

# Education Update:

## Pivotal response training benefits parents, children

Autistic children and their parents benefit most when home training focuses on "pivotal" behaviors, according to continuing research by Laura Schreibman and colleagues.

"Since children with autism . . . have so many target behaviors that require remediation, the treatment of one behavior at a time is likely to be impractical, extremely lengthy, and unlikely to approximate normalization," the researchers note. Instead, their program focuses on training pivotal behaviors that influence many areas of functioning. The two pivotal behaviors Schreibman et al. currently focus on are *motivation* and *response to multiple cues*. Techniques the parents learn in their program include:

- using clear instructions. Parents are taught, for instance, to say, "give me the blue ball," instead of "can you find the blue ball for me so we can play a game of catch?"

- arranging the environment to encourage spontaneous speech and learning—for instance, placing toys or food items that the child likes nearby, to spark conversation about them.

- interspersing difficult tasks with tasks already mastered, to insure frequent success and increase motivation.

- using multiple cues. For instance, if the child already responds correctly to the request, "get your sweater," the parent will add another cue: "get your red sweater," or "get the sweater in your room." Varying cues helps overcome the autistic behavior of focusing on only one cue.

- allowing the child to share control, by letting him or her select the toys or activities used during a session, and by taking turns in activities.

- offering clear, immediate, contingent, uninterrupted, and effective rewards for appropriate behavior.

- using natural reinforcers. "For example," Schreibman and colleagues say, "if . . . the child points to [a] toy airplane and says 'plane,' it usually is much more effective to let her play with the airplane rather than giving her a candy treat for good talking. Thus, the consequence is a functional and integral part of the activity."

- rewarding both correct responses and obvious tries to perform a requested task, even when these attempts are incorrect. Schreibman et al. speculate that "because children with severe handicaps encounter so much failure, they might become increasingly unmotivated to respond if most of their attempts to respond were met with punishment."

In a recent study, the researchers trained parents to teach pivotal behaviors in natural settings, and also to use more traditional, formal teaching techniques. Observers unaware of the purpose of the study rated

parents using the "pivotal behaviors" technique as more enthusiastic, happier, and more interested than parents using the traditional behavior modification techniques.

An earlier study by Koegel et al. found that children taught pivotal behaviors in a natural setting exhibited less avoidance and off-task behavior and "more positive behaviors indicating motivation to work on the tasks."

Whether the positive response of parents is related to the procedures themselves or to the improved behavior of their children isn't clear, Schreibman et al. say, but "what is important . . . is that for whatever reason, both child and parent seem to display more positive [feelings] when pivotal response training is the method of training being used."

"Positive affect of parents of autistic children: a comparison across two teaching techniques," Laura Schreibman, Wendy M. Kaneko, and Robert L. Koegel; *Behavior Therapy*, 22, 479-490, 1991. Address: Laura Schreibman, Dept. of Psychology, University of Calif. San Diego, 9500 Gilman Dr., La Jolla, CA 92093-0109.

## Self-choking stopped

A 25-year-old retarded and deaf-blind man whose self-injury consisted of choking himself approximately twice a minute—frequently to the point that he lost consciousness—was successfully treated using a simple water misting procedure.

Trainers administered a brief water spray and said, "No!" each time the man choked himself. If the behavior persisted after four sprays, the man's hand was guided away from his neck. Hugs and juice rewards were offered each time the man went 20 seconds without exhibiting the behavior. The man's self-choking dropped 17-fold when the procedure was instituted, and the treatment's effectiveness generalized to other settings. At follow-up eight months later, the behavior had stopped altogether. (The man began taking the drug Cogentin several months after the treatment program, which may have enhanced the treatment's effects.)

The researchers say they chose a mildly aversive procedure because of "the relative absence of interventions with respect to self-choking, the chronic nature and strength of the response in the present case, the fact that the response was producing syncope [fainting], the fact that response prevention usually led to aggression against staff . . . and the general difficulty of decreasing self-stimulatory behavior when the reinforcer [in this case, the physical experience of choking] cannot be separated from the client." No negative effects of the treatment were seen.

"The use of contingent water misting in the treatment of self-choking," Hermann A. Peine, Lianjun Liu, Harold Blakelock, William R. Jenson, and J. Grayson Osborne; *Journal of Behavioral Therapy and Experimental Psychiatry*, Vol. 22, No. 3, pp. 225-231, 1991. Address: Hermann A. Peine, 895 North 900 East, American Fork, UT 84003.

## Early education vital

When ARRI first reported UCLA researcher Ivar Lovaas's claim that 47% of his young autistic students became nearly normal following extensive behavior modification (ARRI 1/1), many professionals were skeptical about Lovaas's results. In a 1992 letter to our Institute, however, Lynn E. McClannahan and Patricia J. Krantz of the Princeton Child Development Institute (PCDI) state that "[Lovaas] has been the target of a good deal of criticism about his reports on treatment outcome, but our data do not suggest that such criticism is just . . . we continue to achieve outcomes that are comparable [to his]."

The Princeton program was featured in a recent *Wall Street Journal* article, in which Krantz noted that the center's autistic students—who begin the program before age five—are mainstreamed into conventional schools at a rate of 60%, compared with 15% for children enrolling in autism programs at a later age. The institute's program, like Lovaas's, focuses on early intervention, traditional behavior management techniques, intensive language training, and involvement of parents as training partners.

McClannahan, Krantz and colleagues first reported on their success with early intervention in a 1985 article in *Analysis and Intervention in Developmental Disabilities*, in which they compared autistic students entering the Princeton program before and after the age of five. Of nine children beginning at the Princeton Center before age five, four were later able to attend regular public school classes; two others attended special education classes, but were mainstreamed at least part of the day. Of the nine children beginning the Princeton program after age five, only one child was later able to attend a regular school program.

McClannahan and Krantz have followed their original "graduates"—some of whom are now attending college—and say that "follow-up data supplied by their parents [show] strong academic work and good family participation; skill deficits are still somewhat apparent in the social interaction arena. But we know other people, never diagnosed autistic, who also have social skill deficits."

The researchers say they, like Lovaas, have encountered skepticism because they report a higher success rate than other programs, "but we seldom see intervention programs that are as committed to a scientist-practitioner model or as comprehensive as PCDI's."

"Cracking the shell: an intensive therapy for autistic children yields gains and hope," Brent Bowers, *Wall Street Journal*, May 20, 1992.

—and—

"Age at intervention and treatment outcome for autistic children in a comprehensive intervention program," Edward C. Fenske, Stanley Zelenki, Patricia J. Krantz, and Lynn E. McClannahan; *Analysis and Intervention in Developmental Disabilities*, Vol. 5, 1985, pp. 49-58.