

## Positive techniques handle nearly 60% of severe behaviors

"The good news is that positive procedures do work," according to Lori Goetz in a review appearing in the May 1990 newsletter of the Association for Persons with Severe Handicaps (TASH). Nearly 60% of developmentally disabled trainees showed at least 90% suppression of targeted inappropriate behaviors, according to Goetz, whose article was based on a new TASH-published monograph reviewing the professional literature on the effectiveness of positive (nonaversive) methods of suppressing "challenging" (presumably severely self-injurious or assaultive) behaviors.

The monograph, by Edward G. Carr and associates, reviewed nearly 100 research articles as well as related books and other literature. "Successful treatment," defined as 90% or greater improvement in at least one of the targeted behaviors, was found in 53 of the 96 studies evaluated (55%).

Copies of the monograph are available for \$15.00 (U.S. dollars only; includes postage and handling) from TASH, 7010 Roosevelt Way NE, Seattle, WA 98115.

**Editor's note:** *ARRI is pleased, but not at all surprised, that "positive procedures do work." Our institute has been advocating positive procedures for 25 years. However, what does a parent do if his or her child is one of the 40% who do not respond to positive methods, or whose 10% residual problem behavior is life-threatening? Of the three options, drugging, 24-hour restraints, or the use of unpleasant but non-harmful aversives, we believe aversives are the most humane. See adjacent article.*

## Tests indicate device quickly reduces severe head-banging

Thomas Linscheid et al. have completed tests of the SIBIS (Self-Injurious Behavior Inhibiting System) on five individuals with violent, constant, and previously unmanageable head-banging episodes. (Two of these subjects previously participated in a preliminary study; see ARRI 1/3.)

SIBIS is a device that automatically administers a .08-second mildly unpleasant shock to an area on the arm or leg when the wearer engages in head-banging.

Linscheid and his colleagues say that "the clients who participated in this study were considered appropriate for inclusion only because their self-injurious behavior was severe and had not been successfully treated after many years of intervention."

Participants hit themselves hundreds or thousands of times per day and had suffered neurological damage, cataracts, detached retinas, bruises and chronic open wounds because of their self-injury. One woman was placed in the study to prevent her from blinding herself.

The researchers note that study subjects had undergone extensive but unsuccessful treatment procedures including functional analysis, differential reinforcement, relaxation training, Gentle Teaching, redirection, response prevention, sensory extinction, physical restraint, overcorrection, aversive procedures and/or sensory stimulation before entering the SIBIS study.

Linscheid et al. report that:

—The device quickly reduced head-banging to near-zero levels in four of the five cases, and caused a similar reduction in

the fifth case, although not as quickly.

—Four of the study participants required only a few stimulations each, or about two to three seconds total, to nearly stop their head-banging. The fifth received more than 3,000 SIBIS stimulations—approximately four minutes' worth—over the course of the 580-hour treatment. While this level was high, the researchers say, the number of head-bangings prevented by SIBIS (based on extrapolated baseline data) was over one million during a 30-day period.

—Participants appeared more relaxed and happier during SIBIS treatment, and "began to exhibit a number of positive behaviors [such as] increased sociability, responsibility to reinforcement, cooperation during to instruction, and acquisition of new behaviors as their self-injury decreased." In addition, they were able to participate in community activities formerly ruled out because of their self-injury. None of them made a concerted effort to remove the device.

—All of the participants had previously needed restraints and/or drugs to keep them from seriously injuring themselves. These were greatly reduced or eliminated during SIBIS treatment.

—No detrimental effects were seen.

—Follow-up on four of five subjects revealed that "the suppressive effects of SIBIS are enduring." The fifth subject, who was moved to a facility which declined to use SIBIS, has resumed her severe self-injury, and again requires restraints.

While the study was not designed to test generalization, the researchers say several participants showed signs of diminished head-banging during periods when the SIBIS was inactivated. It is likely, they say, that SIBIS could be successfully "faded" once self-injury is under control.

Linscheid et al. emphasize that SIBIS "is not intended to be used as the first or the only means of treating self-injurious behavior," and may be appropriate only for a small percentage of individuals who exhibit such behaviors. In addition, they note that the device has some limitations including a small percentage of false-positive and false-negative responses.

They note that SIBIS differs from former shock procedures in that it is designed to produce only a mildly unpleasant, very brief, safe stimulation to a limited area.

**Editor's Note:** *To me, SIBIS is annoying rather than painful. Having tried it, I would gladly accept 50 SIBIS shocks rather than stand in a grocery line for five minutes.*

"Clinical evaluation of the Self-Injurious Behavior Inhibiting System (SIBIS)," Thomas Linscheid, Brian Iwata, Robert Ricketts, Don Williams, and James Grif-fin; *Journal of Applied Behavior Analysis*, Spring 1990, 23, Vol. 1, pp. 53-78. Address: Thomas Linscheid, Ohio State University, Dept. of Pediatrics, Children's Hospital, 700 Children's Dr., Columbus, OH 43205.

### Families needed for genetic study of autism

Families (mother/father and two or more children) in which there is a case of autism and autistic sibling(s), or one case of autism and a second case of either mental handicap or abnormal social or language development, are sought for a research project which is being assisted by the International Autistic Research Organization in England. Participation by overseas families is welcome. For information contact Mrs. Gerda McCarthy, I.A.R.O., 49 Orchard Avenue, Shirley, Croydon TN6 7NE, England.

### Computers and autism

Computer scientist/parent is compiling guidebook on software, hardware, literature, and other resources related to teaching autistic persons by computer. Authorship will be credited, and the guidebook will be made available to all who provide input. Contact Frank Whitty, 13992 Putney Road, Poway, CA 92069, (619) 679-2817.

### Research help needed!

1) The soy-based baby formula Neo Mull Soy was produced without sufficient chloride, an essential nutrient, from 1972 to 1978. It is possible that chloride deficiency may have produced chronic autism-like behaviors in some children. ICBR is seeking contact with parents of autistic-like children given Neo Mull Soy between 1972 and 1978, for possible participation in a simple, safe, no-cost research study. Please write to ARRI, 4182 Adams Avenue, San Diego, CA 92116, if interested.

2) In ARRI 3/4 (1989), we included an inserted questionnaire, form 34Q, to be completed by parents as part of a research project on parent evaluations of various therapies, especially drugs. We particularly desire completed forms for autistic children or adults on whom a number of drugs have been tried. If you have not had an opportunity to send your completed form, we hope you can do so; please let us know if you would like a new copy of the form and we will send one. Thanks for your help!

3) Dr. Dominick Maino of the Illinois Eye Institute is conducting research into eye disorders associated with Fragile X syndrome. Professionals who have conducted eye examinations on individuals with Fragile X can assist in his efforts by sending copies of their findings to Dr. Dominick Maino, Associate Professor, Illinois Eye Institute, 3241 S. Michigan Avenue, Chicago, IL 60616.