivers for this client.
- Experimenter did not include data on vocal protesting (clinical considerations, data collection/measurement inconsistencies).