

BALANCING SOCIAL ACCEPTABILITY WITH TREATMENT EFFECTIVENESS  
OF AN INTRUSIVE PROCEDURE: A CASE REPORT

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The debate over social acceptability of intrusive procedures has led some school districts to adopt policies allowing punishment for only the most extreme forms of destructive behavior. We investigated the effectiveness of selectively implementing punishment for only the most severe topographies of aggression and property destruction, while less extreme behaviors were ignored. Results indicated that severe behaviors were reduced to near-zero levels only when both severe and less severe behaviors were similarly punished.

**DESCRIPTORS:** punishment, treatment acceptability, school policy, behavior severity

There has been considerable debate regarding the social acceptability of punishment procedures. Studies indicate that acceptance of intrusive procedures increases with behavior severity (Witt & Elliott, 1985). Accordingly, some school districts have adopted policies that allow punishment only for the most severe forms of destructive and aggressive behavior. However, little data exist on the effects of interventions that are differentially implemented on the basis of severity. This case study assesses the effectiveness of punishment in reducing severe topographies of aggression and property destruction when less severe topographies were either similarly punished or ignored.

**METHOD:** Cory, a nonverbal 11-year-old male with severe mental retardation, was hospitalized for the treatment of aggression and property destruction. Prior to admission, school personnel had recommended residential placement due to behavior severity (e.g., breaking glass and walls, displaying aggression against wheelchair-bound students).

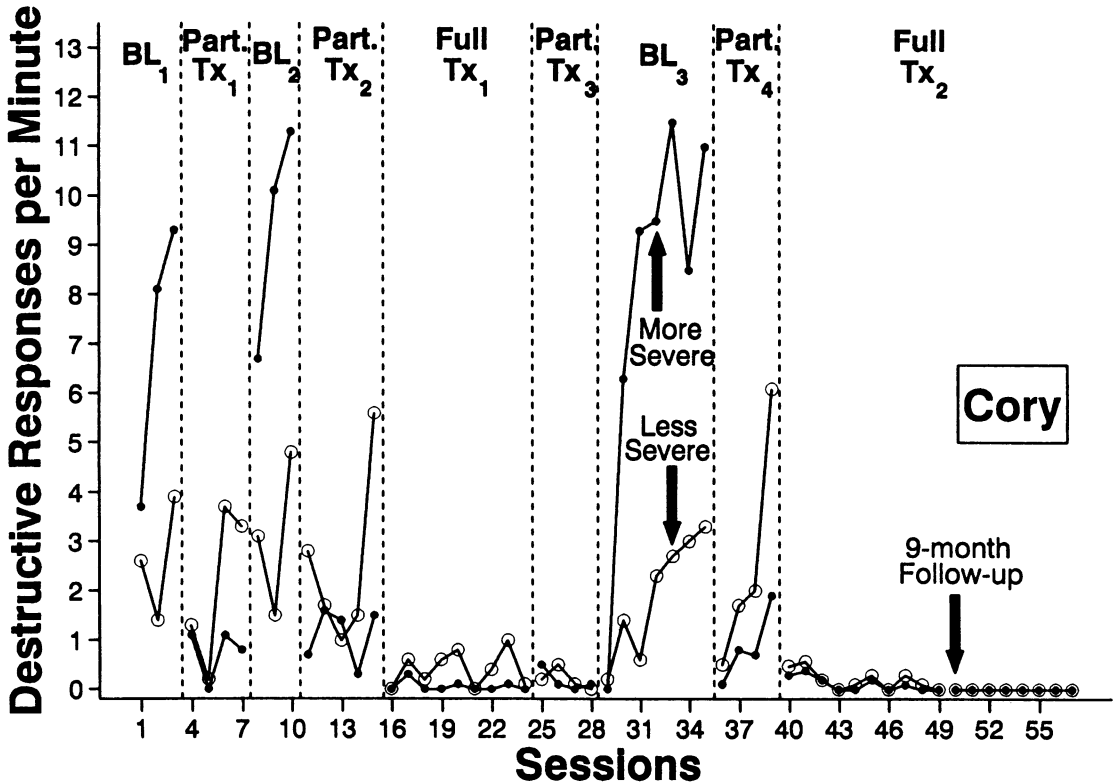
A functional assessment (Iwata, Dorsey, Slifer, Bauman, & Richman, 1982) initially indicated that escape from demands was associated with higher rates of maladaptive behaviors. Based on these results, the effectiveness of functional communication training (FCT) (in which Cory was taught to escape demands through signing "finish") gentle teaching, and generalized compliance training was assessed. FCT was most effective; however, destructive behaviors still occurred at unacceptable rates. Therefore, with parental approval, a 3-min seated basket-hold contingent upon maladaptive behaviors was added to FCT. During this procedure, Cory's arms were crossed in front of his chest and he was guided to a seated position on the floor by the therapist who then held him in order to maintain the seated position. Administrators from Cory's school indicated that their policy would allow implementation of the basket-hold for only the most severe topographies of destructive behavior. Therefore, we completed the following analysis to determine the effectiveness of implementing the punishment procedure in accordance with the school's policy.

Destructive behaviors were divided into "more severe" (e.g., forcefully striking others, throwing objects at or near others, throwing or overturning furniture, destroying objects) and "less severe" topographies (e.g., light shoving or pushing others, banging but not breaking objects, pushing objects off the table). Ten-minute sessions were conducted in a partitioned area of a larger living unit that was equipped with work tables and educational materials. Observers recorded each occurrence of behavior on laptop computers. Interobserver agreement data were collected during 53% of the sessions. For less and more severe behaviors, respectively, occurrence (nonoccurrence) agreement coefficients averaged 74.6% (92.9%) and 83.8% (91.7%). During follow-up sessions, both occurrence and nonoccurrence agreement coefficients for compliance to teacher's requests averaged 100%. For adaptive behaviors, occurrence and nonoccurrence agreement coefficients averaged 98.4% and 98.0%, respectively.

Treatments were evaluated using a reversal design. During baseline, sessions were designed to approximate contingencies typically used by Cory's teacher: (a) The therapist directed Cory to engage in developmentally appropriate tasks (e.g., coloring and sorting cards), (b) praised him approximately once per minute for on-task behavior, and (c) responded to the more or less severe behaviors with verbal reprimands or warnings. Partial treatment sessions were identical to baseline, except that more severe topographies of destructive behavior resulted in a verbal reprimand followed by a 3-min seated basket-hold, and less severe behaviors were ignored. Full treatment sessions were also identical to baseline, except that all topographies of destructive behavior resulted in a verbal reprimand followed by a 3-min seated basket-hold. After 9 months, follow-up data were collected in Cory's classroom during 30-min samples while he worked on academic tasks with his teacher. Over the 9-month period, his teacher implemented the behavioral intervention, which consisted of FCT and seated basket-hold, for both more and less severe topographies.

**RESULTS AND DISCUSSION:** As depicted in the figure, during partial treatment (part. tx, and part. tx<sub>2</sub>) the rate of more severe topographies was substantially lower than baseline, but the rate of almost one per minute ( $M = 0.8$ ) was still unacceptable. During partial treatment, less severe behaviors remained at approximately the same rate as baseline ( $M = 2.1$  and  $M = 2.5$  per minute, respectively). During full treatment (full tx<sub>1</sub>), more severe topographies decreased to 0.1 responses per minute, and less severe behaviors were reduced to 0.4 per minute. The subsequent reversal back to partial treatment did not result in an increase in more severe behaviors. Therefore, the ABC (bl<sub>1</sub>, part. tx<sub>4</sub>, full tx<sub>2</sub>) sequence was replicated, yielding results similar to those of the initial sequence.

Although the school's policy of allowing punishment for only the most severe forms of destructive behavior was to limit the use of intrusive procedures such as the basket-hold, it resulted in more basket-holds per session during partial treatment ( $M = 4.8$ ) than during full treatment ( $M = 3.5$ ). During the last seven sessions of full treatment, the mean number of basket-holds decreased to 1.6 per session. Thus, the policy both decreased treatment effectiveness and increased the frequency



of implementation of the intrusive procedure. When these data were shared with Cory's school administrators, they allowed an exception to their policy, and the basket-hold was used for more and less severe behaviors.

One possible explanation of why partial treatment resulted in less than optimal reductions in the more severe behaviors is that the less and more severe topographies formed a response class, and the client did not accurately discriminate between punished and unpunished members of the response class (Parrish, Cataldo, Kolko, Neef, & Egel, 1986). Alternatively, the less and more severe behaviors may have comprised earlier and later components of a response chain, respectively, such that less severe responses served as discriminative stimuli for more severe topographies.

Partial treatment (part. tx.) resulted in low rates of maladaptive behaviors when it followed a phase of full treatment. Therefore, it might be beneficial for additional research to assess whether fading results in maintenance of low rates of inappropriate behavior and improves social acceptability of treatment.

Our investigation of adaptive behaviors was limited to follow-up data that indicated that when FCT and full treatment were combined, task-related behaviors averaged 47.9%, compliance (i.e., initiating behavior directed towards carrying out his teacher's verbal or gestural request within 10 s) averaged 43.9%, and communication (e.g., signing finish to obtain a break from demands) did not occur during sessions. Destructive behaviors were absent during all follow-up sessions. These data were consistent with daily data collected by Cory's teacher. Future investigators may wish to assess the effects of full and partial treatment on adaptive as well as maladaptive behaviors, and the potential interaction effects of FCT with both partial and full treatment conditions.

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This investigation was supported in part by Grant MCJ249149-02 from the Maternal and Child Health Service of the U.S. Department of Health and Human Services. The authors wish to acknowledge Susan Johnson and Irene Slevin for their contributions. Requests for reprints should be sent to Nancy C. Grace, Neurobehavioral Unit, The Kennedy Krieger Institute, 707 N. Broadway, Baltimore, Maryland 21205. Received June 25, 1993; final acceptance September 8, 1993; Action Editor, Nancy A. Neef.