Noncontingent Reinforcement to Improve Behavior of a Student with a Developmental Disability
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A student exhibited high levels of disruptive and avoidance behaviors during task demands

The student:
- 8-year old Caucasian male in the 3rd grade
- He has developmental disability
- Expressive and receptive language
  - Did not use verbal speech
    - Grunted or led by hand to get other’s attention or make requests
  - Inconsistently used an augmentative communication device
  - Occasionally followed simple one-step directions

Problem behaviors:
- Resisted most task demands by trying to leave the area, dropping to the floor, screaming, kicking, biting, pinching, mouthing, and throwing task-related objects
- Self-injurious behaviors: biting and scratching fingers with his teeth
- Would often run out of classroom to adjacent room (contained a swing, a preferred activity)
- Required hand-over-hand prompting and blocking him from leaving classroom during task demands
- Much of his problem behavior was hypothesized to be escape-maintained

The setting:
- Elementary, self-contained special education classroom for students with moderate to severe disabilities.
- 6 other students in his class
- Primary teacher, interning teacher, and teaching assistant

Baseline conditions:
- One-on-one with interning teacher
- Fine motor task demands (e.g., removing blocks from Velcro and placing in hole on box, removing clothes clips and replacing, placing knobbed puzzle pieces into a board puzzle, placing wooden coins in a slot) floor
- Interning teacher instructs, “Do your work.”
- Would provide full physical prompting (i.e., hand over hand) as necessary
- Reduced intensity of prompts approximately every 3 seconds, as appropriate
- Extinction procedures in place because he was not able to escape/avoid work by engaging in problem behavior
- Max presented with and prompted to complete task demands for 6 minutes; no breaks were given

The Problem

A noncontingent reinforcement intervention package

- Escape breaks at fixed-time 2-minute intervals (work for 2 minutes, then 3 minute break)
- Reinforcement menu for Max to select preferred escape activities (e.g., swinging)
- Picture prompt to serve as a reminder of upcoming reinforcement and to serve as an instructional support
- Providing prompts during task demands as in baseline; extinction procedures in place
- Provided prompts as necessary to transition Max from breaks back to work

The Intervention

Outcomes

Data collection:
- Data collected during task demands, totaling 6 minutes of work time across all phases
- Direct observation of Max’s behavior using 10-second interval recording

Target behaviors:
- Task engagement - student in work area with eyes focused on materials and hands working with materials presented (momentary time sampling)
- Disruptive behavior - behaviors which interrupted Max’s participation in instructional activities, including trying to leave the work area, pushing materials off of work space, slumping to floor, fingers or materials in mouth, screaming, and crying (partial interval recording)

For more information:

Reinforcement Menu

Picture Prompt

Baseline
Intervention
Withdrawal
Reimplementation

Percent of trials with exhibited target behaviors
Sessions

Disruptive
Task Engagement