

*AN EVALUATION OF A BRIEF FUNCTIONAL ANALYSIS  
FORMAT WITHIN A VOCATIONAL SETTING*

MICHELE D. WALLACE

UNIVERSITY OF NEVADA–RENO

AND

DAWN J. KNIGHTS

TRINITY SERVICES, INC.

We conducted and compared both brief and extended functional analyses of disruptive behaviors for 3 individuals with developmental disabilities who attended a vocational training program. Results demonstrated that the brief assessment identified the function of 2 of the 3 participants' disruptive behavior compared to the extended assessment.

DESCRIPTORS: assessment, brief functional analysis, disruption

Despite the empirically demonstrated utility of functional analysis procedures, they may be infrequently used in clinical situations such as vocational or school settings due to time constraints or untrained care providers (e.g., Moore et al., 2002). Several attempts have been made in recent years to increase the efficiency with which assessments may be conducted through procedural variations of one sort or another. The brief functional analysis is an important advancement in the area of behavior analysis because it provides clinicians with an empirical method of behavioral assessment that can be utilized within the time constraints imposed on most practitioners (Northup et al., 1991). This study sought to further examine the accuracy and efficiency of using brief functional analyses by comparing their re-

sults to the results of an extended functional analysis within a vocational setting.

## METHOD

### *Participants and Setting*

Three adults (Ben, Chris, and Brian) with developmental disabilities participated. The brief functional analysis was conducted in the participants' usual vocational training area. The extended functional analysis sessions were conducted in a therapy room equipped with tables, chairs, and a variety of items necessary for each condition.

### *Response Definition, Measurement, and Interobserver Agreement*

The target behavior in this study was disruptive behavior, including yelling, rocking, pacing, jumping up and down, finger snapping, clapping, and physical aggression. Number of disruptive behaviors per minute was recorded during sessions.

A second observer independently collected data on each participant's behaviors during 33% of the sessions. Interobserver agreement was calculated by dividing session time into consecutive 10-s intervals, comparing observers' records, dividing the smaller num-

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Address correspondence to Michele D. Wallace, Psychology Department/296, University of Nevada–Reno, Reno, Nevada 89557 (e-mail: wallacem@unr.edu).

ber of responses by the larger number of responses in each interval, summing these fractions, dividing by the number of intervals in the session, and multiplying by 100%. Agreement averaged 82% (range, 66% to 100%) and 85% (range, 78% to 100%) during the brief functional analysis and extended functional analysis conditions, respectively.

#### *Brief and Extended Functional Analyses*

Sessions consisting of ignore, attention, control, and demand conditions (Iwata, Dorsey, Slifer, Bauman, & Richman, 1982/1994) were conducted in the vocational program using a modified pairwise design. The sessions were 2 min in length; the first 60 s served as the test condition and the next 60 s as the control condition. The conditions were alternated as follows: attention–control, demand–control, ignore–control. During the extended functional analysis, sessions were 10 min long, with each of the conditions used in the brief assessment alternated within a multielement design.

## RESULTS AND DISCUSSION

Figure 1 shows the results of the brief functional analysis (left column) and extended functional analysis (right column). Ben displayed the greatest rate of disruptive responses during the ignore condition ( $M = 10.3$  responses per minute), and displayed a significantly lower rate during the attention ( $M = 3.7$ ), demand ( $M = 3.8$ ), and control ( $M = 0.4$ ) conditions in the brief analysis (see top left panel). Ben also displayed the greatest rate of disruptive responses during the ignore condition ( $M = 10.4$ ) and lower rates during the attention ( $M = 5.1$ ), demand ( $M = 5.2$ ), and control ( $M = 0.2$ ) conditions during the extended analysis (see top right panel).

Chris displayed the greatest rate of disruptive responses during the attention con-

dition ( $M = 6.7$ ), and significantly lower rates of responding in the ignore ( $M = 1.8$ ), demand ( $M = 1.0$ ), and control ( $M = 0.3$ ) conditions of the brief assessment (see middle left panel). Chris also displayed the highest rate of disruptive responses ( $M = 11.6$ ) during the attention condition and lower rates in the ignore ( $M = 4.6$ ), demand ( $M = 2.8$ ), and control ( $M = 0.5$ ) conditions of the extended functional analysis (see middle right panel).

Brian displayed the greatest rate of disruptive responses during the ignore condition ( $M = 16.3$ ) and comparatively lower rates in the attention ( $M = 2.8$ ), demand ( $M = 2.7$ ), and control ( $M = 0.4$ ) conditions of the brief assessment (see bottom left panel). Brian displayed high rates of responding in both the ignore ( $M = 8.7$ ) and demand ( $M = 7.0$ ) conditions during the extended functional analysis. However, he displayed comparatively lower rates of responding in the attention ( $M = 1.3$ ) and control ( $M = 0.4$ ) conditions. Four additional sessions of the ignore condition were conducted to confirm that his disruptive behavior would persist in the absence of social contingencies during the extended functional analysis (see bottom right panel). Conducting a minute-by-minute analysis of the last five sessions of the demand condition during the extended functional analysis demonstrated that Brian engaged in more disruption later in the demand session (e.g., after 5 min), which may explain why an escape function was not identified in the brief analysis.

The average amount of time it took to determine the function of the participants' disruptive behavior during the analyses were 36 min for the brief analysis and 310 min for the extended analysis. This study demonstrated that brief functional analyses can be effective in identifying maintaining variables of disruptive behavior in a vocational setting for some individuals.

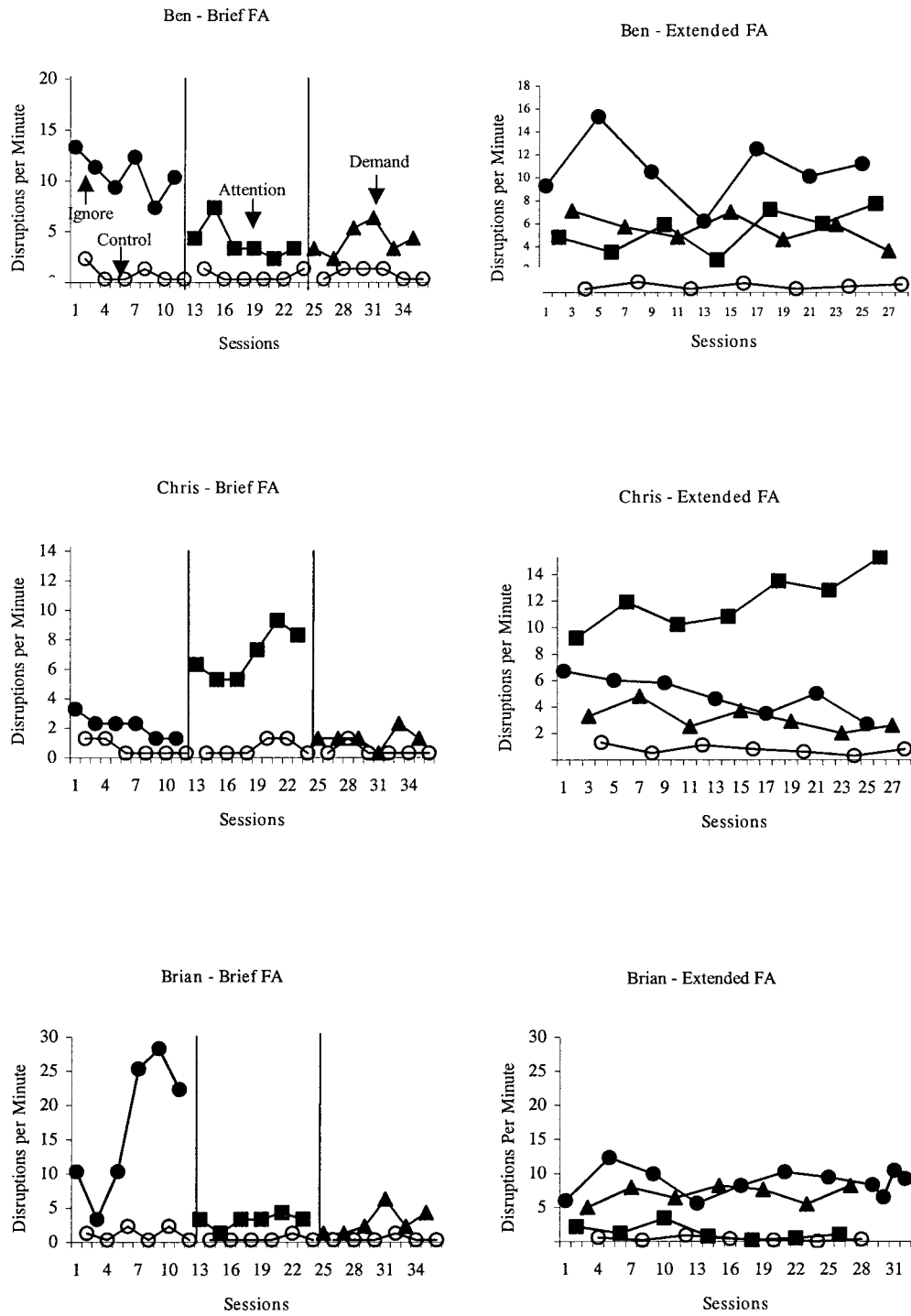


Figure 1. Disruptions per minute during the brief functional analysis (left column) and the extended functional analysis (right column) for Ben, Chris, and Brian.

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