



Descriptive Analysis of Verbal Behavior by Children with Autism in the Natural Environment

Christine Hoffner Barthold, Andrew L. Egel, Natasha Bailey, Bonnie S. Dayhoff, Becky Gruetzmacher, Kateri Hull, Lisette LeCompte, Amponsah Nkansah, Amanda Sawma, Layne Whitney, Curtis Wojnar, and Jessica Zdatny

Results and Discussion

Mean Verbal Operants Per Child

Table with 4 columns: Name, Mean Mands/hr. (Total/Unprompted), Mean Tacts/hr. (Total/Unprompted), Mean Intraverbals/hr. (Total/Unprompted). Rows for Simon, Colin, and Darren.

Graphs of intraverbals are available from the first author

Simon engaged in the highest number of intraverbals, both prompted and unprompted, of the students. He emitted a high number of tacts; however, mands were very low.

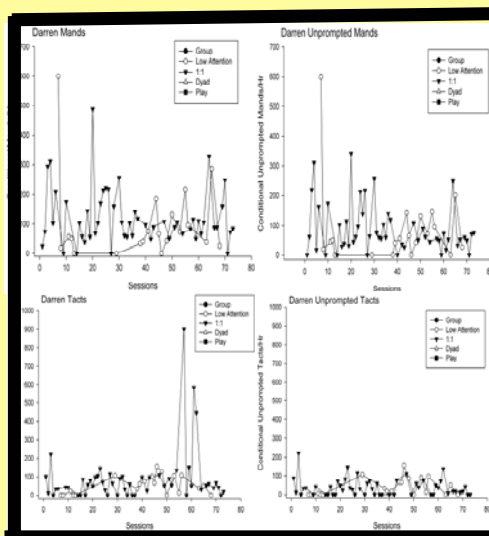
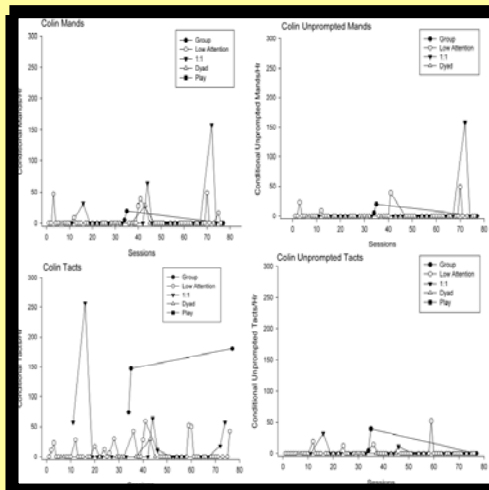
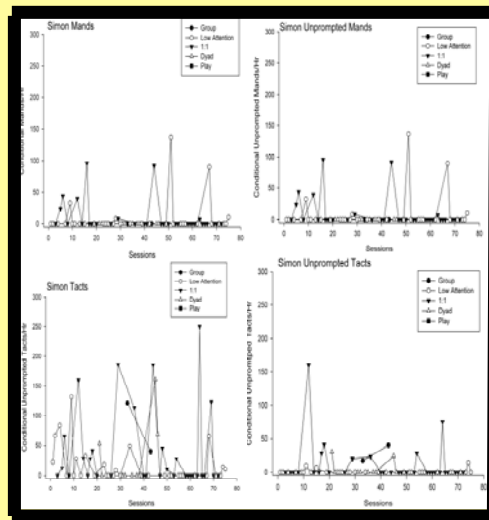
Colin engaged in few total intraverbals and no prompted intraverbals. He emitted a large amount of unprompted tacts, the majority of which were emitted during group instruction.

Darren was observed mostly in a 1:1 condition. Due to Darren's severe problem behavior, a staff member was dedicated to him during the entire school day. Darren emitted both total and unprompted mands at a high rate; manding was a skill targeted specifically in Darren's behavior support plan.

This assessment showed valuable information; however, there were limitations to the assessment that are of note. Skinner (1957) stated that most of our utterances are impure; that is, most utterances act on the environment in multiple ways.

Future descriptive assessments should also take into account the specific environmental conditions that evoke responding. Often, the utterances of students were observed to be stereotypic and/or evoked by very narrow stimuli.

A descriptive assessment also does not take into account the topography of the response. Students were observed to have difficulties with generalized grammar and syntax.



Children with autism have difficulty with conventional language and communication acquisition. Without intervention, 21-61% of children with autism do not develop communicative speech.

Many practitioners utilize Skinner's analysis of verbal behavior (VB; Skinner, 1957) as a framework for teaching children communication. There are many articles available regarding effective teaching methods; however, little is known about what types of verbal behavior children emit when not directly instructed.

A descriptive analysis of verbal behavior was conducted to determine the types of verbal behavior students emitted during a typical school day in order to assess their levels of verbal ability. A descriptive analysis is a form of direct observation in which no environmental variables are manipulated or held constant; rather, the behavior of the target student is recorded in the natural environment.

Four Students, ages 9-1 to 10-8, with a diagnosis of mild-moderate and severe range of autism symptoms and PDD-NOS participated in the study. All participants attended the same self-contained classroom located in a private school program for students with autism in Suburban Washington, DC.

- Simon, age, 9-1
•Colin, age 10-1
•Darren, age 10-8

Methods

- Students were videotaped in the classroom during lunch and library instruction for an average of 4 hours over the course of several weeks.
•Observations were broken down into several different conditions
•Data collectors coded the antecedents, responses, and consequences of each instance of verbal behavior by the student using the OBSERVE data collection program
•Combinations of antecedents, responses, and consequences were considered to be indicative of particular verbal operants, and were
•The number of times a particular verbal operant was emitted was divided by the amount of time the student was observed in a particular setting to determine the rate of an utterance given the setting.
•In addition to total verbal behavior, unprompted verbal behavior was calculated across conditions.