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# Teaching Functionally Equivalent Replacement Behaviors to Students with Problem Behavior: What? How? Why?

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# What? How? Why?

## Teaching Functionally Equivalent Replacement Behaviors to Students with Problem Behavior: What? How? Why?

*"Are we there yet?" asked Bart.*

*"No," responded Bart's dad, Homer.*

*"Are we there yet?"*

*"I said no."*

*"Are we there yet?"*

*"Still no!"*

*"Are we there yet?"*

*"Would you prefer a different language?! Come on, Bart, your behavior is starting to annoy me."*

*"Hmm," started Bart. "OK, look, I know we're not there yet. I guess I'm just bored and I want something to do with my time."*

*Bart's mother (Marge, as you might guess) turned around from the passenger seat. "Bart, look in your suitcase behind you. I packed your video game. You can play with it until we get there."*

*"Cool," responded Bart. "Why didn't you tell me in the first place?"*

*As Homer drove on, he thought to himself, "You didn't ask."*

*What* is teaching functionally equivalent replacement behaviors to students with problem behaviors? It involves teaching a behavior that serves the same purpose, or function, a problem behavior. It allows the student to get, maintain, avoid, or escape something but in a more socially appropriate way. That is, the socially appropriate behavior serves the same purpose as the problem behavior. It replaces the problem behavior if the student is taught to perform it rather than the problem behavior when certain situations arise. For Bart, a functionally equivalent replacement behavior might have been to ask "What can I do while I sit here in the back seat during this long car ride?"

There are a variety of ways to attempt changing a problem behavior. Most behavior interventions take one of three forms or use a combination of procedures. One approach is to use antecedent-based procedures, i.e., those that arrange the environment to prevent problem behavior before it occurs. Physical changes in the classroom or a teacher's review of classroom rules are examples of antecedent-based procedures. A second approach is to reinforce an alternative behavior while withholding reinforcement for problem behavior. The alternative is a socially appropriate behavior and one that is incompatible with the problem behavior (i.e., the student cannot engage in both behaviors at the same time). The third approach is to teach functionally equivalent replacement behaviors. Research shows that teaching functionally equivalent replacement behavior effectively suppresses problem behaviors and teaches a new way to approach problem situations (Iwata et al., 1994; Iwata et al., 2000). Examples of functionally equivalent replacement behaviors for some common problem behaviors along with suggested intervention components are shown in Table 1.

*How* does one teach functionally equivalent replacements to students with problem behaviors? First, identify the function of the problem behavior using functional behavior assessment procedures (Kern, O'Neill, & Starosta, 2005). That is, observe the antecedents and consequences surrounding occurrence of the problem behavior and interview others who may have important information. Second, look for patterns in what the student attempts to get, maintain, escape, or avoid by engaging in the problem behavior. Third, develop a hypothesis statement (or "best guess") regarding the function of the problem behavior. For example,

*"When presented with a high demand academic task (particularly independent seatwork on math problems), Eric buries his head on the desk and refuses to engage in the assignment in order to avoid the task."*

Fourth, if possible, confirm the hypothesis by presenting the student with a situation producing the problem behavior assuming no harm or disruption to



the student or others. Fifth, identify a replacement behavior the student can perform that

serves the same function. The replacement behavior must accomplish the same end and be recognized by those carrying out the intervention. For example, Eric may raise his hand and ask his teacher a question about a difficult math problem instead of burying his head. Raising a hand and asking a question serves the same function if these behaviors allow Eric to finish the math and “reduce the burden” of the task. Also, performing these behaviors makes Eric eligible for praise and recognition from the teacher. Sixth, develop intervention procedures that relate to the function of the replacement behavior. That is, provide consequences that establish motivation for performing the replacement behavior instead of reverting to the problem behavior.

Given that the student engages in the replacement instead of the problem behavior, the intervention should include preferred consequences. In Eric’s case, the teacher may arrange for him to temporarily complete three fewer problems on the math sheet contingent on raising his hand and asking for help. Eventually, the number of required math problems can be increased but without disruptive behavior. Those students who find it belittling to request help may summon the teacher using less obvious signs, such as moving a book on the desk.

Teachers will want to collect data on the problem behavior and the replacement behavior starting with baseline (prior to intervention) and continuing through intervention. By doing so, teachers can assess intervention effectiveness, make necessary adjustments, and develop ways to maintain the replacement behavior.

*Why* teach functionally equivalent replacement behaviors? First, because when the student is confronted with a similar situation in the future, it provides her with a functional alternative. Second, it serves as a model to other students who learn that the student is responsible for performing an alternative behavior when confronted with a situation. Rather than struggle with the assignment, Eric was expected to

**Example 1**

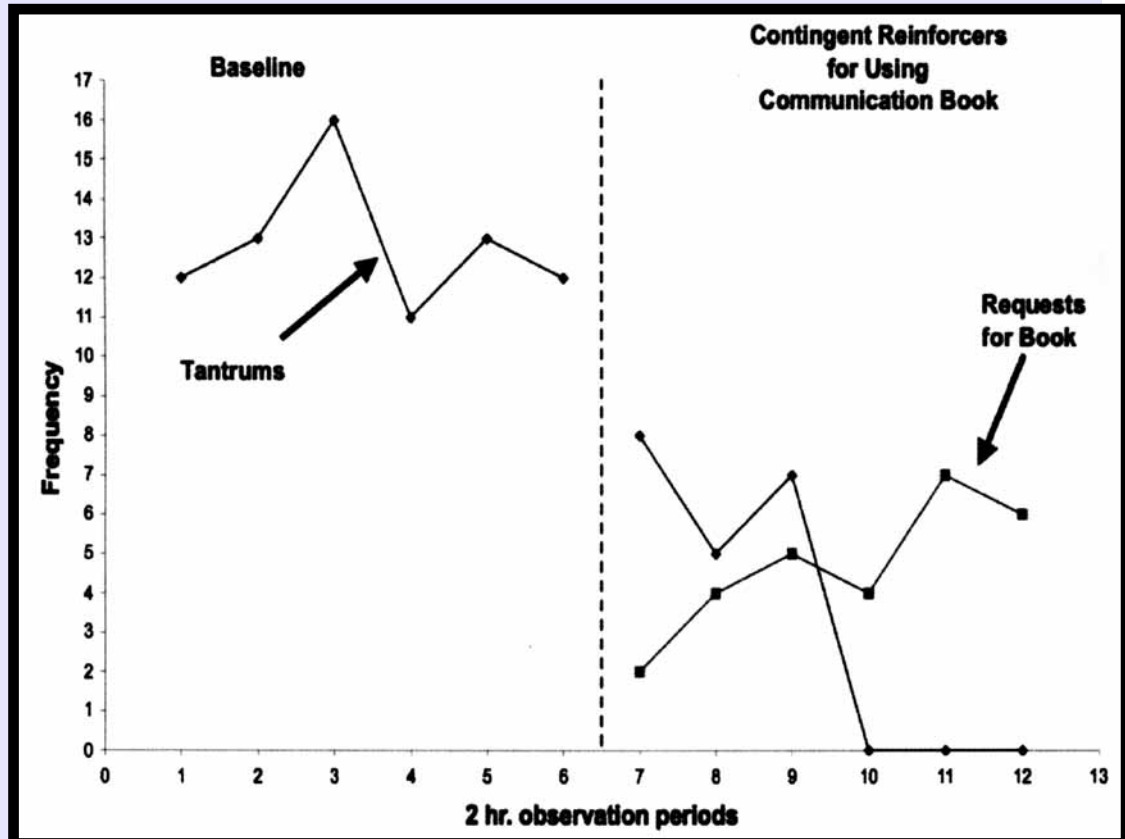
ask for help. Third, instead of simply suppressing misbehavior, the teacher develops a partnership with the student to come up with an alternative. The student agrees to perform the replacement behavior. The teacher agrees to carry out the intervention procedures and assist Eric if he asks for help.

Preservice teachers from the Department of Special Education and Rehabilitation at Utah State University learn to teach functionally equivalent replacement behaviors in interventions with students who engage in problem behavior. Trainees conduct functional behavior assessment, identify hypotheses regarding the function of problem behavior, implement interventions, and assess effects. Three of the projects are summarized below.

*Interventions: Teaching Functionally Equivalent Replacement Behavior*

*Example 1* shows behaviors of a 3-year-old girl learning English as a second language in a home-based intervention. With severe intellectual disability, she struggled to verbalize her requests with her mother and a preservice teacher. During baseline, severe tantrums occurred at the rate of 10-16 per 2-hour observation. The hypothesis was that she engaged in tantrums to get tangibles and activities. During the intervention, she was taught to request a communication book showing pictures of toys and activities. Given a verbal request for the book and a verbal or pointing response to a picture, she

*Continued on page 36*



received the item plus praise and edible reinforcers. Tantrums decreased from 8 to zero occurrences as requests for the communication book increased.

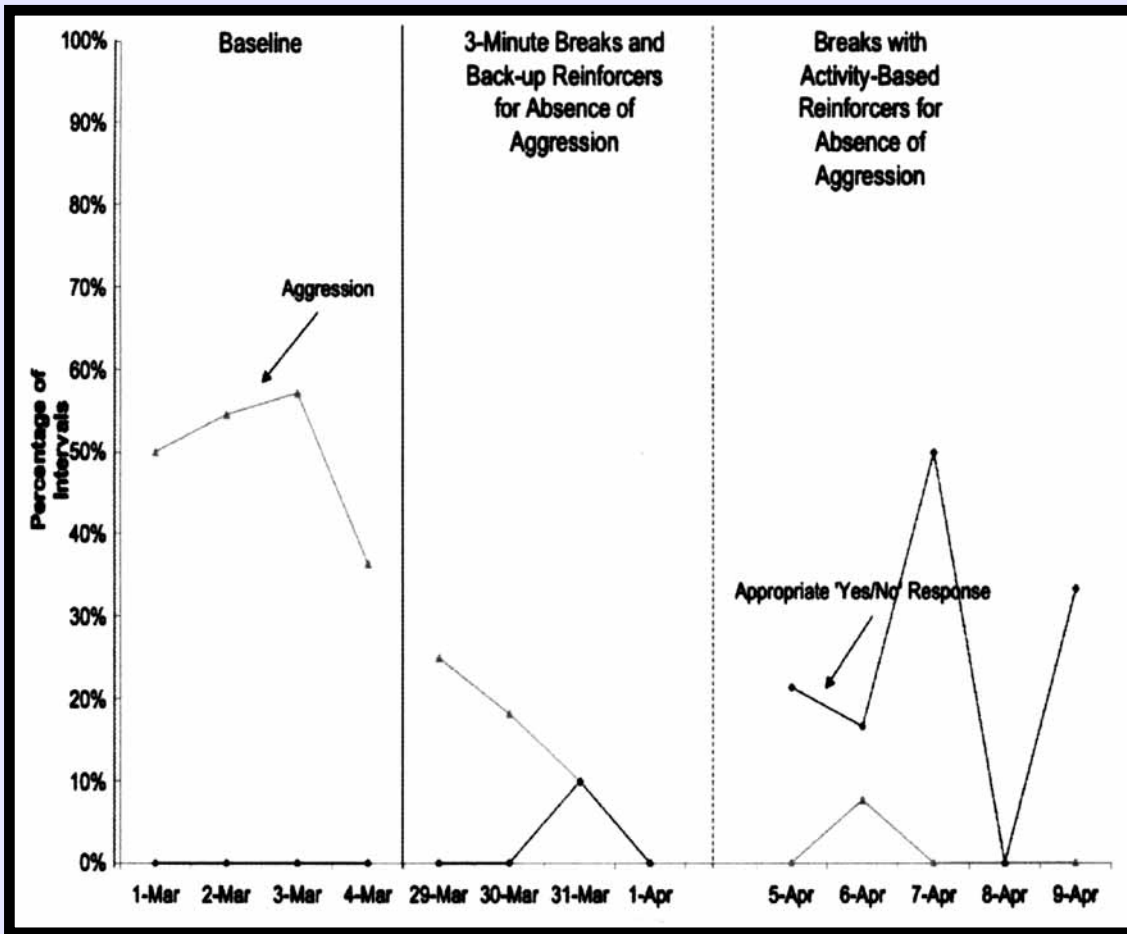
**Example 2** shows behaviors of a 7th grade boy with severe aggression. Aggressive episodes involved hitting, biting, kicking, and property damage. Because of the high rate of aggression, the behavior was measured in percentage of intervals. The hypothesis was that the student engaged in aggression to escape academic tasks (in this case, math). The replacement behavior was to respond to interspersed questions from the preservice teacher (i.e., “Would you like a short break?”) by indicating “yes” or “no.” The first intervention, involving a 3-minute break and access to a toy/game for the absence of aggression, reduced aggression but did not increase responses to questions. The second intervention, involving

activity-based reinforcers (e.g., leaving the academic setting to go outdoors) increased responses to questions.

**Example 3** shows a 14-year-old male in the 7th grade who talked to a neighbor during teacher instruction and independent work. The hypothesis was that “when presented with new material the student would engage in off-task behavior to avoid a high demand task and gain teacher and peer attention.” The replacement behaviors were raising hand and asking for assistance on the assignment. The intervention called for the entire class to earn a pizza party if the target student’s on-task behavior matched or exceeded a preset criterion. ■

*References available upon request from the Utah Personnel Development Center.*





Example 3

