

# Educational Update:

## Teaching "child's play"

One symptom almost universal among autistic children is a lack of symbolic play (for instance, pretending a cloth doll is a baby, or drinking from an invisible teacup). But a new study suggests that autistic children with adequate language abilities can readily learn symbolic play skills.

Aubyn Stahmer used a technique called "pivotal response training" to teach symbolic play skills to seven autistic children. The training involved:

- presenting toys the child preferred;
- varying toys frequently;
- modeling the desired play behaviors, and repeating the modeling if the child did not respond;
- reinforcing even approximations of desired toy play, and gradually expecting more complex play;
- reinforcing correct responses with praise and desired toys;
- interspersing the symbolic play activities with simpler activities already mastered by the child; and,
- turn-taking between the child and the experimenter.

Stahmer reports that "all seven of the children with autism who participated in the symbolic play training showed an increase in symbolic play and play complexity after training," and that their skills after training were comparable to those of non-disabled language-matched control subjects. Furthermore, most of the autistic children were able to generalize their symbolic play skills to new toys, settings, and playmates, and all were still using their new skills at follow-up three months later.

"These results imply that other children with autism who have expressive language abilities of about 2.5 years or more may benefit from this training," Stahmer says. "For children who do not have that language capacity this intervention may not be developmentally appropriate."

"Teaching symbolic play skills to children with autism using Pivotal Response Training," Aubyn Stahmer, *Journal of Autism and Developmental Disorders*, Vol. 25, No. 2, 1995, pp. 123-141. Address: Aubyn Stahmer, Psychology Department, State University of New York at Cortland, P.O. Box 2000, Cortland, NY 13045.

## Intervention: it doesn't need to be early

Remarkable results are being reported by early intervention programs which use intensive behavior modification techniques to teach autistic children under the age of five. But John McEachin and Ronald Leaf, who are using the techniques developed at UCLA's early intervention program, say that intensive treatment can be highly effective with older autistic individuals as well.

"We do not expect that the same proportion of older children would be able to attain

normal functioning," McEachin and Leaf say, but they say that "the degree of improvement should still be considerable." In particular, they say, individuals with mild autism can be helped to deal with frustration, low self esteem, social problems, and depression. But even lower-functioning children, they stress, can benefit from intensive behavioral therapy.

In working with older children, the researchers say, they frequently combine a school program with a home-based program. In addition, they focus on problems specific to older children. "Older children often present a higher frequency and intensity of disruptive behaviors, which are more difficult to manage," they say. "Therefore, we have found it essential to train parents in application of behavior management techniques outside of intensive individualized intervention. Whereas the bulk of treatment of younger children occurs in one-on-one structured therapy, treatment of older children necessitates parents providing intervention throughout the child's day."

McEachin and Leaf stress that in working with older autistic children, it is important to "help parents fit therapy into their life, not their life into therapy." While therapy should not be compromised, they say, it should not be so complex and time-consuming that it adds to the family's burdens.

"Adapting the intensive behavioral model to older children and adolescents," John McEachin and Ronald Leaf, presentation to the 1995 annual meeting of the Autism Society of America, Greensboro, NC, July 12-15, 1995. Address: John McEachin or Ronald Leaf, The Autism Partnership, 3346 Olive Ave., Signal Hill, CA 90807.

## Recently published....

**TURNING LEAD INTO GOLD**, Nancy Hallaway, R.N., and Z. Strauts, M.D., 1995. \$20 (U.S.); available from Metal Detox Medical Services, Inc., P.O. Box 16096, 3017 Mountain Hwy., North Vancouver, B.C., V7J 2R0, Canada, 604-986-3871 (fax 604-986-5802)

Nancy Hallaway, the mother of "autistic" twin boys who became virtually normal after receiving treatment for lead toxicity, has written this book about her children's recovery—and about the perils of lead poisoning. Hallaway, a nurse, collaborated on the book with Zigurt Strauts, M.D., the doctor who successfully treated her children. Hallaway and Strauts include extensive information on the symptoms of lead poisoning, which can include language delay, learning disabilities, poor attention span, poor concentration, impulsivity, hyperactivity, insomnia, mood swings, behavioral problems, poor coordination, hearing loss, and mental retardation.

## Picture system aids non-verbal children

Educators in New Jersey have developed a "Picture-Exchange Communication System" (PECS®) for autistic children with little or no oral speech.

Andrew Bondy and Lori Frost say trainers begin by determining what foods, toys, books, and other items or activities a child wants. Line drawings or photos are made of the objects or activities. Then the trainers follow these steps:

1. One desired object is selected for initial training sessions. When the child reaches for the object, one trainer physically helps the child to pick up the picture of the object and put it into the hand of the other trainer (who is holding the object). Immediately, the second trainer says, "Oh, you want [the object]" and gives it to the child.

"The child is *not* asked what he or she wants," Bondy and Frost say. "The child is *not* told to pick up the picture. The trainer says *nothing* until the child has put the picture into an open hand."

Gradually, as the child becomes better at picking up the card and giving it to the trainer, physical prompting is dropped.

2. Once the first card is mastered, the trainer holding the object begins moving farther away from the child. In addition, several trainers are used. Eventually more pictures are added, although only one is presented to the child at a time. Finally, the child is given several pictures at once.

The result of the training, the educators say, is that "when the child wants something, he or she will go to the picture board, pull off a picture, find an adult, go to the adult, put a picture into the adult's hand and wait to receive what was requested. The child calmly goes to an adult to get something instead of trying to obtain the object while ignoring other people."

Bondy and Frost say all of their students have mastered this part of the training program. Many are also able to learn to create simple sentences (such as "I want...puzzle"), using several picture cards. In addition, some students learn to make comments (for instance, "I see... the ball") using cards.

"One important positive side effect of this system," the educators say, "has been the large number of children who have developed speech following a year or two of starting on the program. In our experience, children who use 30 to 100 pictures often start to speak while handing over the pictures." They note that of 66 previously non-verbal preschool students using the system for more than a year, 44 learned to speak independently and 14 others developed some speech.

"The Picture Exchange Communication System," Andrew S. Bondy and Lori Frost; presentation to the annual meeting of the Autism Society of America, Greensboro, NC, July 12-15, 1995. For information on the PECS® system, call or fax (609) 489-1644.