

Biomedical/Education Update:

Study recommends: listen to parents!

Early educational intervention for autistic children can lead to dramatic improvement—and the earlier such intervention begins, the better the results are likely to be. But autistic children often are not enrolled in educational programs until well after the optimal age of two or three, because of delays in diagnosing autistic toddlers. A new article suggests that such delays could often be avoided if family physicians simply listen more closely to parents.

Frances Page Glascoe studied 408 children between the ages of 21 and 84 months, asking parents about their children's motor, language, and cognitive skills, medical problems, and (for parents of preschoolers) their academic achievement. Her conclusion: that parents who suspect developmental problems generally are correct, and that physicians should question parents carefully about potential concerns, and take such concerns seriously. Among Glascoe's findings:

—Parents were accurately concerned about 44 of 56 children (nearly 80%) who turned out to require special education services for mental retardation, autism, language and speech impairments, learning disabilities, and/or physical impairments.

—Of 352 parents of children who were developing normally, the parents of 255 children (72%) correctly reported no concerns. And while the remaining parents incorrectly suspected that their children may have major developmental problems, Glascoe found that these children tended to score lower on measures of language, motor, and socialization skills than the non-disabled children whose parents voiced no concerns.

"This suggests that parents with concerns, but whose children appear to be developing normally, are not simply anxious or ill-informed about development," Glascoe says. "Rather, these parents appear to be noticing subtle developmental and behavioral problems."

Glascoe notes that "parents with limited education or income were as able as more educated or wealthy parents to raise concerns that were predictive of developmental status," and that "parents' concerns were accurate regardless of parenting experience." She concludes that "If systematically elicited, parents' concerns approach standards for screening tests and can be used to make reasonably accurate referral decisions."

Physician Barbara Yawn commented in the *Medical Tribune* that the study "confirms what probably most of us have suspected all

along, and that is that parents are really quite good observers of their children."

"Parents' concerns about children's development: prescreening technique or screening test?," Frances Page Glascoe, *Pediatrics*, Vol. 99, No. 4, April 1997, pp. 522-528. Address not listed.

"Parents accurately gauge child development," Jody A. Chamow, *Medical Tribune*, May 1, 1997, p. 1.

Self-monitoring reduces stereotypes

Teaching autistic or retarded individuals to monitor their own actions is a powerful technique for reducing inappropriate behaviors and increasing those which are desirable (see *ARRI* 10/2, 10/1, 6/4). A new study by UK researchers Sharon Pope and Robert Jones indicates that even a "minimalist" approach to self-monitoring can reduce behaviors such as face slapping, head waving, and echolalia.

Pope and Jones worked with five retarded adult men and women who were capable of answering simple questions and following simple commands. Subjects participated in six 15-minute sessions in which they were trained to monitor target behaviors and record the frequency with which they occurred. The researchers used modeling and role play to demonstrate the inappropriate behaviors targeted for reduction. In each case, three stereotypic behaviors—one of which was the targeted behavior—were modeled or role-played by the researchers. Participants were asked to identify their target behavior when it was demonstrated, and then were asked to act out the target behavior as well as several others.

Participants were then trained to record each occurrence of their target behaviors on an index card during the intervals between training sessions. The researchers note that "no evaluations about the desirability of the target behavior were made." In addition, no reinforcements were used.

At the end of the six sessions, participants were told they no longer needed to record occurrences of their behavior. Researchers monitored the participants' behaviors during this second baseline period, and at a follow-up session seven weeks later.

Pope and Jones report that "significant reductions in target behaviors for all participants were observed" during the intervention. Target behaviors increased during the second baseline (although not to initial levels) when participants were told to stop monitoring their behaviors.

Their data, the researchers say, show

"the potential for participants to use self-regulatory skills [to reduce stereotyped behaviors] with only minimal levels of external intervention." The researchers also note that when target behaviors were reduced, behaviors similar in function increased somewhat (for instance, one participant's targeted body rocking decreased while her leg kicking increased), but behaviors that were functionally dissimilar did not.

"The therapeutic effect of reactive self-monitoring on the reduction of inappropriate social and stereotypic behaviours," Sharon T. Pope and Robert S. P. Jones, *British Journal of Clinical Psychology*, 35, 1996, pp. 585-594. Address: Sharon Pope, Serv. to People with Learning Disabilities, Chevret Hey, Prices's Lane, Wrexham, Clwyd, Wales.

More on exercise for behavior problems

Supporting previous research, a new study indicates that exercise can significantly reduce self-stimulating behaviors such as hand-flapping, rocking, and self-biting.

Andrea Rosenthal-Malek and Stella Mitchell tallied the number of self-stimulating behaviors shown by five autistic adolescent boys in a classroom setting and a work setting, following either a) a 20-minute jogging session, or b) an academic session. The researchers found that:

—self-stimulating behaviors decreased significantly following the exercise sessions, compared to the academic sessions.

—the boys gave more correct answers in the classroom setting following jogging sessions than following the academic sessions.

—the boys completed significantly more tasks at their job site following jogging sessions than they did after academic sessions.

"Another benefit of aerobic exercise, besides the obvious health benefits," the researchers say, "is that unlike the use of behavior management techniques that are implemented during the training sessions, the exercise intervention takes place before the training sessions. Thus, exercise has the advantage of not interrupting the classroom teaching."

Although other researchers have reported that only very strenuous exercise decreases behavior problems, this study used only moderately vigorous exercise.

"Brief report: the effects of exercise on the self-stimulatory behaviors and positive responding of adolescents with autism," Andrea Rosenthal-Malek and Stella Mitchell, *Journal of Autism and Developmental Disorders*, Vol. 27, No. 2, 1997, pp. 193-202. Address: Andrea Rosenthal-Malek, Monmouth University, Education Department, West Long Branch, New Jersey 07764-1898.