

Education update:

Retarded adults learn to pay bills

Mildly retarded adults can be taught to pay bills using a "forward chaining" technique, according to researchers (LaCampagne and Cipani).

In this study, four adults learned to write checks, enter check amounts in check registers, and fill out and mail bills. Each skill was broken into steps, and each step was mastered before the next was taught. (For instance, all four adults learned to record the name of the payee correctly on a check before progressing to writing the date on the check.)

Before this "forward chaining" method was initiated, bank personnel participating in the study rated none of the subjects' bill payments as acceptable. After training, the bank employees rated all of the subjects' payments as acceptable.

"Training adults with mental retardation to pay bills," John LaCampagne and Ennio Cipani; *Mental Retardation*, Vol. 25, No. 5, 1987, pp. 293-303. Address: Ennio Cipani, Associate Professor, Department of Special Education, University of the Pacific, Stockton, CA 95211.

Protective gear reduces self-injury

Protective equipment applied each time self-injurious behavior occurs can greatly reduce such behavior, according to James Luiselli.

Luiselli tested this approach on a 16-year-old developmentally disabled, blind and deaf boy who frequently struck his head, and who had not responded to other behavior modification techniques.

In this study, the boy received food rewards and praise when he did not strike himself. When self-injury occurred, a padded helmet and padded mittens were put on the subject; the protective equipment remained on until 30 seconds passed with no attempts at self-injury.

During treatment the boy's self-injury dropped from about eight incidents an hour to one or two incidents an hour, even though food rewards for good behavior were gradually removed. Follow-ups at two months and six months showed even lower rates of self-injury.

"Modification of self-injurious behavior - an analysis of the use of contingently applied protective equipment," James K. Luiselli; *Behavior Modification*, Vol. 10, No. 2, April 1986, pp. 191-204. Address: James K. Luiselli, Behavioral and Educational Resource Associates, 275 Old Bedford Road, Concord, MA 01742.

Pica treated using DRO

Pica - the eating of nonfood items such as clay or paper - can be reduced by reinforcing incompatible behaviors, according to Marcia Datlow Smith et al.

The researchers worked with a 23-year-old man who frequently ate paper, paper clips, bottle caps, etc. Attempts to control his pica by reprimanding him, removing objects from his mouth, or praising other behaviors had failed.

During the study, Datlow et al. used food, drinks or favorite activities to reward the subject frequently for behaviors incompatible with pica (such as keeping his hands on his work). They also praised him every 10 minutes or so for good behavior.

No reinforcement was delivered within 10 minutes of pica. Trainers prevented pica by taking items before the client could reach them, and returning him to his task without reprimands.

During treatment, the client's pica dropped from more than 21 incidents a day to less than seven incidents. At a follow-up one year later, the client averaged less than one incident a day.

"Treatment of pica in an adult disabled by autism by differential reinforcement of incompatible behavior," M. Datlow Smith, *Journal of Behav. Ther. and Exp. Psychiat.*, Vol. 18, No. 3, pp. 285-288, 1987. Address: Marcia Datlow Smith, Community Serv. for Aut. Adults and Children, 751 Twinbrook Pkwy., Rockville, MD 20851.

"Stimulus overselectivity" studied

While normal children respond both to the content of another person's speech and to the speaker's intonation, a recent study (Schreibman et al.) has found that autistic children tend to respond only to one or the other.

The researchers found that echolalic autistic children seem to focus on intonation, while non-verbal children are more likely to respond to content. This overselectivity may contribute to monotonic speech, noncomprehension, and other communication problems common in autism.

"Differential responding to content and intonation components of a complex auditory stimulus by nonverbal and echolalic autistic children," L. Schreibman, B. Kohlenberg, and K. Britten; *Analysis and Intervention in Dev. Dis.*, Vol. 6, 1986. Address: Laura Schreibman, Dept. of Psychology, C-009, University of California, La Jolla, CA 92093.

Autistic individuals learn to work without supervision

Autistic people can be trained to do school work or job tasks for long periods of time without supervision, according to a study by Glen Dunlap et al.

The researchers worked with two six-year-old children in a private school and one 17-year-old boy in a community workshop. They used a four-step training program:

1. Trainers began by prompting and reinforcing high rates of on-task behavior and immediately reprimanding off-task behavior. One trainer worked with each autistic person.

2. The trainers then began "thinning" the subjects' reinforcers by requiring longer periods of appropriate behavior before offering reinforcement. At first, reinforcements were delayed gradually; later, the required "on-task" time was increased more rapidly.

3. When the subjects were able to work for at least one minute between reinforcers, the staff started delaying reprimands for inappropriate behavior. This also was done very gradually.

4. When a subject was able to stay on task for up to five minutes, the trainer began moving away from the subject until they were at opposite ends of the room. The trainer then left the room, and observed the subject through a window or monitored his behavior with a walkie-talkie. The trainer returned to the room at gradually increasing intervals to reward or reprimand the subject.

By the end of the study, the two children were able to work well without supervision for 30-minute sessions. The 17-year-old boy was able to perform well for up to eight hours at a time with no supervision; his parents delivered a reinforcement or reprimand at the end of each day, based on his supervisor's report.

"Maintaining performance of autistic clients in community settings with delayed contingencies," Glen Dunlap, Robert L. Koegel, Jean Johnson and Robert E. O'Neill; *Journal of Applied Behavior Analysis*, Vol. 20, No. 2, 1987, pp. 185-191. Address: Glen Dunlap, Autism Training Center, Marshall University, Huntington, West Virginia 25701.