

*THE USE OF SYMMETRICAL “DO”
AND “DON’T” REQUESTS TO INTERRUPT
ONGOING ACTIVITIES*

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The results of a modified functional analysis demonstrated that aggression, displayed by a 27-year-old man, was occasioned by the use of “don’t” requests to interrupt the client’s ongoing and often inappropriate activities (e.g., lying on the floor, pica, inappropriate touching of others). Subsequent analyses demonstrated that aggression was lower when ongoing activities were interrupted with symmetrical “do” requests than with “don’t” requests. An intervention utilizing symmetrical “do” requests (i.e., prompting an individual to engage in an incompatible behavior) to interrupt such activities resulted in reduced levels of aggression.

DESCRIPTORS: aggression, symmetrical “do” and “don’t” requests

Several studies have evaluated the class-specific effects associated with “do” and “don’t” requests (e.g., Ducharme & Worling, 1994; Fisher, Adelinis, Thompson, Worsdell, & Zarcone, 1998; Neef, Shafer, Egel, Cataldo, & Parrish, 1983). Neef et al. observed that compliance training with a specific request (i.e., “do” requests) did not facilitate an increase in compliance with a dissimilar request (i.e., “don’t” requests) and vice versa. Consequently, Neef et al. suggested, that for some, “do” and “don’t” requests may comprise distinct stimulus classes. Fisher et al. evaluated the effects associated with the use of symmetrical “do” and “don’t” requests to interrupt high-probability activities with 2 individuals whose destructive behavior was occasioned by the interruption of such activities. In contrast to the findings of Neef et al., Fisher et al. did not observe distinct stimulus class effects as-

sociated with symmetrical “do” and “don’t” requests (on destructive behavior). That is, interruption of high-probability activities occasioned destructive behavior independent of the type of request. However, in the current study, the use of symmetrical “do” and “don’t” requests to interrupt ongoing activities resulted in a differential pattern of responding.

METHOD

Participant

Raffie, a 27-year-old man who had been diagnosed with autism and moderate mental retardation, was admitted to an inpatient facility for the assessment and treatment of a severe behavior disorder (he weighed 260 lb and engaged in severe aggression). He was ambulatory and was independent with a variety of adaptive skills (e.g., feeding and toileting). Although Raffie could follow two- or three-step instructions, his expressive communicative skills were limited to the use of one- or two-word utterances.

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Response Measurement and Interobserver Agreement

Data were collected on the frequency of aggression (hitting, biting, kicking, and pulling the hair of others). During Phases 1 and 2, data collectors observed sessions in the treatment room (6 m by 6 m) and collected data using laptop computers (during Phase 3, sessions were conducted on the living unit). Two observers collected data independently during 50%, 45%, and 65% of sessions for Phases 1, 2, and 3, respectively. Exact agreement coefficients were calculated by dividing the total number of agreements by the number of agreements plus disagreements and multiplying by 100%. An agreement was defined as two independent observers agreeing on the exact frequency of a response observed within a given 10-s interval. The mean exact agreement coefficients for Phases 1, 2, and 3 were 96%, 98%, and 93%, respectively.

Procedure

All sessions were 10 min in length, and therapist assignment was randomly determined for each session throughout the study.

Phase 1: Functional analysis. A functional analysis using the procedures described by Iwata, Dorsey, Slifer, Bauman, and Richman (1982/1994) was conducted. However, aggression was low in frequency (near zero) and intensity and was not representative of the aggression observed on the living unit and reported to occur at home. Observation of Raffle's aggression suggested an increase in the probability of aggression when ongoing and often inappropriate activities (e.g., lying on the floor, pica, inappropriate touching of others) were interrupted. Consequently, a modified functional analysis was conducted based on these observations. Using a within-series design (ABAB), Raffle's aggression was evaluated in two conditions. In the control condition, Raffle was given free ac-

cess to leisure activities and was allowed to engage in ongoing activities without interruption. No programmed consequences were delivered for aggression. In the "don't" request condition, a "don't" request was delivered on a fixed-time (FT) 30-s schedule to interrupt the ongoing activity (e.g., "don't lie on the floor"). Compliance (termination of the activity within 5 s of the verbal prompt for a duration of 20 s) with the therapist's verbal prompt resulted in the delivery of brief verbal praise (e.g., "good job"). Non-compliance with the verbal prompt resulted in initiation of a physical prompt. Occurrences of aggression at any point during the prompting sequence resulted in termination of the prompt and giving him access to the interrupted activity for the remainder of the 30-s interval.

Phase 2: Evaluation of symmetrical "do" requests and "don't" requests. The effects associated with the use of "don't" requests relative to symmetrical "do" requests in the interruption of ongoing activities were evaluated using a within-series design (ABAB). The "don't" request condition was identical to that described in Phase 1. The symmetrical "do" request condition was similar to the "don't" request condition, except that ongoing activities were interrupted by prompting Raffle to engage in an incompatible behavior using a "do" request (e.g., rather than delivering the request "don't lie on the floor," Raffle was instructed to "sit in a chair"). In both conditions, occurrences of aggression terminated the request and Raffle was allowed access to the interrupted activity. In addition, compliance with prompts resulted in the delivery of brief verbal praise.

Phase 3: Treatment generality. A generality assessment was conducted immediately following completion of Phase 2. The purpose of this assessment was to evaluate the effects of introducing "do" requests to interrupt ongoing activities on the living unit, under

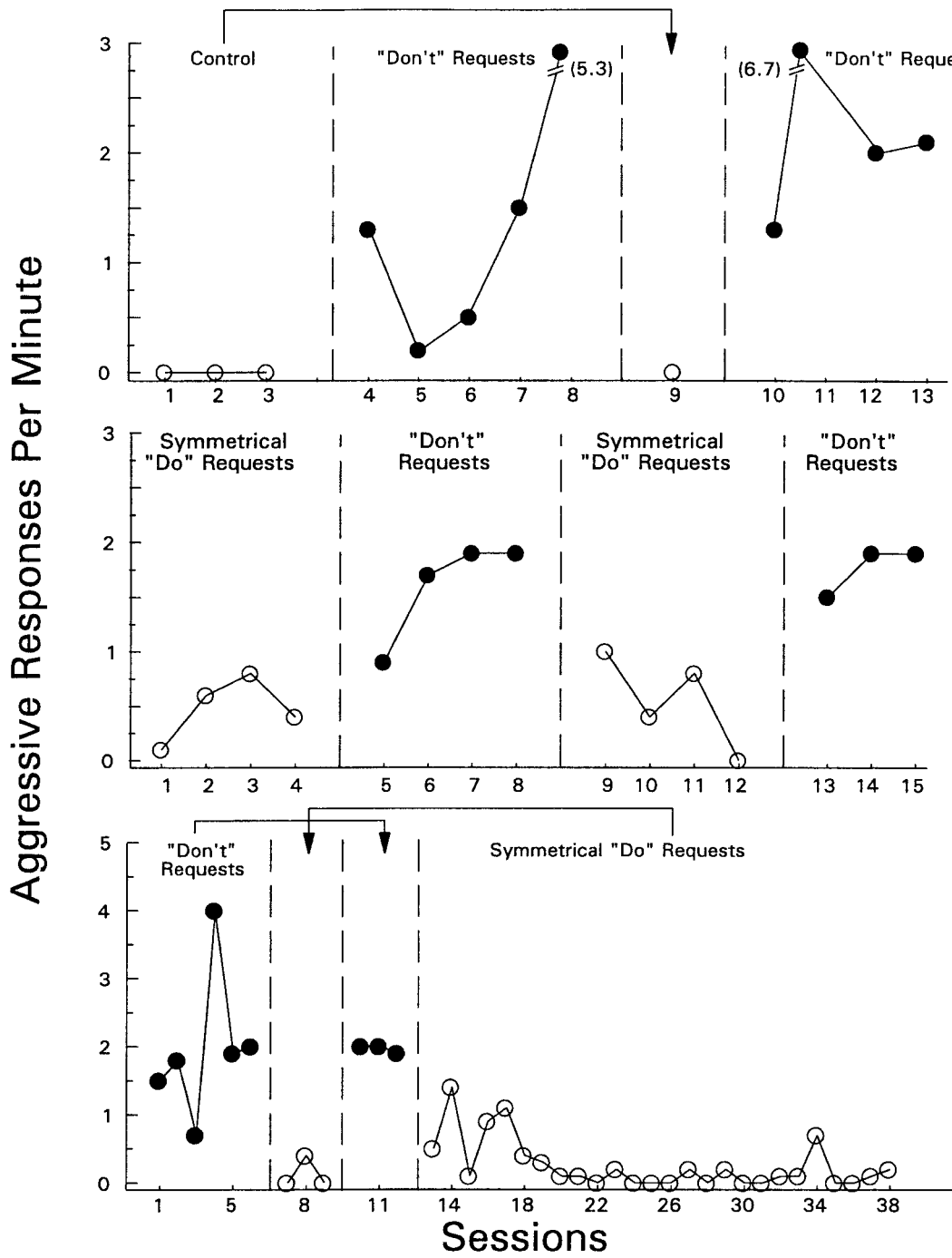


Figure 1. Top: the results of the modified functional analysis. Middle: the results of the symmetrical "do" versus "don't" request analysis. Bottom: the results of the generalization assessment.

more naturalistic conditions (e.g., an increase in opportunity to engage in high-probability activities in the presence of additional staff and clients). The conditions evaluated were identical to those described in Phase 2.

RESULTS AND DISCUSSION

In Phase 1 (top panel of Figure 1), aggression was observed exclusively in the "don't" request condition ($M = 2.3$ responses per minute), demonstrating the functional relation between Raffie's aggression and the interruption of ongoing activities. Phase 2 (middle panel of Figure 1) demonstrated the differential effects of the two types of requests used to interrupt activities ("don't" request condition, $M = 1.7$; symmetrical "do" request condition, $M = 0.4$ responses per minute). In Phase 3 (bottom panel of Figure 1), low levels of aggression were maintained when the "do" request condition was introduced on the living unit ("don't" request condition, $M = 1.9$; symmetrical "do" request condition, $M = 0.2$ responses per minute).

In the current investigation, aggression occasioned by the use of "don't" requests to interrupt ongoing and often inappropriate activities was reduced with the use of symmetrical "do" requests. Researchers (Ducharme & Worling, 1994; Neef et al., 1983) have suggested that the differential effects associated with "do" and "don't" requests may be a function of discrepancies in the reinforcement contingencies historically related with each. That is, a caregiver may be more inclined to provide preferred consequences for compliance with "do" requests (e.g., verbal praise) relative to "don't" requests. This may be because the use of "don't" requests is typically limited to the interruption of high-probability, inappropriate, and presumably preferred activities (e.g., jumping on furni-

ture). Consequently, "do" and "don't" requests may become discriminative for conflicting reinforcement contingencies, affecting behavior (e.g., compliance and destructive behavior) accordingly. Such historical events likely differ from individual to individual. Therefore, idiosyncratic reinforcement histories may account for the lack of an across-subject replication demonstrated between the current investigation and the Fisher et al. (1998) study.

Although the differential effects associated with the use of symmetrical "do" and "don't" requests to interrupt ongoing and often inappropriate activities were clearly demonstrated in this case, it should be noted that the specific operative mechanism responsible for behavioral maintenance was not identified. That is, it is unclear whether Raffie's aggression was functionally related to the contingent access to the interrupted activities (positive reinforcement), contingent termination of "don't" requests (negative reinforcement), or perhaps a combination of the two. In summary, the current investigation contributes to research conducted in this area by suggesting that for some individuals, destructive behavior occasioned by the interruption of activities using "don't" requests may be reduced by simply modifying the stimulus properties of the request. Future research in this area may evaluate the reported procedures with a larger number of individuals and attempt to isolate variables that may determine an individual's response to requests that are used to interrupt ongoing activities.

REFERENCES

- Ducharme, J. M., & Worling, D. E. (1994). Behavioral momentum and stimulus fading in the acquisition and maintenance of child compliance in the home. *Journal of Applied Behavior Analysis*, *27*, 639-647.
- Fisher, W. W., Adelinis, J. D., Thompson, R. H., Worsdell, A. S., & Zarccone, J. R. (1998). Functional analysis and treatment of destructive behav-

- ior maintained by termination of “don’t” (and symmetrical “do”) requests. *Journal of Applied Behavior Analysis*, 31, 339–356.
- Iwata, B. A., Dorsey, M. F., Slifer, K. J., Bauman, K. E., & Richman, G. S. (1994). Toward a functional analysis of self-injury. *Journal of Applied Behavior Analysis*, 27, 197–209. (Reprinted from *Analysis and Intervention in Developmental Disabilities*, 2, 3–20, 1982)
- Neef, N. A., Shafer, M. S., Egel, A. L., Cataldo, M. F., & Parrish, J. M. (1983). The class specific effects of compliance training with *do* and *don’t* requests: Analogue analysis and classroom application. *Journal of Applied Behavior Analysis*, 16, 81–99.

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