

TEACHING SELF-PROTECTION TO YOUNG CHILDREN

CHERYL POCHE, RICHARD BROUWER, AND MICHAEL SWEARINGEN

WESTERN MICHIGAN UNIVERSITY

Self-protective behaviors were taught to three preschool children in order to prevent the opportunity for abduction. An analogue measure of self-protection was developed in which confederate adults approached and verbally attempted to lure each child from the setting, before, during, and after training. A multiple baseline design across subjects was used. During baseline, all the children displayed susceptibility to the lures. Training procedures included modeling, behavior rehearsal, and social reinforcement. Within 1 week after training began, all children displayed appropriate responses to all of the lures both in the training setting and in the community.

DESCRIPTORS: Self-protection, child molesting, community psychology, safety, prevention, preschool children, analogue assessment

The purpose of this study was to develop and evaluate a program to teach preschool children appropriate responses in the event of a potentially dangerous interpersonal situation. Self-protection was defined as reacting in a safe manner when approached by a potential kidnapper or child molester.

Over 25,000 children are molested each year in the U.S., and this number is growing (Law, 1979). For some of these children, the family condones the molesting, and the molester is a relative or friend of the family. For the remainder, the family does not condone the molesting, and the molester is a stranger or relative stranger. For example, the molester may have been seen by the child in the neighborhood or vicinity of the school before the approach was made. It is this second kind of molesting that this study was designed to prevent.

Studies of the characteristics of child molesters revealed that only 10% to 17% of child molesters used physical force to abduct their victims (Groth, 1980; Law, 1979). The major-

ity attempted to develop an association with the child or entice the child away from safety. These studies support the contention that most child abductions can be prevented if children are taught to resist the inducements and to react quickly.

Interviews with child molesters disclosed the startling fact that molesting occurred whenever the opportunity presented itself (Forgione, 1976). Thus, any unsupervised child might be considered a susceptible target for a molester.

Preventive approaches in behavior therapy are scarce (Wilson & O'Leary, 1980). In the area of sexual deviance, preventive studies are limited to attempts to hinder the development of gender identity problems (Rekers, 1977; Rekers & Lovaas, 1974). There are few preventive studies dealing with child molesting (Ballard, Gipson, Lawson, & Telch, Note 1).

Research on molesting has focused on the personality characteristics of molesters rather than on the development of methods to decrease the opportunity for molesting (e.g., Groth & Bernbaum, 1978; Newton, 1978; Pantton, 1978). Aversion therapy, family counseling (Forgione, 1976; Groth, 1980), and contingent confinement (Wong, Gaydos, & Fuqua, 1980) have been used with some success to treat the molester after the fact. Such procedures, how-

The authors express their appreciation to Steve Stang for his assistance and suggestions on the project. Administrative support from the staff of the Child Development Center is also gratefully acknowledged. Reprints may be obtained from Cheryl Poche, Department of Psychology, Western Michigan University, Kalamazoo, Michigan 49008.

ever, are of little value to past victims of the molesters.

Preventive approaches to dealing with the problem have centered around educating the public to the dangers of advances made by strangers. Operation Lure (Tobias & Gordon, Note 2) is a program aimed at alerting and educating parents and school children of the dangers. Films (Arnold, 1978; B.F.A., 1977; Davis, 1972, 1975, 1977) and lectures by local and state law enforcement officials have also been used. The lectures, films, and other materials are, however, directed at grade school children rather than preschoolers. They often require complex reasoning skills on the part of the child, and they sometimes prescribe a rather detailed method of dealing with suspects that is more suitable to older children. In addition, there are presently no data on the effectiveness of these programs in actually enabling children to resist the lures of strangers in real life situations.

Preschool children were selected for this study because they are considered highly susceptible targets for kidnappers and molesters. Children ages 3 to 5 are entering a period of reduced supervision by parents and caretakers. Both parents of many children this age work and thus are away from home for extended periods of time. Also, there are presently no programs to assist preschoolers in dealing with potential abductors.

In recent years, experimenters have used several techniques to teach social skills to children. O'Connor (1972) showed that a modeling film, with or without social reinforcement in the classroom, produced greater gains in peer interaction of preschoolers than did social reinforcement alone. Braukmann, Maloney, Fixsen, Phillips, and Wolf (1974) showed that a combination of instructions, rationale, demonstration, behavior practice, and feedback during training, along with money for correct performance during posttraining, was effective in improving adolescents' interview behaviors during posttraining. Minkin, Braukmann, Minkin, Timbers, Timbers, Fixsen, Phillips, and Wolf (1976)

showed the same package to be effective in training conversational skills in university and junior high students. Bornstein, Bellack, and Hersen (1977) used modeling, reinforcement, and corrective feedback following a role-playing situation to teach assertive behaviors to children ages 8 to 12. Assertive behavior was measured in a lab situation in which adults played the role of children.

Several questions regarding social skills training for preschoolers are raised by these studies. First, in all these studies, no attempts were made to program or to test for the target responses in situations in which no treatment variables (e.g., social reinforcement, money, adults role-playing children in a lab) were present. One important question is which procedures are necessary to produce social skills in realistic situations in which neither motivational nor artificial conditions are present. A second question is whether or not it is necessary to provide a rationale for responding, particularly when subjects may be too young to understand the rationale and when the explanation would be a delicate one. A final question is whether children as young as 3 yrs old can be taught to deal safely with the complex interpersonal situation posed by a potential abductor. The present study attempted to answer these questions.

In order to increase the probability that correct responses made in the training setting would occur in the natural environment, two techniques recommended by Stokes and Baer (1977) were used in this study. The first technique is to program common stimuli, that is, to make the training situation as much like the real situation as possible. The second is to train sufficient stimulus exemplars. Yeaton and Bailey (1978) demonstrated the effectiveness of training in a lifelike setting on the generality of responding.

In the present study, modeling, behavior rehearsal, and social reinforcement were used to teach self-protection in analogue situations on the school grounds. Three stimulus exemplars were trained. Measurement was conducted on

the school grounds as well as in a community setting to assess the generality of responding.

METHOD

Participants

The participants of this study were one female and two male preschool children, ages 3 to 5, of normal intelligence and social skills. They were selected for this study on the basis of daily availability and their performance in an analogue situation in which a "suspect," role played by an adult confederate, approached and asked the child to leave the preschool. Children who readily agreed to leave with the suspect and thus appeared susceptible to the lure of an actual child molester were included in the study. Of nine children screened in this manner, all but one displayed susceptibility to the lures, and three met the availability criterion. In the current study and pilot studies, approximately 90% of the children screened agreed to go with the confederate.

The written informed consent of the children's parents was obtained to conduct the training and measurement. Parents also received information on their children's performance and progress at the end of the training program.

Setting

Training took place in three locations within 50 feet of the school building. Measurement took place in these three locations as well as in several locations on a sidewalk ranging from 150 to 400 feet from the school and shielded from view by small trees and shrubs.

Characteristics of Suspects

The suspects used for training and measurement were selected to resemble the typical molesters arrested in the local area (Note 1), that is, approximately 80% males, ages 20-35, both black and white. Suspects used one of three lures commonly used by molesters: (a) a simple request for the child to go with the molester; (b) a request to leave with the implication that

an authority figure (e.g., the child's parents or teachers) approved of the child's leaving; and (c) a request to leave with the promise of an incentive. Specifically, suspects used the following script to present the lures:

Simple lure. The suspect approached the child, said, "Hello," or "Hi, there," and engaged in small talk, for example, "Nice day, isn't it?" After the small talk, the suspect said, "How would you like to go with me and take a walk?" or "Would you like to go for a walk?"

Authority lure. After small talk, suspect said, "Would you like to go with me for a walk? Your teacher said that it was all right for you to come with me."

Incentive lure. After small talk, the suspect said, "I've got a nice surprise in my car. Would you like to come with me and see it?" The suspect did not specify the surprise.

Definitions of Target Behaviors

Interviews with several parents of preschoolers indicated they preferred that their child make a very brief verbal statement, so as not to offend the good intentions of a benevolent person, but not so long and detailed as to permit an actual molester to abduct the child. They also preferred that their children then quickly move from the vicinity of the suspect.

Based on these interviews, two target dimensions were delineated, one involving the child's verbal statements and the other involving the child's movements. Below are the possible responses a child could make to a suspect. The numbers in parentheses indicate the safety rating given each response, with the most appropriate combination of responses given a rating of 6 and the least appropriate given a rating of 0. More detailed definitions of terms follow:

Goes away from suspect. The child moves toward the school building for a minimum distance of 20 feet within 3 sec following either a verbal response or the lure. (Scored 4 if no vocalization occurred, 5 if inappropriate vocalization, or 6 if appropriate vocalization.)

Stays near suspect. The child does not move away from the suspect or moves less than 20 feet away or takes longer than 3 sec to move. (Scored 1 if no vocalization, 2 if inappropriate vocalization, and 3 if appropriate vocalization.)

Goes with suspect. The child moves any distance with the suspect away from the school building. (Scored 0, regardless of verbal response.)

No vocalization. The child says nothing.

Appropriate vocalization. The child says "No, I have to go ask my teacher."

Inappropriate vocalization. The child says she or he will go with the suspect, or carries on small talk with the suspect, or makes any other verbal response than the ones defined as appropriate.

The criterion response dimensions were those in which the child said, "No, I have to ask my teacher" and then ran toward the school building within 3 sec.

The present study proceeded on the conviction that a child need not understand the implications of the situation in terms of a possible abduction or physical harm. Therefore, no attempt was made to explain the possible consequences. Rather, the children were taught simply to respond appropriately to any request to leave the preschool made by a person other than their parents or teachers.

Observation Procedures

At the beginning of every session, the child's teachers brought the child outdoors to a designated location and then pretended to have to return to the building for some reason. The teacher then hid from view near the location or inside the building and observed the child's motor responses. An adult played the role of a suspect and approached the child, using one of the three lures described earlier. A method was devised for preventing the child from actually leaving with the suspect. As soon as the child responded, whether correctly or incorrectly, the teacher quickly returned to the child, pretending

to have accomplished the fictitious mission. The suspect quietly moved away, ending the session. The suspect served as the primary observer, scoring the child's verbal responses as either appropriate, inappropriate, or no vocalization and motor responses as either goes with, stays near, or goes away from suspect.

Reliability Procedures

The teacher served as a reliability observer for the child's motor response, observing the movement and scoring the response in the same manner as the suspect. The suspect wore a tape recorder concealed on the body to record the child's verbal behavior, and the tape was scored by the teacher and compared with the observations made by the suspect.

An agreement was defined as both observers scoring the child's verbal and motor responses identically for one session. Percentage agreement was computed on 80% of the sessions. Agreement was 100% for all sessions.

Experimental Conditions

Baseline. In this condition, observations were made of the child's responses to the approach of a suspect in three outdoor locations within 50 feet of the school building and in the community setting. All three types of lures were used in the locations near the school and in the community to test susceptibility to particular lures or locations. In order to prevent an association between going outdoors with the approach of a suspect, the children were taken outdoors for several days during which no suspect appeared. No instructions nor consequences accompanied the child's responses. The session was interrupted in the natural manner described earlier as soon as the child responded.

Training. As soon as the child had responded to the test lure, training commenced. Training consisted of modeling, behavior rehearsal, and social reinforcement. Two adult trainers joined the child and acted out a scene in which one trainer, the "suspect," approached the other

trainer, the "child," and used one of the three lures described earlier. The trainer playing the role of the child then modeled the desired verbal and motor target behaviors. Next, the child was asked to rehearse the same scene with the "suspect" and to respond in the same way as the model. Finally, the child's responses were followed by positive social reinforcement if they were correct. Social reinforcement was occasionally paired with material and activity reinforcers (e.g., stickers, playing on the swings). If the child's responses were only partly correct or incorrect, the trainer used instructions and additional modeling and rehearsal until the child performed the responses correctly once. Responses were trained to only one lure per day. Training for each lure ended when the responses were assessed and correctly performed the next day.

When responses to the first lure were mastered, responses to the second and third lures were tested, and, if incorrect, were modeled and rehearsed, in order to train a number of exemplars. The exact location of each session on the school grounds was also varied by approximately 75 feet for the same reason. Sessions lasted approximately 15 min. Training ended when the child correctly responded at least once to each of the three lures over three days.

Generality. After training was completed, observations were made in the community setting to determine if the correct responses made during training would be performed in a novel and more naturalistic situation. Measurement trials in the community setting were set up in the same manner as those near the school. That is, the teacher brought the child out on the sidewalk, as though going for a walk, and then left the child to return to the building for some fictitious mission. Each of the three lures was tested on a separate day.

Follow-up. Approximately 12 weeks after training, one observation per child was made again in the community setting in order to ascertain the durability of correct responding.

Experimental Design

A multiple baseline design across subjects was used (Baer, Wolf, & Risley, 1968).

RESULTS

Figure 1 shows the children's responses to probes made during baseline, training, and generality conditions. Data in the training condition were collected prior to training for that day. During baseline, all the children displayed responses with a safety rating of 0 or 1. Inappropriate responses were made to all three types of lures both on the school grounds and in the community.

During training, all the children acquired the appropriate verbal and motor responses, those with a safety rating of 6, to all three types of lures. Correct responses to the first lure were mastered in one to three training sessions. Responses to the second and third lures were acquired in one to two sessions. Thus, training was completed in five to six sessions, or approximately 90 min per child.

Although Stan gave an incorrect response to an authority lure on the sixth day of training, generality probes were begun the next day for two reasons. First, the child's family had announced plans to go on vacation soon, and we felt it was desirable to collect generality data before the child left. Second, training with the authority lure occurred after the probe that day, and the child performed the correct responses by the end of the session.

In the generality probes conducted in the community, all the children responded correctly to all three types of lures.

Follow-up data were collected on the two children who remained at the preschool. Stan correctly performed the terminal verbal and motor responses 12 weeks after training was over. Patty correctly performed the terminal verbal responses but stayed in the vicinity of the suspect.

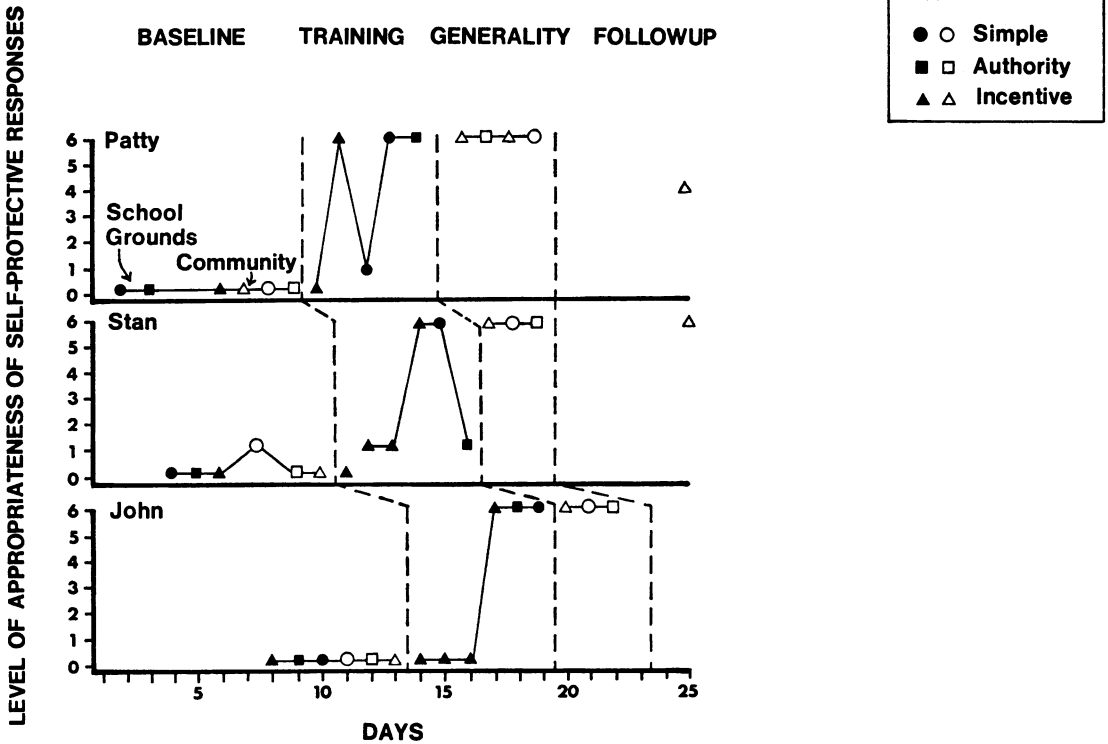


Fig. 1. The level of appropriateness of self-protective responses during baseline, training, and generality probes in both school and community settings. Closed symbols present data gathered near the school; open ones, in a location away from the school.

DISCUSSION

The children in this study displayed susceptibility to the lures of suspects before training. After training, the children displayed a substantial improvement in self-protective skills, from a pretraining safety rating near 0 to a post-training one of 6. Further, the children's self-protective responses generalized to novel suspects and locations. This improvement was fully maintained at least 3 months following training for one of the two children tested at that time. To increase the maintenance of safe responding, a "booster" training session might be conducted 2 or 3 months after formal training ends.

The children did not respond differentially to the three different lures before or after training. We had hypothesized that the simple lure would be easier to resist than the authority or

incentive lures, but this did not appear to be the case.

It was not necessary to provide a rationale for responding in order to obtain good results. The children appeared sufficiently motivated to perform the responses without a detailed explanation of the potential danger of leaving with an abductor.

The package of techniques in this study was designed to be easily administered and could become a regular part of preschool and elementary classroom routines. Future studies might attempt to analyze the contributions of the components of this effective program.

REFERENCE NOTES

- Ballard, B., Gipson, M., Lawson, G., and Telch, M. *Teaching State hospital residents appropriate responses to strangers*. Paper presented at the meet-

ing of the Association for the Advancement of Behavior Therapy, San Francisco, 1979.

2. Tobias, J. L., & Gordon, T. *Operation lure*. Detroit, Michigan: Oakland County Task Force, 1977.

REFERENCES

- Arnold, B. (Producer). *Don't go with strangers*. Livonia, Michigan: The Kroger Company, 1978. (Film)
- Baer, D. M., Wolfe, M. M., & Risley, T. R. Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 1968, 1, 91-97.
- B. F. A. (Producer). *Meeting strangers: Red light/green light*. Santa Monica, California: CBS Educational and Professional Publishing, 1977. (Film)
- Bornstein, M. R., Bellack, A. S., & Hersen, M. Social-skills training for unassertive children: A multiple-baseline analysis. *Journal of Applied Behavior Analysis*, 1977, 10, 183-195.
- Braukmann, C. J., Maloney, D. M., Fixsen, D. L., Phillips, E. L., & Wolf, M. M. An analysis of a selection interview training package for pre-delinquents at Achievement Place. *Criminal Justice and Behavior*, 1974, 1, 30-42.
- Davis, S. (Producer). *The dangerous stranger*. Los Angeles, California: Sid Davis Productions, 1972. (Film)
- Davis, S. (Producer). *Trouble with Strangers*. Los Angeles, California: Sid Davis Productions, 1975. (Film)
- Davis, S. (Producer). *Strangers we meet*. Los Angeles, California: Sid Davis Productions, 1977. (Film)
- Forgione, A. G. Use of mannequins in behavioral assessment of child molesters. *Behavior Therapy*, 1976, 7, 678-685.
- Groth, A. N. *Men who rape: The psychology of the offender*. New York: Plenum, 1980.
- Groth, A. N., & Bernbaum, M. S. Adult sexual orientation and attraction to underage persons. *Archives of Sexual Behavior*, 1978, 7, 175-181.
- Law, S. K. Child molestation: A comparison of Hong-Kong and Western findings. *Medicine, Science, and the Law*, 1979, 19, 55-60.
- Minkin, N., Braukmann, C. J., Minkin, B. L., Timbers, G. D., Timbers, B. J., Fixsen, D. L., Phillips, E. L., & Wolf, M. M. The social validation and training of conversation skills. *Journal of Applied Behavior Analysis*, 1976, 9, 127-139.
- Newton, D. E. Homosexual behavior and child molestation: A review of the evidence. *Adolescence*, 1978, 13, 29-43.
- O'Connor, R. D. Relative efficacy of modeling, shaping, and the combined procedures for modification of social withdrawal. *Journal of Abnormal Psychology*, 1972, 79, 327-334.
- Panton, J. H. Personality differences appearing between rapists of adults, rapists of children, and nonviolent sexual molesters of female children. *Research Communications in Psychology, Psychiatry, and Behavior*, 1978, 3, 385-393.
- Rekers, G. A. Atypical gender development and psychosocial adjustment. *Journal of Applied Behavior Analysis*, 1977, 10, 559-571.
- Rekers, G. A., & Lovaas, O. I. Behavioral treatment of deviant sex-role behaviors in a male child. *Journal of Applied Behavior Analysis*, 1974, 7, 173-190.
- Stokes, T. F., & Baer, D. M. An implicit technology of generalization. *Journal of Applied Behavior Analysis*, 1977, 10, 349-367.
- Wilson, G., & O'Leary, K. D. *Principles of behavior therapy*. Englewood Cliffs, N.J.: Prentice-Hall, 1980.
- Wong, S. E., Gaydos, G. R., & Fuqua, R. W. Reducing approaches to children in a mildly retarded pedophile: operant control in the natural environment. *Behavior Modification*, 1980, 0, ?-?.
- Yeaton, W., & Bailey, J. The generalization of pedestrian safety skills from the classroom to the natural environment. *Journal of Applied Behavior Analysis*, 1978, 11, 121-129.

Received February 19, 1980

Final acceptance October 7, 1980