

# An Analysis of Task Presentation and Probability for Escape - Maintained Aggression

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## Introduction

Research has indicated that escape maintained behavior can be analyzed through manipulation of the demand condition, specifically task presentation and probability. Examination of task preference and the instructor's delivery can indicate specific situations that may be maintaining problem behavior (Cooper et al., 1992). Roscoe, Rooker, Pence, and Longworth (2009) modified tasks within the demand condition of functional analyses to indicate specific variables maintaining higher rates of problem behavior. It has also been considered that task novelty may serve as an establishing operation for escape maintained behavior (Iwata, Goh and Shore, 1995). The purpose of the present study was to identify the contributing variables within the demand condition of a functional analysis of escape maintained aggression.

## METHOD

### Participants

The participant was a 16 year old male diagnosed with autism and mental retardation. This individual resided at a short-term behavior stabilization program. He was admitted to this facility for treatment of maladaptive behaviors of aggression and self injury.

### Setting and Materials

Functional analysis sessions were conducted in a small treatment room with one table, two chairs and no windows. Materials consisted of academic and vocational tasks that the participant was familiar with and tasks that were novel to the participant as well. For the multi-element portion of the functional analysis preferred edible and leisure items were used for the tangible condition.

### Dependent Measures

The dependent variable in this study was aggression displayed by the participant. Aggression was topographically defined as biting, kicking, hitting, pinching, elbowing, shoving spiting, head butting or throwing objects at the instructor. This definition included attempts. Frequency of aggression per minute was recorded.

### Inter-Observer Agreement Data

IOA data was collected for 5% of the sessions. The IOA for these sessions was 100% reliable. Occurrence agreement was used to calculate IOA.

## PROCEDURE

A multi-element functional analysis of aggression was conducted. This functional analysis included four standard conditions; demand, tangible, toy play and attention. Sessions were 10 minutes in length. All of the sessions were conducted in the same room and the instructors varied but were not unfamiliar to the participant.

A second phase of the analysis was conducted in which the demand conditions were separated into a whole task presentation and a partial task presentation. The whole task presentation had a clear beginning and end to the assignment with minimal verbal instructions delivered. The partial task presentation consisted of high rates of instruction with no clear beginning and end to the assignment. During this phase of the analysis three conditions were ran; partial task demand, whole task demand, and a toy play condition which served as a control

The third phase of the analysis was a replication of the partial task demand condition; however, the conditions were separated by familiar task presentation and novel task presentation. The participant was presented with a high probability partial task presentation and a low probability partial task presentation. A toy play condition served as a control during this third and final phase of the analysis.

## RESULTS AND DISCUSSION

The graph indicates the results of the present functional analysis of aggression. It was indicated from the first phase of analysis that aggression was highest ( $M=1.1$ ) in the demand condition compared to the other conditions (toy play  $M= .04$ , tangible  $M= .03$ , attention  $M= 0$ ). During the second phase of the analysis aggression was higher in the partial task condition ( $M= .74$ ) opposed to the whole task condition ( $M= 0$ ). Toy play ( $M= 0$ ) was included as a control. During the third phase of the analysis aggression was prevalent in novel partial task and familiar partial task presentation. However, it was indicated that rates of aggression were higher in familiar partial task presentation ( $M= .83$ ) than novel task presentation ( $M= .2$ ). Rates of aggression during toy play remained at 0.

Overall the participant was most likely to engage in aggression during high probability demand situations in which the verbal instructions were delivered at a high rate and the task had no clear beginning and end. Through further examination of variables within a demand condition the experimenters successfully identified variables that may be contributing factors to increased rates of aggression.

Further plans for treatment are being discussed at this time. Functional communication training will be implemented to teach the individual to ask for "space". This will allow the participant a break from the presence of the instructor, however, the task will not be taken away. Since results indicated that aggression is more likely to occur during familiar tasks rather than novel tasks has suggested that the individual is seeking more time to attempt the low probability task on his own.

