Wolf M, Risley T & Mees H. Application of operant conditioning procedures to the behaviour problems of an autistic child. *Behav. Res. Ther.* 1:305-12, 1964. [Univ. Washington, Seattle, and Western State Hospital, WA]

This paper describes one of the earliest attempts to apply behavioral procedures to autistic children, to evaluate the effects of time-out on children, to use single-subject evaluation and measurement procedures in a naturalistic setting for children, and to employ behavioral procedures in a comprehensive manner that included the training of parents, institutional staff, and teachers. [The Social Sciences Citation Index® (5SCI®) indicates that this paper has been cited in over 290 publications since 1966.]

Montrose M. Wolf
Department of Human Development and
Family Life
University of Kansas
Lawrence, KS 66045

July 25, 1983

"In the early 1960s, there was much excitement about the application of the principles of behavior to clinical and educational problems. Sidney W. Bijou and Donald M. Baer, University of Washington, gathered together a vigorous group interested in these applications.

"Soon after I had arrived, as a new and not very self-confident postdoc, Bijou described an interesting case and an unsettling challenge. The director of the children's unit at the local mental hospital had said to Bijou, something like, 'I understand that you guys think you can teach anyone to do anything. Let's see if you can teach a little, threeand-a-half-year-old autistic boy with severe self-destructive tantrums, sleeping problems, and no normal language how to wear his glasses. Because of cataracts in his eyes, both lenses have been removed. For the past year, we and his parents have tried without success to get him to wear his glasses. The ophthalmologist predicts that unless the boy begins wearing his glasses within the next six months, he will permanently lose his macular vision. Let's see you guys teach this boy to wear his glasses!

"Todd Risley, Hayden Mees, and I found that we were able to develop procedures that dealt effectively with the tantrums, self-destructive behavior, sleeping and eating problems, and that also established the wearing of glasses, and some appropriate language and social behavior. For the two years following the boy's seven-month stay at the institution, we and our colleagues developed procedures for teaching him several other appropriate social and self-care behaviors. He recently graduated from high school. By all accounts, except for his abnormally thick glasses, he has the appearance and style of a typical adolescent.

"This paper may have been widely cited for several reasons. It describes the earliest attempt to apply and to evaluate systematically the effects of brief time-out on child behavior. O'Leary and Carr2 have suggested that this paper became a model for future studies in the field because of its emphasis on parent and teacher training, early intervention, and systematic follow-up to ensure maintenance of treatment gains as well as continued acquisition of new behaviors. The research was also an early example of the application of single-subject research methodology in a naturalistic setting. Behavioral data were collected in order to evaluate the effectiveness of almost all of the procedures that were used. It was not until a few years later that some of us formalized our notions regarding single-subject experimental design and measurement procedures. These were described in a paper by Baer, Risley, and myself3 which was recently selected as a Citation Classic.

"A final reason for the paper's frequent citation may be the fact that the procedures it described became part of a major body of behavioral technology for treating autistic children. Most of the described procedures have been successfully replicated in research with other autistic children. We replicated most of these procedures ourselves and evaluated their effectiveness using single-subject research methodology. Other researchers have also replicated these procedures, adding their own important additions and refinements. Some have evaluated this evolving technology using elegant and carefully controlled comparison group experimental designs." 5,6

Wolf M M, Risley T R, Johnston M K, Harris F R & Allen K E. Application of operant conditioning procedures to the behavior problems of an autistic child: a follow-up and extension. Behav. Res. Ther. 5:103-11, 1967.

<sup>2.</sup> O'Leary K D & Carr E G. Childhood disorders. (Wilson G T & Franks C M. eds.) Contemporary behavior therapy: conceptual foundations of clinical practice. New York: Guilford Press, 1982. p. 445-504.

Baer D M, Wolf M M & Risley T R. Some current dimensions of applied behavior analysis. J. Appl. Behav. Anal. 1:91-7, 1968.

<sup>[</sup>Citation Classic. Current Contents/Social & Behavioral Sciences 14(46):14, 15 November 1982.]

Risley T R & Wolf M M. Establishment of functional speech in echolalic children. Behav. Res. Ther. 5:73-88, 1967.

Lovass O I, Koegel R L, Simmons J Q & Long J S. Some generalization and follow-up measures of autistic children in behavior therapy. J. Appl. Behav. Anal. 6:131-65, 1973.

Hemsley R, Howlin P, Berger M, Hersov L, Holbrook D, Rutter M & Yule W. Treating autistic children in a family context. (Rutter M & Schopler E, eds.) Autism. New York: Plenum Press, 1978.