Employing Electric Shock with Autistic Children

A Review of the Side Effects

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The use of electric shock in a punishment paradigm has continued to be a highly controversial issue in the treatment of autistic children. While the experimental literature argues for the effectiveness of the procedure for reducing maladaptive behaviors, some clinicians and researchers have expressed fear of possible negative side effects. The reported side effects of contingent electric shock were reviewed in an attempt to evaluate the validity of these fears. The review indicated that the majority of reported side effects of shock were of a positive nature. These positive effects included response generalization, increases in social behavior, and positive emotional behavior. The few negative side effects reported included fear of the shock apparatus, negative emotional behavior, and increases in other maladaptive behavior. The implication of these findings for the use of the shock procedure are discussed in terms of correct usage of the shock, therapist reservations, and alternative procedures.

The use of electric shock in the treatment of autistic children has proven to be one of the most hotly debated issues facing the researcher or clinician concerned with the welfare of these children. On one hand, some point out that it is an extremely effective method of reducing behaviors which pose an immediate threat to the child’s welfare (e.g., self-destruction) and on the

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other hand, some express concern over possible negative side effects of the shock.

Actually, there are two main issues to be addressed. The first concerns the use of punishment per se and the second concerns the use of electric shock as the aversive stimulus in the punishment paradigm. Punishment refers to the operant conditioning procedure whereby an aversive stimulus is presented contingent upon the occurrence of a specified behavior for the purpose of decreasing the probability of the recurrence of that behavior. A formidable body of research exists which argues for the beneficial use of punishment (e.g., Azrin & Holz, 1966; Solomon, 1964), while there have been cautions voiced by others regarding the undesirable emotional side effects which may accrue to the recipient of punishment (Adler, 1930/1970; Maurer, 1974; Skinner, 1953; Yates, 1962). Additionally, the operant researchers have emphasized the temporary nature of response suppression by punishment (e.g., Estes, 1944; Azrin & Holz, 1966) and those representing psychodynamic theory predict symptom substitution (Freud, 1926/1959; Freud, 1946). Regarding autistic children in particular, warnings predicting various noxious side effects including worsening of the autistic withdrawal and decrease in social behavior continue to be voiced (Bettelheim, 1967).

A more specific issue pertains to the use of shock as an aversive stimulus with autistic children. Unlike the use of punishment, this area does not have the benefits of decades of research to help us evaluate its effectiveness on target behaviors and potential positive and negative side effects. However, there has been a considerable amount of recent work in this area and the facts are accumulating. It is the purpose of this paper to review the use of electric shock with autistic children in an attempt to evaluate the nature of any side effects it may produce.

Electric shock has been applied to autistic children as a punisher to eliminate self-destructive behaviors (Baroff & Tate, 1968; Browning, 1971; Bucher & Lovaas, 1968; Lovaas & Simmons, 1969; Merbaum, 1973; Tate & Baroff, 1966), aggression toward others (Birnbrauer, 1968; Browning, 1971; Risley, 1968), playing with electrical equipment (Bucher & King, 1971), self-stimulation (Baroff & Tate, 1968; Lovaas, Freitag, Kinder, Rubenstein, Schaeffer, & Simmons, 1966; Lovaas, Schaeffer, & Simmons, 1965; Tate & Baroff, 1966), attempts to leave the experimental setting (Bucher & Lovaas, 1968; Lovaas et al., 1965), climbing on furniture (Risley, 1968), whining and inattention (Simmons & Lovaas, 1969), destroying property and soiling pants (Birnbrauer, 1968), tantrum behavior (Lovaas et al., 1966; Lovaas et al., 1965), saliva holding (Baroff & Tate, 1968; Tate & Baroff, 1966), and clinging to people (Tate & Baroff, 1966).