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O'Leary K D, Becker W C, Evans M B & Saudargas R A.

A token reinforcement program in a public school: a replication and systematic analysis. *J. Appl. Behav. Anal.* 2:3-13, 1969.

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Daily review of classroom rules, praising appropriate behavior, and ignoring disruptive behavior did not lead to a decrease in inappropriate behavior of unruly students. However, a token reinforcement program involving tokens in the form of ratings and rewards (e.g., special pencils, comics, and raisins) did lead to dramatic decreases in inappropriate behavior. The reinforcers were gradually faded from daily to weekly reinforcers. [The *SCI*® and the *SSCI*® indicate that this article has been cited in more than 200 publications.]

Class Behavior

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In 1967, with my graduate research adviser, Wesley C. Becker, I devised a token reinforcement program for a classroom of 17 children who would now be diagnosed oppositional/defiant disorder and attention deficit disorder with hyperactivity.¹ The children were from a relatively poor neighborhood in Urbana, Illinois, in a class for children labeled emotionally disturbed. The majority of the children were black, and the teacher was on the verge of quitting if she did not receive aid in classroom management.

The token reinforcement system we devised involved reviewing a list of classroom rules twice each day, praising appropriate behavior and ignoring disruptive behavior, as well as feedback to the children about how well they did academically and socially. Further, the children received reinforcers in the form of prizes such as special pencils, rules, and candy. The combination of these factors led to a marked decrease in the disruptive behavior by the students. It was unclear, however, which of the factors in the token reinforcement program was functional in producing the dramatic changes in the

children's behavior. Therefore, Becker, Michael B. Evans, a graduate student colleague, Richard A. Saudargas, an undergraduate, and I decided to assess the value of the various factors that might have led to reductions in the children's inappropriate behavior. Neither review of classroom rules nor praising appropriate behavior and ignoring inappropriate behavior led to changes in the children's behavior.

Token reinforcement programs were essentially 'unknown in public schools in the 1960s, and we borrowed from the conceptualizations of Jay S. Birnbrauer and his colleagues who devised a token reinforcement program for a small class of retarded children at the University of Washington.² During the mid-1960s, treatment for children with what we now call oppositional/defiant disorders or attentional deficit disorders with hyperactivity involved individual psychotherapy of a psychodynamic nature.

Basically, the psychodynamic treatment involved play therapy, but there was little evidence then or now that such treatment is successful with aggressive and hyperactive children. On the other hand, token reinforcement programs have repeatedly proven of value in increasing academic productivity and decreasing inappropriate behavior,³ and they have proven very effective in large-scale comparative evaluations in inner-city schools.⁴ Indeed, after reviewing the research on contingency management procedures, M.T. Nietzel, D.A. Bernstein, and R. Milich⁵ reported that, in terms of sheer frequency, research on contingency management is unmatched by any other behavioral technique and that these procedures have consistently been found to be effective. Generalization and maintenance of desired behavior are problems that require special clinical skill, and research on these topics is still sorely needed.

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Received March 29, 1991