

A FACTOR IN DETERMINING FUNCTIONAL VOCABULARY TO INCREASE THE RATE OF ACQUISITION

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Introduction

The ability to communicate is vital to increase a person's independence. Communication allows individuals to obtain reinforcement through tangible items, activities, and social interaction among other things, which can reduce maladaptive behaviors. Consequently, students are taught to tact items and then mand for items. Current practice has a student learn functional vocabulary. This case study explored the effectiveness of functional communication training to increase expressive vocabulary acquisition rate. Vocabulary that was functional was compared to vocabulary that was functional and provided access to a reinforcing item. The subject was a 15 year-old male with the primary diagnosis of autism receiving educational and residential behavioral services through a Midwest residential hospital/school.

Methods and Settings

Children's Care Hospital and School is an educational and residential facility which the student attends. Children's Care Hospital and School is a private non-profit facility serving children with disabilities from birth to 21. The behavioral care services program provides ABA-based services for individuals with significant cognitive and behavioral deficits. The facility is licensed by its state's Department of Education to provide educational programming and by the Department of Health for residential programming.

This child's interdisciplinary team consists of a behavior analyst/school psychologist, parents, special educator, speech-language pathologist, occupational therapist, physical therapist, social worker, dietician, audiologist, and nursing staff. A pediatric psychiatrist also works in conjunction with a behavior analyst to serve all residential students.

Participant

The student is a child with autism with no functional spoken speech. His primary mode of communication is sign language. However, his sign vocabulary consisted of three signs: book, more, and please. He exhibits self-injury behaviors of hitting, biting, and head banging. The *Functional Analysis Screening Tool (FAST)* was administered to education and residential staff in July 2007. The result indicated that the student engaged in SIBs in order to obtain a tangible or attention and to escape for a demand (results are attached). Increasing his ability to communicate was essential to help reduce his rates of targeted behavior. He began to receive services educational and residential services in 1997. He receives 24-hour ABA-based programming. The student to staff ratio is 1:1 in the educational and residential setting due to the high level of SIBs.

Instruments

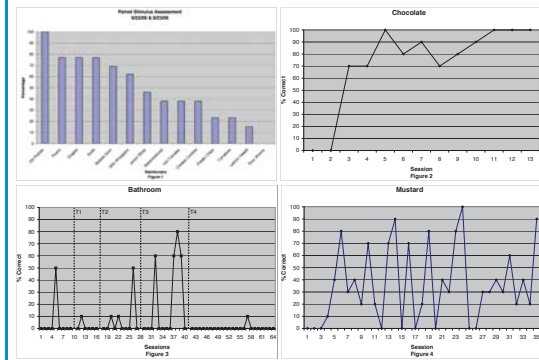
A Paired Stimulus Assessment was performed to determine highly reinforcing items (Figure 1). While chocolate was not determined as the most preferred item, the classroom found that chocolate (whoppers) was the easiest tangible to carry around with them at all times. Later mustard was determined as a targeted vocabulary since the child was experiencing high SIB rate at meal time, and usually wanted mustard on most food. It was hypothesized that by him learning the mustard sign he would show a reduction in SIBs. An expressive signing vocabulary program modified from the Eden School Curriculum Series was used. Data for this program were kept using a discrete trial data collection system.

Procedure

An expressive labeling vocabulary program from the Eden Curriculum was implemented. The classroom was asked to run the program with 10 trials one time a day at a variety of times. The program was implemented for 13 sessions using the word chocolate criteria was set at 90% for three consecutive sessions. The program was run for 60 sessions for the functional word bathroom. The bathroom picture card was enlarged after session 9 (T1) due to lack of progress. The original enlarged Mayor Johnson picture of bathroom was changed to another Mayer Johnson bathroom picture after session 15 (T2) due to lack of progress. After session 25, the program was altered (T3) to be run throughout the day, prior to the child going to the bathroom due to lack of progress. After session 37 (T4), the program was to be run a mass trial format and naturally throughout the day with data collected, due to a sudden drop in performance. After session 60, a new vocabulary word was selected to see if with another word he could experience more success. The program was run for 35 sessions with mustard as the targeted word. Performance was highly variable during all sessions, but no changes were made to the original program.

Discussion

Data collected from the classroom indicate that the student learned functional vocabulary that gave access to a reinforcing item quicker than he learned functional vocabulary. This study did not take into account the use of multiple staff to implement programming. Staff reported that the inconsistent performance with vocabulary word mustard was a result of the type of food they were putting the mustard on. No testing was done to determine whether this was a factor. Further research could examine, the effects on environment, consistent staff running the program, and effects of material used (i.e. real object, photo, pictures, etc) during presentation to teach vocabulary.



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