Determining How to Increase On-Task Behavior with Concurrent Choice Assessments

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Introduction

A number of studies have used concurrent operants assessments to evaluate variables that bias choice. One area of study involves offering functionally different reinforcers in a concurrent operants arrangement to determine whether positive reinforcement can bias responding towards tasks when negative reinforcement is available (i.e., Gardner, Harding et al., 1999, & Kodak et al., 2007). When the topography of the target behavior includes avoiding or escaping an aversive stimulus, it is difficult to apply an independent contingency. Concurrent operants assessments can circumvent this difficulty by looking at on-task behavior instead of off-task behavior and evaluating under what conditions participants will choose an academic task. Evaluating the conditions under which individuals will select demands generates suggestions for increasing appropriate behavior that rely on positive reinforcement rather than techniques like extinction or punishment (Zarcone, Fisher & Piazza, 1996, Harding et al., 1999).

Methods

Carly, a 9-year-old girl of Native American descent, was in a general education classroom. She was referred by her teacher because of frequent off-task behavior. First, a preference assessment was conducted to determine the relative preference of different math activities. Then, the researchers varied the task preference and the amount of attention using a choice assessment. During the intervention, her time on-task was high and stable.

Results

The concurrent choice assessment results are shown in Figure 1. The results indicated that both attention and task preference played a role in biasing choice towards academic tasks when escape was available, and that more attention was necessary to bias responding towards lower preference tasks. Carly received more attention during low-preference one-on-one and small group tasks than medium-preference one-on-one and small group tasks, and chose the middle-preference tasks slightly more frequently for each group type. Attention was also related to amount of time on-task within each choice. Based on these results, we determined that contingent attention would likely reinforce on-task behavior, and that while the amount of attention naturally occurring in small groups was enough to maintain sufficient on-task behavior once Carly was in the group, adults would need to provide additional attention during independent activities. The intervention results are shown in Figure 2. During baseline, her amount of time on-task was low for independent tasks, and variable for small group tasks. During intervention, her time on-task was high and stable.

Discussion

The current study extends the literature by demonstrating that changes in task and attention can influence on-task responding, and that a choice assessment can be used to design an effective classroom intervention. Several limitations should be noted. First, only one participant was included. Second, although on-task behavior increased, task completion was not measured as a dependent variable. It is unknown if task completion increased along with on-task behavior. Third, it is unknown whether treatment gains maintained over time or generalized to different contexts. Future research should evaluate the utility choice assessments to examine different task dimensions or types of reinforcers, whether modifications to interventions increase generalization and maintenance, and whether similar results can be obtained with teacher implementation.

References


