

Effective Implementation of Contingent Physical Restraint to Reduce Severe Aggression and Property Destruction

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Introduction

The use of aversive and punishment procedures in the treatment of severe behavior disorders is a controversial topic in the field of developmental disabilities. For some individuals, however, reinforcement-based interventions alone are not effective in reducing challenging behaviors to acceptable levels. The Least Restrictive Treatment Model indicates that an ethical clinician balance the risks and benefits of intrusive treatments with the risks and benefits of allowing dangerous behavior to continue (Van Houten, et.al., 1988). This case study investigates the benefits of implementing a contingent physical restraint, with and without an additional positive component, for an individual who displayed severe aggression and property destruction.

METHOD

Participants

The participant was a 17 year old male diagnosed with Autism, Mental Retardation and Schizophrenia. He resided at a campus-based residential facility and attended the adjacent special education school.

Setting

The behavioral interventions in this case study were implemented in a campus-based residential facility.

Dependent Measures

The dependent measures in this study were aggression and property destruction. Aggression was operationally defined as hitting others with an open or closed fist, scratching, pushing, kicking, biting, head-butting others, or throwing objects at others. Property destruction was defined as breaking furniture or appliances, throwing furniture or appliances, breaking parts of buildings or large structures (i.e. door frames, windows). These definitions include attempts. Data were collected as frequency. Previous functional assessments indicated the function of aggression and property destruction was access to preferred tangibles. Frequency data were also collected on the number of contingent restraints implemented, 911 calls made, and Crisis Unit admissions.

Inter-Observer Agreement Data

Data collected for this case study were part of the facility's typical 24-hour data collection by staff. IOA data was not collected.

PROCEDURE

During the Block and Redirect condition, all instances or attempts of aggression and property destruction were blocked. Emergency restraints were implemented if blocking was unsuccessful in maintaining safety and de-escalating the situation.

During the Contingent Restraint Condition, a 3-4 person supine restraint was implemented contingent on any instance or attempt of aggression or property destruction. The participant was informed that he would be released from the restraint following one minute of calm.

During the Contingent Restraint Condition + Token Economy Condition, the restraint procedure outlined above continued. In addition, the participant

earned a sticker on a calendar for each day that he completed his daily routine with the absence of aggression and property destruction. After seven consecutive stickers, the participant was able to purchase a preferred tangible or edible.

During the Token Economy Condition, the motivational system as outlined above was in place and all aggressions and property destruction was blocked. If blocking was ineffective, emergency restraints were implemented.

RESULTS AND DISCUSSION

The introduction of the contingent restraint resulted in a reduction of aggression and property destruction, but not the number of restraints experienced. Average daily rate of aggression decreased from 3.8 to 2.3, but the average daily rate of restraints increased from 0.16 to 0.3. When the token economy component was added, however, the daily average rate of aggression decreased to 0.5 and the average rate of restraints decreased to 0.08. When the token economy only was in place, the average rate of aggression increased to 2.0, but restraints remained stable. When the contingent restraint was re-introduced, both averages decreased further to 0.04 and 0.02, respectively. Neither the contingent restraint nor the token economy alone was as effective as the combination of the two interventions. Rates for property destruction followed a similar pattern.

In addition, calls to 911 decreased and the number of days the participant was admitted to a crisis unit decreased (8 days in approximately 1.5 months; 6 days in 1.3 years). Finally, the percentage of adaptive goals run increased from 69% to 77%. An intervention that combined a reinforcement-based component and an aversive component was most effective in reducing dangerous behaviors and increasing overall quality of life.

