



Using a Task Analysis to Increase Self-Monitoring of Academic Tasks in a Student with Autism



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Introduction

Self-monitoring is defined as the observation of one's behavior (Newman et al., 1997) and applying operant techniques to modify that behavior (Malott, 1989). The skill of self-monitoring is acquired and perfected with daily practice. One of the educational goals for individuals with autism is learning skills that will promote independence (Lovett & Haring, 1989; Rhode, Morgan, & Young 1983; Shreibman, 1988). A task analysis can be used to teach self-management and self-monitoring to the individual with autism by giving a set of steps to follow in order to complete an academic assignment. While a task analysis can be used in settings other than academics, for example laundry skills, using the task analysis for academic tasks such as reading comprehension for an online class can be a helpful reference point to learn the steps necessary to complete the online assignments correctly and successfully.

In this study, a thirteen-year-old boy diagnosed with Autism learned to use a task analysis for completing his online reading comprehension assignments. Due to clicking to access the next part of the assignment without completing the reading selection and reading his answer choices, his scores for assignments were low and did not reflect his academic ability.

Method

Sessions took place at the home of the participant. His online assignments were to be completed on the home computer located in the kitchen/dining area.

An ABA therapist took baseline data for two sessions prior to the implementation of the task analysis. Only two instances of reading and clicking correctly were observed. All other interaction with the online reading comprehension assignment was without reading and with rapid clicking. Grades for these days, however, did not fully reflect the assignment scores resulting from his rapid clicking, as he received grades of 6 correct out of 8 questions, 22 out of 24 correct questions, 7 out of 8 correct questions, and 23 out of 24 correct questions, for a deceleration of correct responses of 1.13 and deceleration of incorrect responses of 16.23. We made the decision to implement the task analysis anyway as incorrect responses were decreasing.

The task analysis presented to the participant as the following:

Task Analysis: Language Arts and Reading Comprehension

1. Click to begin assignment.
2. Read ALL of the story OUT LOUD.
3. Click to view the question about the story.
4. Read the question OUT LOUD.
5. Read ALL possible answers to the question.
6. Decide what you think the best answer is and say it OUT LOUD. (do NOT click!)
7. Find your answer choice within the story.
8. If answer choice is correct, THEN click to select answer.
9. Repeat numbers 4-8 until story questions are complete.



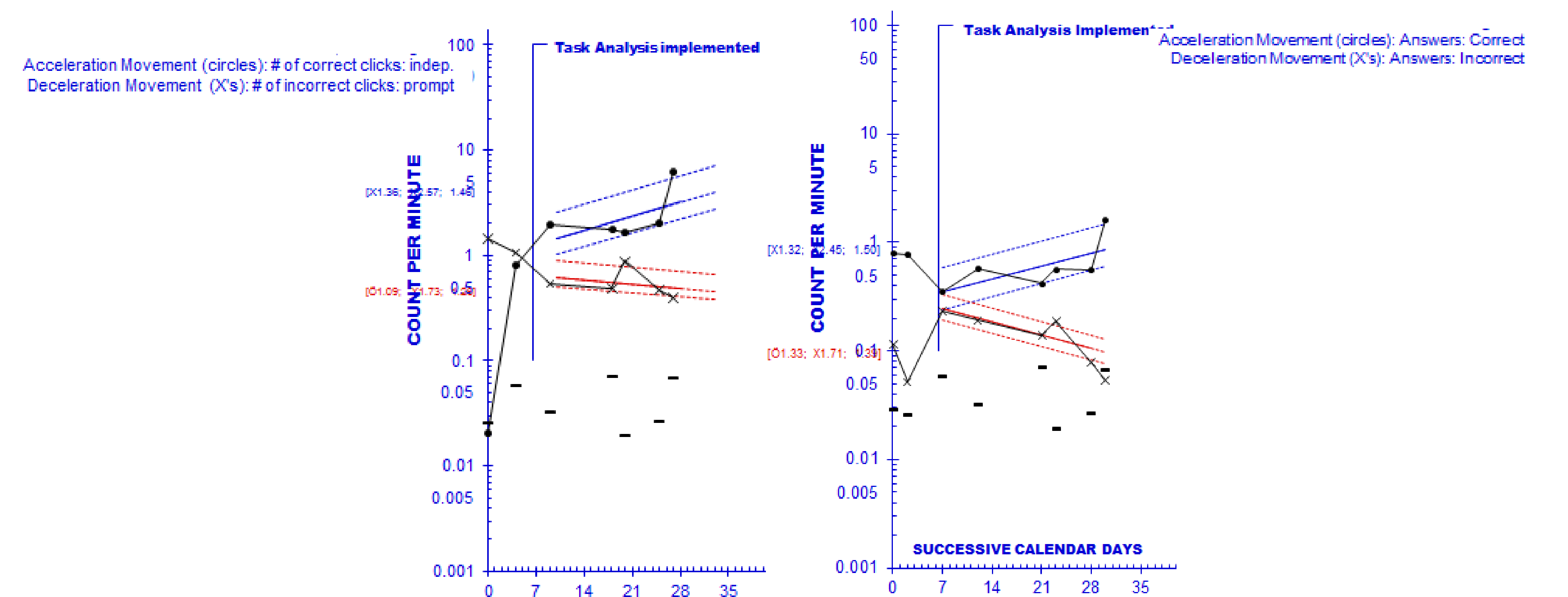
The participant was instructed to follow these steps until assignment completion in order to decrease impulsive clicking and increasing reading comprehension and scores. The task analysis was taped up next to the computer screen for easy reference for the participant.

At implementation of the task analysis, the ABA therapist sat next to the participant at the computer on the side that the mouse was located. The participant removed his hand from the mouse until it was necessary to click to continue the assignment or to click to answer a question. Physical prompts, such as blocking access to the mouse were used initially, along with verbal prompts directed to the task analysis. Over time, the ABA therapist faded to sitting behind the participant as he did his assignments, with gestural and occasional verbal prompts to increase his self-monitoring and independence with referring back to the task analysis when he incorrectly clicked an answer.

After assignment completion the participant earned free time on the computer to play games or other preferred activities. Depending on how well he did using the task analysis, the participant earned three to ten minutes of free time.

Results

Results indicated acceleration of x1.48 in independent correct clicks of the mouse and a slight jump down followed by deceleration of x1.26 in incorrect clicks of the mouse or prompts needed. In addition, correct answers on the assignments accelerated by x1.32, while incorrect responses had an initial jump up then a steady deceleration of 1.33.



Discussion

Self-monitoring [training] has been used to increase a wide variety of skills and to develop social appropriate behavior to students with autistic-spectrum disorders (Koegel, Koegel, Hurley, & Frea, 1992; Newman, Tuntigian, Ryan, & Reinecke, 1997; Reinecke, Newman, & Meinberg, 1999; Stahmer & Schreibman, 1992). The results suggest that using a task analysis to teach a thirteen year old boy with Autism self-monitoring of academic tasks is an effective way to teach self-management. Future programming could look at transferring data collection to the participant for further independent monitoring.

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