

Education Update:

Restraint effective

The feces smearing of a six-year-old retarded boy, and the aggression and stereotyped behaviors of a 24-year-old retarded schizophrenic man, were reduced to near-zero levels by a combination of reinforcement of other behaviors and a brief restraining procedure, according to Ahmos Rolider et al.

The researchers first conducted a functional analysis to determine the causes of the behaviors in each subject. They then instituted the following procedure:

—Praise, food rewards or other reinforcers were given when the individuals did not engage in inappropriate behaviors.

—When feces smearing, aggression, or stereotyped behaviors occurred, a 20-second brief movement restriction (BMR) procedure was used. The individual was told, "No!" and escorted to a nearby chair where he was required to sit with his chest resting on his lap and his arms behind his back at waist level. To ensure safety, trainers practiced this technique on each other, and a physician observed the procedure beforehand and during use on the subjects.

The six-year-old's feces smearing, which had occurred up to three times a day, dropped to nearly zero after eight months of the procedure. The 24-year-old man's aggressive and stereotyped behaviors dropped from about 12 each per day to less than one per week.

The improvement was especially important in the case of the six-year-old, the researchers say, because his cytomegalovirus infection could be spread to others through his feces.

Advantages of their technique over similar procedures, the researchers say, are that it is safe, easy to apply immediately on the spot, and requires only that a straight-backed chair be available.

"The use of a brief movement restriction procedure to eliminate severe inappropriate behavior," Ahmos Rolider, Larry Williams, Anne Cummings, and Ron Van Houten; *Journal of Behavioral Therapy and Experimental Psychiatry*, Vol. 22, No. 1, 1991, pp. 23-30. Address: Ahmos Rolider, Psychiatry Department, McMaster University, 1200 Main Street West, Hamilton, Ontario, Canada, L8N 3Z5.

Technique increases children's peer play

Autistic children can learn valuable social skills by interacting with non-disabled peers — but getting autistic and non-disabled children to play together isn't always easy. Non-disabled children often initiate social exchanges with autistic peers when prompted by teachers, but the frequency of such interactions drops sharply when teacher prompts are faded.

Hoping to encourage non-disabled preschool children to associate with autistic peers in the absence of teacher prompts, Samuel Odom and Emily Watts recently used a two-stage approach called "correspondence training/visual feedback" (CTVF).

The non-disabled students first learned techniques for initiating interactions with their autistic peers, and then participated in play sessions where they were prompted by the teacher to play with the autistic students. After several sessions the CTVF program was introduced (initially in a session following the prompted session, and later by itself, after teacher-prompt sessions were discontinued). The CTVF program has two elements:

- A "say-do" procedure, in which the researchers explain, "children first state the behavior in which they will engage and then are reinforced for actually doing the behavior." In this case, if a child told the teacher that he or she would get an autistic peer to play eight times in one session, and then actually did so, the child received a reward (for instance, a sticker, or a desired activity) after the play session.
- A visual feedback procedure, in which the teacher sat outside the play area but within sight, and drew a "happy face" on a card each time an autistic child interacted socially with a non-disabled peer. At the end of each session, the non-disabled children counted the number of happy faces on their cards, and received rewards if they had met the criterion.

Odom and Watts report that the introduction of the CTVF procedure following the teacher-prompt sessions "resulted in substantial increases in peer initiations," and that when prompted sessions were discontinued, the CTVF procedure alone "continued to support the peers' social initiations."

Odom and Watts comment that this procedure — since it tends to produce responses in the autistic students, but not encourage initiation of social interactions by them — is probably more appropriate for young, mentally retarded autistic students with few verbal skills, while other strategies might be more effective for older and more verbal autistic students.

Odom and colleagues plan future studies to see if nondisabled children will continue to initiate social contacts with autistic peers when the CTVF procedure is faded.

"Reducing teacher prompts in peer-mediated interventions for young children with autism," Samuel Odom and Emily Watts; *Journal of Special Education*, Vol. 25, No. 1, 1991, pp. 26-43. Address: Samuel Odom, Box 328, Peabody College, Vanderbilt Univ., Nashville, TN 37203.

Rutgers study: good news about early intervention

"Striking" IQ gains and significant improvements in language test scores were seen in a group of autistic preschoolers after one year of intensive education, according to researchers Sandra L. Harris et al.

Harris and colleagues administered an IQ test (the Stanford-Binet IV) and a language test (the Preschool Language Scale) to autistic children and non-disabled peers at the beginning and end of the preschool year at the Douglass Developmental Disabilities Center at Rutgers University, which provides structured behavioral treatment in group and individual settings. Nine autistic children participated in the IQ testing, and 16 in the language testing.

At the second testing, Harris et al. report, the children with autism showed "a nearly 19-point increase in IQ and an eight-point gain in language quotient." All of the autistic children still had significantly lower IQ and language scores than the control subjects after the year of preschool, and remained socially and emotionally impaired; however, Harris et al. say that the increase in their IQs, "if maintained over time, provides encouraging support for the notion that children with autism can make major developmental increases during their early years."

While improvement in "test-taking skills" such as sitting quietly and following directions may have accounted for some of the IQ increases seen, the researchers say, the pattern of improvement "suggests the children had started to learn how to process information they previously had been unable to organize."

Non-disabled control subjects showed no significant change in IQ after one year, but did improve significantly on the language test. This, Harris et al. say, may reflect the fact that both non-disabled and autistic preschoolers were exposed to a "language-intensive" curriculum.

The researchers caution that the autistic children they tested were high-functioning, with a mean IQ of nearly 70 at the time of their first evaluation and scores on the Childhood Autism Rating Scores which placed them in the mild to moderate range of autistic symptoms. More research is needed, they say, to determine if lower-functioning children with autism benefit as substantially from early intervention programs.

"Changes in cognitive and language functioning of preschool children with autism," Sandra L. Harris, Jan S. Handleman, Rita Gordon, Barbara Kristoff, and Felicia Fuentes; *Journal of Autism and Developmental Disorders*, Vol. 21, No. 3, 1991, pp. 281-290. Address: Sandra L. Harris, GSAPP, P.O. Box 819, Rutgers University, Piscataway, New Jersey 08855-0819.