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SOCIAL-SKILLS TRAINING FOR UNASSERTIVE CHILDREN: A MULTIPLE-BASELINE ANALYSIS[1]

MITCHELL R. BORNSTEIN, ALAN S. BELLACK, AND MICHEL HERSEN

UNIVERSITY OF PITTSBURGH

The effects of social-skills training consisting of instructions, feedback, behavior rehearsal, and modelling were examined in a multiple-baseline analysis in four unassertive children. The treatment was effective in that the behaviors selected for modification changed markedly. The effects of treatment generalized from trained to untrained items (interpersonal situations requiring assertive responding) and gains were maintained at the two- and four-week followup probe sessions. In addition, overall assertiveness in all subjects increased from baseline assessment to the conclusion of treatment and into followup.

DESCRIPTORS: verbal skills, social skills, training, multiple baseline, unassertive children

In recent years, increased attention has been accorded to the measurement and modification of social-skill deficits in a variety of populations (see Hersen and Bellack, 1976; Hersen and Bellack, (*in press*); Hersen and Eisler, 1976; Hersen, Eisler, and Miller, 1973, for reviews). Although much of the present experimental work in social-skills training owes its historical roots to the pioneering clinical efforts of Salter (1949), Wolpe (1958, 1969), and Wolpe and Lazarus (1966) on assertion training, a further source of inspiration stems from the extensive studies conducted by Zigler and his colleagues relating psychiatric disorder to social competence (Levine and Zigler, 1973; Phillips and Zigler, 1961, 1964; Zigler and Levine, 1973; Zigler and Phillips, 1960, 1961, 1962). Among the important findings resulting from this interrelated series of studies is the suggestion that a psychiatric patient's posthospital success is directly related to his premorbid level of social competence or skill. Argyle and Kendon (1967) also presented data relating psychiatric disorder to level of social skill. At the clinical level, Gladwin (1967) underscored the importance of teaching social skills to patients in order to improve their resistance to environmental stresses.

Therapies such as assertive training that are aimed at ameliorating clients' and patients' social-skill deficits have been carefully evaluated both in analogue studies (*e.g.*, Hersen, Eisler, Miller, Johnson, and Pinkston, 1973; Kazdin, 1974; McFall and Marston, 1970) and in clinically oriented investigations using group comparison designs (*e.g.*, Percell, Berwick, and Beigel, 1974) and single case experimental strategies (*e.g.*, Hersen, Turner, Edelstein, and Pinkston, 1975). The component techniques comprising assertive training have been examined by McFall and his colleagues with unasser-

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tive college students (McFall and Lillesand, 1971; McFall and Marston, 1970; McFall and Twentyman, 1973) and by Hersen and his colleagues with unassertive psychiatric inpatients (Eisler, Hersen, and Miller, 1973; Hersen *et al.*, 1973). In addition, specific strategies for remediating dating-skill deficiencies in college students have been evaluated (*e.g.*, Christensen and Arkowitz, 1974; Curran, 1975; Curran and Gilbert, 1975; Twentyman and McFall, 1975). In general, these studies indicate that the most active ingredients in social-skills training leading to behavioral change include instructions, coaching, feedback, behavior rehearsal, and modelling.

In addition to the recent interest in the evaluation and training of interpersonal social skills in college students and psychiatric patients, the need for research investigating the development of social skills in children has frequently been articulated. Zigler and Phillips (1961, 1962) presented cogent arguments for conceptualizing psychopathology in a developmental context. In a longitudinal study in which the stability of childhood characteristics was examined, Kagan and Moss (1962) found that "passive withdrawal from stressful situations, dependency on the family, ease of anger arousal, involvement in intellectual mastery, social interaction anxiety, sex-role identification, and pattern of sexual behavior in adulthood were each related to reasonably analogous behavior dispositions during the early school years" (p. 266).

Several other investigators have described populations of children who lack appropriate social skills (*e.g.*, Patterson, 1964; Robinson, Vitale, and Nitsche, 1962; Ross, Lacey, and Parton, 1965). Patterson (1964), using factor analytic techniques, identified withdrawn children who characteristically were cooperative but passive and shy, looked off into space, and spoke and reacted slowly. Robinson *et al.* (1962) identified passive children who generally were reluctant to take initiative in addition to being apprehensive about expressing antagonistic feelings. Ross *et al.* (1965), also using factor analysis, described a population of withdrawn children who were shy, experienced difficulty communicating their anger, did not stand up for their rights, conformed to the wishes of others, and experienced difficulty speaking clearly when frustrated.

Lack of social skill appears to generate social failure. Poor competency as a child may set the stage for inappropriate interpersonal functioning as an adult, accentuating the potential for psychiatric disorder. Along these lines, O'Connor (1969) pointed out that "a child who is grossly deficient in social skills will be seriously handicapped in acquiring many of the complex behavioral repertoires necessary for effective social functioning. . . . Such negative experiences would be expected to reinforce interpersonal avoidance responses which, in turn, further impede the development of competencies that are socially mediated" (p. 15). These findings strongly suggest the importance of effective treatment programs for children deficient in social skills (*cf.* Cowen, Gardner, and Zax, 1967).

The term "social skills" has generally been used inexplicitly in reference to the compound abilities necessary for effective interpersonal functioning. As described above, social-skill deficits of children are primarily described in a manner similar to assertiveness deficits. The term "assertiveness" refers to a subcategory of social skills in which the emphasis is on the ". . . ability to express both positive and negative feelings in the interpersonal context without suffering consequent loss of social reinforcement" (Hersen and Bellack, (*in press*) *b*). Children deficient in this regard would require training to increase their ability to stand up for their rights and express both anger and positive feelings, such as appreciation.

The traditional therapeutic approach with unassertive children has attempted to overcome their inhibitions by providing a supportive atmosphere while waiting for the desired social behavior to emerge. Bandura and Walters (1963) criticized this approach as being minimally effective and time consuming, and proposed alternatives to this traditional treatment, arguing that

social imitation or modelling can be most effective in the modification of inhibited behavior in children. Analogue studies confirm that modelling techniques can be used effectively to help such children acquire relevant social behaviors (*e.g.,* Bandura, Grusec, and Menlove, 1967; Bandura and Huston, 1961; Bandura, Ross, and Ross, 1963; O'Connor, 1969, 1972). In addition to short-term analogue studies, there are a few clinical reports in which skill approaches to treatment have been applied successfully to shy and withdrawn children (*e.g.,* Patterson, 1972).

However, the efficacy of the entire social-skill treatment package (instructions, feedback, behavior rehearsal, and modelling), such as that applied to psychiatric patients by Hersen and his colleagues (*e.g.,* Hersen *et al.,* 1975; Hersen, Eisler, and Miller, 1974), has not been experimentally evaluated with unassertive children. Moreover, in previous studies with children, the sequential effects of treatment on the component behaviors comprising social skill have not been examined. In the present study, the effects of social-skills training (specifically assertion training) on verbal and nonverbal component measures were assessed in a multiple-baseline design across behaviors in four withdrawn children. Standard training situations involving interpersonal encounters, as in the Behavioral Assertiveness Test (Eisler, Miller, and Hersen, 1973) and the Behavioral Assertiveness Test-Revised (Eisler, Hersen, Miller, and Blanchard, 1975), were adapted for use with children. In addition to evaluating generalization, a brief followup was conducted to assess durability of results.

METHOD

Subjects

Unassertive children ranging in age from 8 to 11 yr were recruited from the Falk Elementary School of the University of Pittsburgh. Twelve children described as excessively cooperative, passive, shy, unassertive, and conforming were referred by their teachers. Of these 12, four met the criteria of at least three deficient verbal and nonverbal target behaviors (*e.g.,* poor eye contact, short speech duration, inaudible responses, and inability to make requests) during baseline assessment (see Eisler, Miller, and Hersen, 1973).

Jane was an 8-yr-old female third grader referred because of her difficulty relating to peers. She was described as passive and she experienced difficulty expressing anger when appropriate, was unable to refuse unreasonable requests, was oversensitive to criticism, and rarely volunteered in class.

Tom was an 8-yr-old male third grader referred because of difficulty in interpersonal situations. When in conflict with a peer, he would cry and report the incident to his teacher rather than directly confront his antagonist. His passivity led to derision by peers and inhibited the development of close interpersonal relationships.

Mary was a 10-yr-old female fifth grader referred because of her inability to stand up for her rights. When in conflict with a peer, she assumed the passive role and reported the incident to her teacher. She failed to express anger when appropriate.

Alice was an 11-yr-old sixth grader referred because of her inability to refuse unreasonable requests, to express hostility when warranted, and to volunteer in class whether in small or large groups. Typically, when in a conflict situation, she sought the teacher as arbitrator.

Experimental Setting

The behavioral assessments and training sessions were conducted in a videotape studio that included three chairs arranged in a triangle to accommodate the subject and two role models. Male and female role models (undergraduate reseach assistants) sat next to the subject and provided predetermined prompts to facilitate responses. An adjoining room separated by a one-way mirror contained videotape recording equipment. Role-played scenes were narrated by the senior author over the intercom from the control room. Similarly, the senior author provided di-

rection, instructions, and feedback from the control room during training sessions.

Behavioral Assessment

Because previous studies with adult psychiatric patients demonstrated that overall level of assertiveness and component behaviors could be reliably identified on the basis of role-played responses to a series of standard interpersonal situations (Eisler *et al.*, 1975; Eisler *et al.*, 1973), the Behavioral Assertiveness Test used in these prior investigations was modified and adapted for use with children. The resulting Behavioral Assertiveness Test for Children served as the dependent measure for the present study. It consists of nine scenes, five involving a same-sex role model and four involving an opposite-sex role model. An attempt was made to include situations that the subjects were likely to engage in daily with other children. Similarity between the scenes and typical daily encounters was expected to facilitate the subjects' ability to respond as they might in the natural environment. Six of the scenes (1, 2, 3, 6, 7, 8), randomly selected from the pool of nine, were used as training items for all subjects. The remaining three scenes (4, 5, 9) comprised the generalization series. Listed below are the nine scenes of the Behavioral Assertiveness Test for Children.

Female Model

1. *Narrator:* You're part of a small group in science class. Your group is trying to come up with an idea for a project to present to the class. You start to give your idea when Amy begins to tell hers also.
   Prompt: "Hey, listen to my idea."
2. *Narrator:* Imagine you need to use a pair of scissors for a science project. Betty is using them, but promises to let you have them next. But when Betty is done she gives them to Ellen.
   Prompt: "Here's the scissors, Ellen."
3. *Narrator:* Pretend you loaned your pencil to Joannie. She comes over to give it back to you and says that she broke the point.
   Prompt: "I broke the point."
4. *Narrator:* "Imagine you're about to go to Art Class when Cindy asks you if she can use your desk while you're gone. You agree to let her use it, but tell her that you'll need it when you get back. When you come back from Art, Cindy says she still needs to use your desk.
   Prompt: "I still need to use your desk."

Male or Female Model

5. *Narrator:* Your class is going to put on a play. Your teacher lists the parts, asking for volunteers. She reads a part you like and you raise your hand. But (Steve/Sue) raises (his/her) hand after you and says that (he/she) would like to get the part.
   Prompt: "I want to play this part."

Male Model

6. *Narrator:* You're playing a game of kickball in school and it's your turn to get up. But Bobbie decides he wants to get up first.
   Prompt: "I want to get up."
7. *Narrator:* Imagine you're playing a game of four squares in gym. You make a good serve into Barry's square. But he says that it was out and keeps the ball to serve.
   Prompt: "It's my turn to serve."
8. *Narrator:* You're in school and you brought your chair to another classroom to watch a movie. You go out to get a drink of water. When you come back Mike is sitting in your seat.
   Prompt: "I'm sitting here."
9. *Narrator:* Imagine you're standing in line for lunch. Jon comes over and cuts in front of you.
   Prompt: "Let me cut in front of you."

During the initial assessment period, all subjects were told about the research nature of the program as well as their volunteer status. It was explained that the program was expected to increase the interpersonal skills of those children who took part. If the subjects and their parents

gave consent for participation, then assessment began.

The initial assessment consisted of three administrations of the entire Behavioral Assertiveness Test for Children. The procedure described for the initial assessment phase was the same as the procedure for all other probe administrations. The subject, along with a male and female role model, sat in the videotape studio, while the therapist provided instructions from the control room. In general, the subject was instructed to respond as realistically as possible to the situations from the Behavioral Assertiveness Test for Children. The following instructions were used with each subject:

> "Hi. I'm next door. Can you hear me? See that box on the floor? Well, my voice comes through there. You must imagine things sometimes. You probably pretend a lot of things. For instance, maybe you pretend that you're doing something with someone else. Well, we're going to imagine a lot of different things with you. At times we will pretend that you are doing something in your classroom, in gym, or in the lunchroom. Each imaginary situation will be about you doing something with someone from school. When I describe each situation I want you to really try to pretend that you are part of the situation.
>
> "To make it even more real, John and Susan (the role models) who are in the room with you will pretend that they are the other people in the situations. They will be someone from school in the different situations. They will say something to you and you try really hard to imagine that they are those people. When they are finished talking, you say what you would say if you were really doing something with that person. Do you know what I mean?
>
> "O.K., why don't we try a situation. Let's imagine you're with your friend in an ice cream store. He/she wants to know what kind of ice cream you want." *Role Model Prompt:* "What kind of ice cream do you want?" Subject responds. *Narrator:* "Can you taste it? Is it good? . . . O.K., now remember you pretend that John or Susan is someone from school in the different situations. When he/she is done talking, you say to him/her what you would say if you were really doing something with that person."

Following the practice scene, probe sessions then proceeded as follows: (a) the narrator presented a scene, (b) the role model delivered a prompt (standard lead-in), (c) the subject then responded to the role model. The subjects' responses to the nine scenes were videotaped on three separate occasions per week (for four weeks) and retrospectively rated on three verbal and nonverbal components of assertive behavior and for overall assertiveness.

Selection and Scoring of Target Behaviors

A behavioral analysis of the subjects' responses was conducted to establish which component behaviors appeared at a disproportionately low rate. To be considered deficient, a behavior had to be consistently rated as low across all three probe administrations of the Behavioral Assertiveness Test for Children. As there are no objective criteria on which to identify low assertiveness, it was anticipated that the selection would be based on subjective clinical criteria. In fact, all four subjects gave minimal responses to all scenes, simplifying the selection process. By the conclusion of the assessment phase, three deficient target behaviors had been identified for each of the four subjects. Jane, Alice, and Mary were rated deficient on eye contact, loudness of speech, and requests for new behavior. Tom was rated deficient on eye contact, duration of speech, and requests for new behavior.

Listed below are the operational definitions of the target behaviors selected for modification and rated retrospectively from videotapes by one pair of judges.

Ratio of eye contact to speech duration. The total length of time in seconds that the subject looked at the interpersonal partner while he/she (the subject) was speaking was measured for each scene. The ratio was computed by di-

viding total duration of eye contact while speaking by the duration of speech.

Loudness of speech. Loudness of speech for each scene was rated on a five-point scale from 1 (very low) to 5 (appropriately loud). Raters were trained so that a response judged to have appropriately loud volume was rated 5.

Requests for new behavior. Verbal content requesting new behavior from the interpersonal partner was scored as occurring or not occurring in each scene. Responses scored in this category required more than mere noncompliance. The subject had to show evidence that he/she wanted his/her interpersonal partner to change his/her behavior (*e.g.,* he had to ask the boy who cut in front of him at the movie to step to the end of the line; or he had to request that his sister wait her turn to sit next to their mother at dinner).

Overall Assertiveness

After all the above behaviors were rated, two additional judges not familiar with the purposes of the study rated the subjects' responses to scenes for overall assertiveness using a five-point scale with 1 indicating "very unassertive" and 5 indicating "very assertive". These global judgments were based on Wolpe's (1969) definition of "hostile" and "commendatory" assertiveness, which emphasizes the socially appropriate expression of feelings.

Reliability of Behavioral Measures

Interrater agreement was evaluated during all experimental phases for half of the videotaped probe sessions. The probe sessions used to calculate reliability were selected randomly. To prevent observer drift and bias (Kent, O'Leary, Diament, and Dietz, 1974), both the primary and secondary raters were uninformed as to which probe sessions were used. Pearson product moment correlations were calculated for ratings of speech duration, eye contact, loudness of speech, and overall assertiveness.

Percentage of agreement between raters was established for ratings of requests for new behavior. As suggested by Hersen and Barlow (1976, Chapter 4), two types of percentage agreements were calculated for the dichotomous occurrence-nonoccurrence judgments of requests for new behavior. First, in cases where both occurrence and nonoccurrence of the behavior were scored, percentage agreement was calculated by dividing number of agreements by total number of agreements plus total number of disagreements multiplied by 100. Second, to obviate the possibility of an inflated estimate of agreement due to agreements on the nonoccurrence of the behavior, percentage agreement was also calculated for instances where only occurrence of the behavior was recorded. Percentage agreement was again obtained by dividing number of agreements by total number of agreements plus total number of disagreements multiplied by 100.

Procedure

Following baseline assessment, all subjects received three weeks of social-skills training consisting of three 15- to 30-min sessions per week. Consistent with multiple-baseline strategies, training was applied sequentially and cumulatively to the three target behaviors over the three-week period. Specifically, during the first week, all subjects received training geared toward increasing eye contact. In the second week, attention was directed to loudness of speech for Jane, Mary, and Alice, and to speech duration (number of words spoken) for Tom. In the final week, training for all subjects focused on increasing the number of requests, with attention still directed to maintaining the second target behavior for Jane, Mary, and Alice.

Throughout training, six of the scenes on the Behavioral Assertiveness Test for Children served as training scenes and the remaining three scenes were used to assess generalization from trained to untrained scenes (for all subjects). Generalization scenes were selected to parallel training scenes in content (*e.g.,* sex of respondent, setting of interaction). Order of scene presentation was randomized throughout all as-

sessment and training phases of the program. At the end of each treatment session, the entire Behavioral Assertiveness Test for Children was administered as a probe.

Social-skills training specifically involved the following: (a) The therapist presented one of the scenes from the Behavioral Assertiveness Test for Children, the model delivered a prompt, and the subject responded. (b) The therapist provided the subject with feedback on his/her performance, with reference to the specific target behavior. (c) The therapist then discussed feedback with the subject to ensure that he/she understood. (d) The role models then modelled responses, with specific attention to the target behavior. (e) Specific instructions were then given by the therapist concerning the target behavior, followed by the subject responding a second time. (f) Rehearsal continued for a scene until the therapist felt that the criterion for that target behavior had been reached. (g) Training then advanced to a new interpersonal situation, proceeding in a similar fashion through all training scenes.

Once training was completed for all three target behaviors, the program shifted to followup assessment. Followups consisted of probe assessments at two- and four-week intervals after treatment.

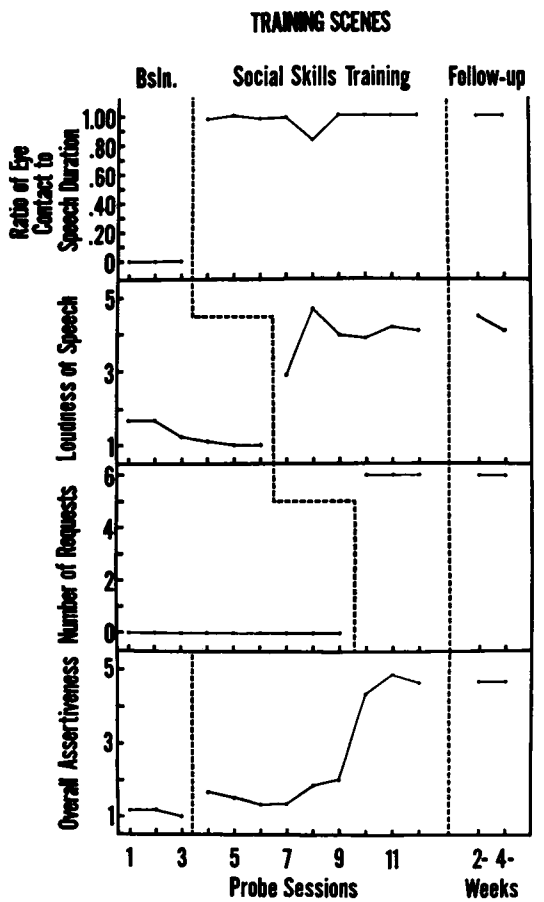

Fig. 1. Probe sessions during baseline, social-skills treatment, and followup for training scenes for Jane. A multiple-baseline analysis of: ratio of eye contact while speaking to speech duration, loudness of speech, number of requests, and overall assertiveness.

RESULTS

The results were similar for all four children. While individual results are presented graphically below, only the results for Jane, which were representative, are discussed.

Interrater reliabilities were uniformly high for all subjects. Pearson correlations were for the most part in the mid 0.90s; percentage agreement ranged from 85% to 100% for all ratings calculated.

The results of the multiple-baseline analysis for training scenes with Jane are presented in Figure 1. Data points represent averages across all scenes for each probe session. The sequential introduction of treatment for eye contact, loudness of speech, and requests for new behavior resulted in considerable increases over baseline levels. These changes were obtained without corresponding changes in untreated baselines: ratio of eye contact to speech duration increased from 0 to 1.00, loudness of speech increased from ratings between 1 and 2 to ratings of about 4, and number of requests increased from zero to six. In addition, overall assertiveness gradually increased during training, with a sizeable increase when treatment for requests was introduced at about probe 10 (this pattern was evident with the other subjects as well). Ratings of overall assertiveness increased from about 1 to almost 5. Enhanced levels of performance were

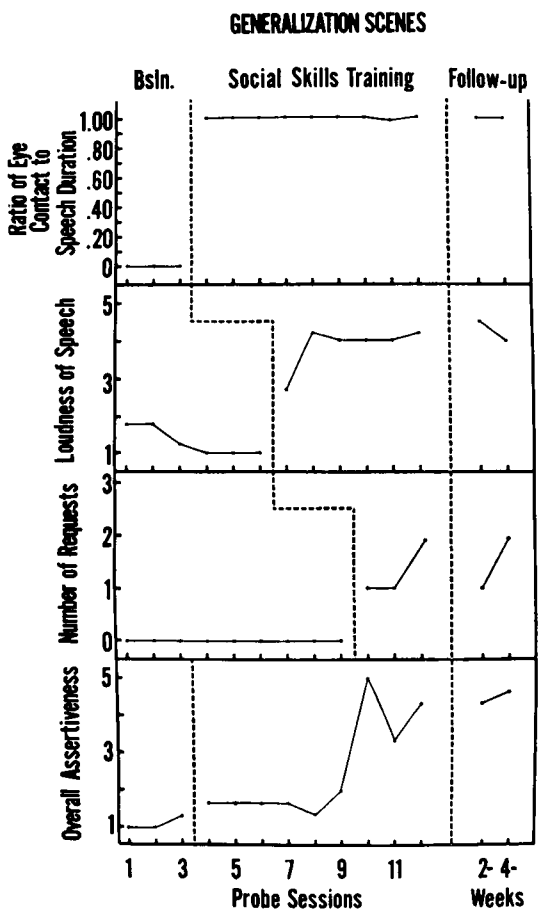

Fig. 2. Probe sessions during baseline, social-skills treatment, and followup for generalization scenes for Jane. A multiple-baseline analysis of: ratio of eye contact while speaking to speech duration, loudness of speech, number of requests, and overall assertiveness.

maintained at two- and four-week evaluations after treatment. The results of the multiple-baseline analysis for generalization scenes are presented in Figure 2. These data parallel those obtained for the training scenes.

DISCUSSION

The results of this multiple-baseline analysis indicate that social-skills training generated considerable improvement in both component behaviors and overall assertiveness for all four subjects in this direct replication series. Treatment effectively enhanced performance in the verbal and nonverbal components of assertiveness that had been identified as deficient (*i.e.*, eye contact, loudness of speech, speech duration, and requests for new behavior). Multiple-baseline analyses indicated that targeted behaviors were predominantly independent and that changes from baseline levels generally occurred only when training was directed to a specific behavior. Thus, the sequential and cumulative effects of treatment were documented. In all cases, gains obtained on treated scenes generalized to untreated scenes. Finally, changes in both treated and untreated scenes persisted over a one-month posttreatment period.

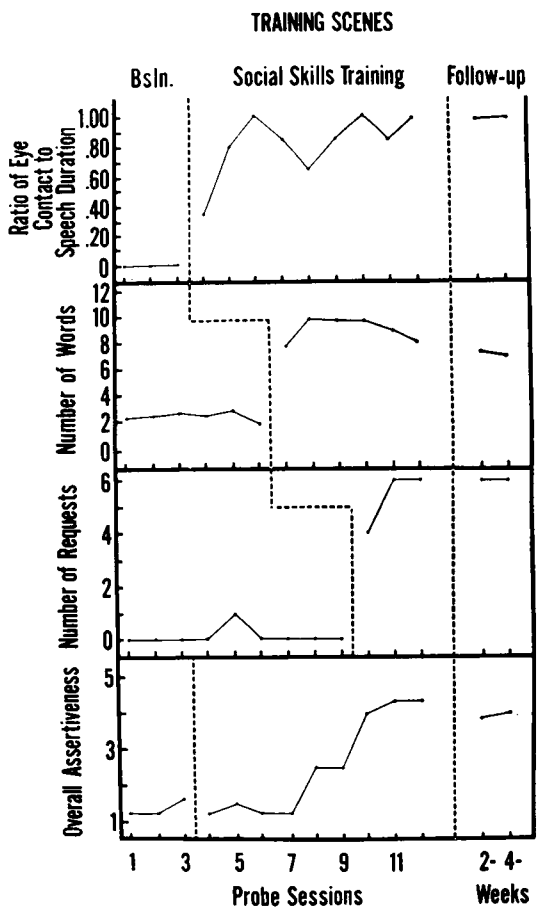

Fig. 3. Probe sessions during baseline, social-skills treatment, and followup for training scenes for Tom. A multiple-baseline analysis of: ratio of eye contact while speaking to speech duration, number of words, number of requests, and overall assertiveness.

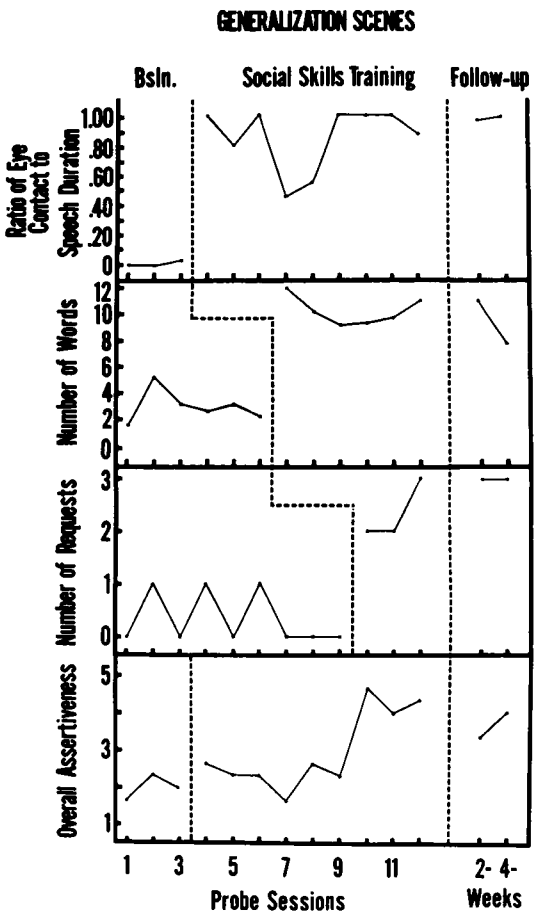

Fig. 4. Probe sessions during baseline, social-skills treatment, and followup for generalization scenes for Tom. A multiple-baseline analysis of: ratio of eye contact while speaking to speech duration, number of words, number of requests, and overall assertiveness.

Two major implications may be drawn from these results. First, the data suggest that it is possible to identify specific deficiencies in verbal and nonverbal components of assertiveness in children globally described as low in interpersonal social skill. These behaviors (eye contact, loudness of speech, speech duration, and requests for new behavior) were identified through the use of a screening battery composed of 10 of the 14 behavioral components of assertiveness isolated in adult psychiatric patients by Eisler *et al.* (1973). However, there is a need to investigate the relationship between deficits in these components and children's level of interpersonal functioning in their natural environment. Despite our reservation about external validity, the screening battery used here seems to represent a systematic method for identifying inadequate social functioning in children. This would present a substantial improvement over traditional classification of such behavior through overall clinical impressions and/or teacher observations.

Second, the extent of modification and stability of change in the targeted behavior provides strong support for the effectiveness of the social-skills training package used (*i.e.*, instructions, feedback, behavior rehearsal, and modelling). Gains in performance over baseline levels indicate each child's improved facility to express

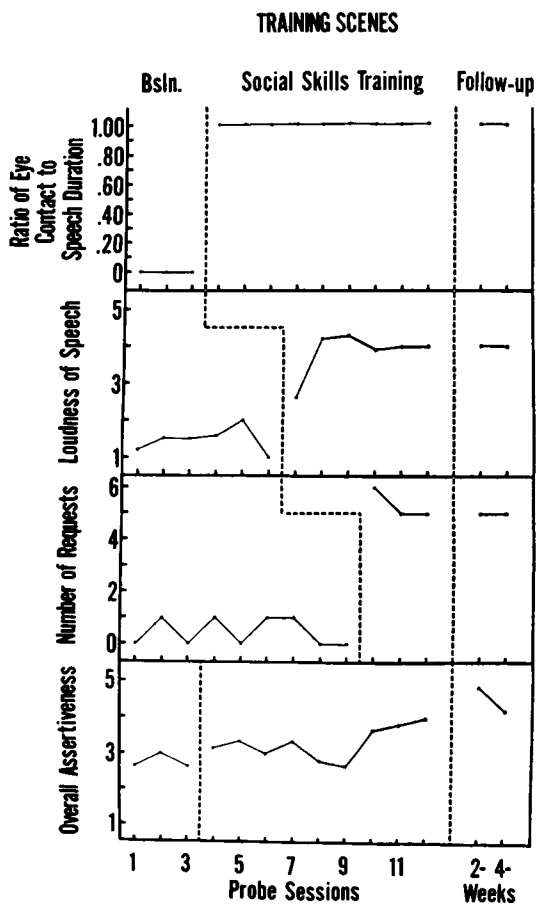

Fig. 5. Probe sessions during baseline, social-skills treatment, and followup for training scenes for Mary. A multiple-baseline analysis of: ratio of eye contact while speaking to speech duration, loudness of speech, number of requests, and overall assertiveness.

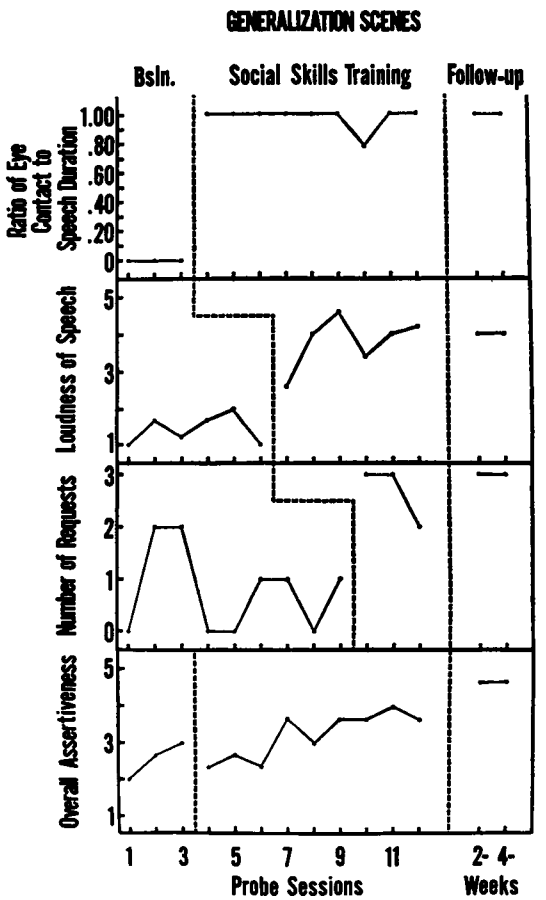

Fig. 6. Probe sessions during baseline, social-skills treatment, and followup for generalization scenes for Mary. A multiple-baseline analysis of: ratio of eye contact while speaking to speech duration, loudness of speech, number of requests, and overall assertiveness.

negative assertion to male and female role models enacting hypothetical peers. However, given the rapidity of behavioral change, along with absence of severe disturbance in this subject population, it seems unlikely that all of the component techniques included in the treatment package were necessary. Such a conclusion seems consistent with previous data collected in analogue studies with psychiatric patients (*e.g.*, Hersen *et al.*, 1973). Therefore, future investigations should focus on establishing the differential effectiveness of the component techniques when applied to a subject population of withdrawn children.

Several questions have been raised by the present findings. One of the foremost concerns the degree of generalization of the behavior change obtained. While a measure of generalization was included in the present study, it involved role play with adults in situations similar to those used in training. The degree of generalization to interactions with other children in the natural environment is, therefore, uncertain. There are several ways in which such generalization might be better assessed. Economic and time limitations precluded the use of naturalistic observations of subjects in this study. Such observations should be included in any replications,

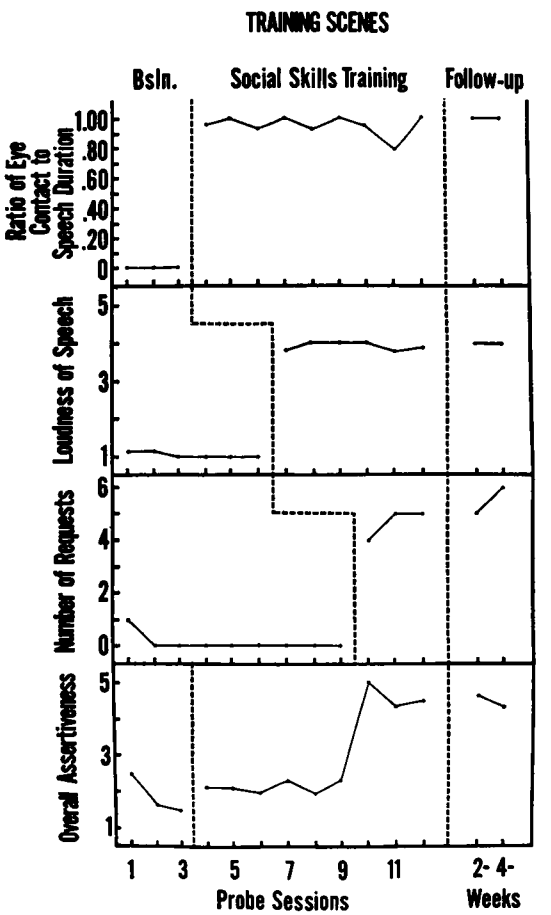

Fig. 7. Probe sessions during baseline, social-skills treatment, and followup for training scenes for Alice. A multiple-baseline analysis of: ratio of eye contact while speaking to speech duration, loudness of speech, number of requests, and overall assertiveness.

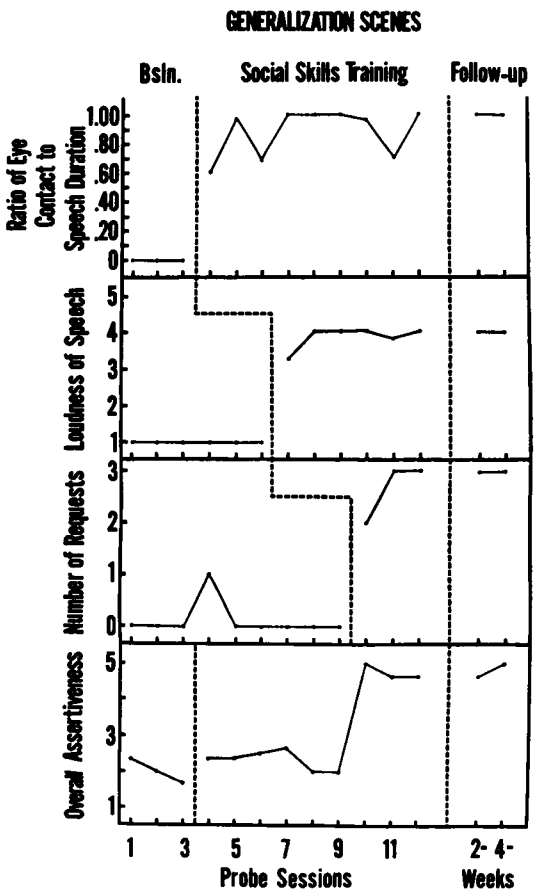

Fig. 8. Probe sessions during baseline, social-skills treatment, and followup for generalization scenes for Alice. A multiple-baseline analysis of: ratio of eye contact while speaking to speech duration, loudness of speech, number of requests, and overall assertiveness.

if at all possible. The use of other children as role models might be more realistic than adult models; however, it is unlikely that children could be recruited who were both consistent across trials and available for such a large number of sessions. Finally, the presentation of entirely novel situations after training could also indicate the generalizability of the new skills. Bellack, Hersen, and Turner (1976) employed this latter procedure with adult psychiatric patients and found that the degree of generalization varied across target behaviors.

Another major question pertains to the selection of target behaviors for treatment. Both the identification of deficient behaviors and determination of which deficient behaviors merit extensive treatment is currently based on subjective evaluation. Empirical criteria should be developed. For example, the present data suggest that there is a high correlation between overall assertiveness and requests for new behaviors. This could be a function of the definition of overall assertiveness employed by the raters, or it could be that verbal content makes a greater contribution to assertiveness in children than does nonverbal behavior. Normative data should be collected and evaluated so as to establish criteria for assertiveness in normal children and to determine the relative contributions of component behaviors to overall assertiveness or effectiveness of responses.

In addition to normative data on performance, a pool of relevant scenes needs to be established for the Behavioral Assertiveness Test for Children, so that a standardized screening device can be constructed for differentiating high and low assertive children (*cf.* Eisler *et al.*, 1975; Eisler *et al.*, 1973). Finally, it would be valuable to develop more elaborate training procedures that would allow for sequential responding such as rebuttal of the child's responses by the role models. This type of interaction would simulate possible stress situations encountered by the child in his natural environment and might lead to responding more representative of typical functioning.

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