TELEPHONE CONVERSATIONAL SKILLS TRAINING WITH SOCIALLY ISOLATED, IMPAIRED NURSING HOME RESIDENTS

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We evaluated the effectiveness of a comprehensive training program for enhancing the conversational skills of socially isolated, impaired elderly nursing home residents. A multiple baseline design across behaviors was used to train four subjects (aged 87, 85, 68, and 66), on four content-related conversational components: (a) expressing common courtesies, (b) making positive self-disclosures, (c) asking questions, and (d) making interjections and acknowledgments. Training procedures included instructions, modeling, behavior rehearsal, feedback, and reinforcement. Results showed positive effects with all four subjects; in two cases, changes were significant enough to affect untrained observers' perceptions of the elders' conversational skills.
DESCRIPTORS: elderly, geriatric patients, geriatrics, institutions, social skills training

Most residents of nursing homes experience some degree of social isolation from the community (Goldstein & Baer, 1976; MacDonald, 1973; Settin, 1982). Residents seldom venture out of the home to engage in activities such as socializing, shopping, sight-seeing, or conducting business, and visits from friends and family living in the community are usually infrequent. The problem of social isolation in these individuals is compounded by, and contributes to, additional psychological problems such as depression, decreased self-esteem, and decreased life satisfaction (Wack & Rodin, 1978). Left unattended, social isolation in nursing home residents typically leads to extreme and deleterious withdrawal from almost all social activities and involvements (Hussian, 1981; Hussian & Davis, 1985; Pfeiffer, 1977).

Two factors that contribute to the development of social isolation in this population are physical disability, which makes it difficult for residents to leave the nursing home without assistance, and loss of significant others through illness or death, which leaves a diminished pool of contacts in the com-

munity. But these two factors alone do not fully explain the extent of the social isolation experienced by those residents who retain the capacity to be more fully involved in social relationships and who have surviving friends or relatives in the community. An additional factor seems to be the relational style residents are taught to adopt under the contingencies typically operating in geriatric settings (MacDonald & Butler, 1974).

Most nursing homes are run on a medical model; in addition, they are typically understaffed. Therefore, nursing home staff generally interact with residents only to provide some form of nursing care; they very infrequently interact simply to socialize (Baltes & Zerbe, 1976). This interactional pattern establishes a contingency by which dependent and self-centered social behaviors are reinforced, while more independent and relationship-centered social behaviors are extinguished. In subsequent interactions with individuals from the community, this shaped dependence and passivity is tolerated because it conforms to societal expectations for the institutionalized elderly person's role (Patterson et al., 1982); but, because this behavior is nonreinforcing or even aversive to others, community members interact with the resident less and less often.

Prior research has demonstrated that relatively simple and straightforward behavioral interventions can be used successfully to alter important

features of nursing home residents' interactional patterns. For example, Kleitsch, Whitman, and Santos (1983) trained four elderly, socially isolated, moderately mentally retarded men using direct prompts and social reinforcement. This training procedure was highly effective for increasing the rate of the elderly residents' verbalizations both during training and under two generalization conditions. Follow-up data indicated that these results were maintained after 4 months.

These results, although encouraging, share a limitation with earlier, similar work (cf. Hoyer, Kafer, Simpson, & Hoyer, 1974; MacDonald, 1978; O'Quinn, O'Dell, & Burnett, 1982): the intervention focused exclusively on quantitative features (e.g., rate, frequency, duration) of the elders' verbal behavior. Qualitative features of the responses, which would reflect verbal content, were not addressed. Yet, it is the qualitative features of verbal responses that have a profound impact on how those responses are perceived by members of the community and, by implication, on how members of the community react to them (Carstensen, 1986).

Two studies addressing qualitative features of verbal responses in elders have been reported. In the first, Berger and Rose (1977) randomly assigned 25 nursing home residents to one of three conditions: interpersonal skills training, a discussion control, and an assessment-only control. Results showed that the skills training group's performance was superior to that of both control groups at posttest for the eight interpersonal situations that were targeted for training, as well as on eight novel, untrained situations; this difference was maintained only for the trained situations, however, at an 8-week follow-up. Contrary to the hypothesis that increased competence would lead to increased self-confidence, no differences were found between the experimental and the control groups on a self-report measure of interpersonal competence, or on self-ratings of competence on the assessment role-play. Nevertheless, the study provides strong evidence that more elaborate social skills training procedures can effect changes in the qualitative features of verbal responses with an institutionalized elderly population.

Another study (Patterson, Smith, Goodale, & Miller, 1979) provides additional evidence for the effectiveness of a content-directed, social skills training procedure for elders. Patterson et al. (1979) used modeling, instructions, behavior rehearsal, feedback, and contingent reinforcement to teach 11 psychogeriatric patients to express feelings of pleasure and displeasure more effectively. Training that incorporated instruction on specific component behaviors was shown to be clearly superior to a comparison procedure that only focused on increasing the rate of verbalization for improving psychogeriatric patients' emotional expressiveness.

The work reported by Berger and Rose (1977) and by Patterson et al. (1979) suggests that a comprehensive social skills training package can enhance important qualitative features of nursing home residents' interactional styles. The next step is to demonstrate that a comprehensive skills training package, such as the one used by Berger and Rose (1977), can effectively modify qualitative conversational features when used with socially isolated elders, such as those studied by Kleitsch et al. (1983) among others (viz. Hoyer et al., 1974; MacDonald, 1978; O'Quinn et al., 1982).

We attempted to demonstrate that qualitative features of a specific type of conversational skill could be modified in socially isolated nursing home residents using a comprehensive social skills training procedure. It was also expected that improvements in the qualitative features of the elders' conversations would result in a more positive perception of those conversations by members of the community.

METHOD

Subjects

Four elderly residents of a proprietary nursing home volunteered to participate. They had been designated by the nursing home's social worker as socially isolated, older than 65, and free of severe physical, cognitive, or emotional impairments. Ex-

tended conversations with these residents, as well as formal testing, indicated that all showed at least moderate cognitive or emotional impairment, or both (for additional details, see individual subject descriptions below). Nevertheless, because a large and increasing percentage of nursing home residents does have one or both of these forms of impairment (Hussian, 1981; MacDonald, 1983), the decision was made to involve these four subjects in the training. It was recognized, however, that their impairments would result in creating an exceptionally stringent test of the procedure's effectiveness.

Subject 1 was a 68-year-old woman who had resided at the nursing home for 18 months. Her medical records indicated that she had been institutionalized previously in a state psychiatric hospital for most of her adult life due to a grand mal seizure disorder which began when she was 17. IQ testing placed her in the range of borderline mental retardation. When given the Kahn, Goldfarb, Pollack, and Gerber (1960) Mental Status Examination, Subject 1 failed four out of the ten questions, indicating significant cognitive impairment (Zarit, Miller, & Kahn, 1978). In addition, she had a minor cardiac illness being controlled with cardiac drugs. She was also receiving anticonvulsants to treat her epilepsy. Subject 1 was ambulatory with a walker and often spent time near but not conversing with others in the common areas of the nursing home.

Subject 2, an 85-year-old woman, had resided at the nursing home for the past 4 years. Prior to her admission, she had lived alone for 14 years. She suffered from cerebral insufficiency and osteoarthritis, and she was being medicated with Mellaril for depression. She failed three items on the Kahn et al. (1960) Mental Status Examination, indicating significant cognitive impairment. Subject 2 was ambulatory with a walker and spent most of her days sitting quietly in the communal area of the nursing home.

Subject 3, aged 66, had lived in the nursing home for 2.5 years. Medical records were incomplete, but indicated that he had been institution-alized for the preceding 25 years with a recorded diagnosis of schizophrenia. He responded correctly to all ten items on the Kahn et al. (1960) Mental Status Examination, indicating no cognitive impairment. However, he suffered from anemia and bronchial asthma, and received medication for both of these conditions. Although fully ambulatory, Subject 3 tended to remain isolated in his room.

Subject 4 was an 87-year-old woman who had lived at the nursing home for the past 18 months. She had suffered an introchanteric fracture of the left hip, which left her wheelchair bound. Her medical diagnosis also included hypertension, cerebral vascular accident (CVA), osteoporosis, and acute brain syndrome secondary to anemia. Subject 4 failed to respond correctly to three items on the Kahn et al. (1960) Mental Status Examination, indicating significant cognitive impairment.

Setting

The study was conducted in an 81-bed nursing home located in a town with a population of 25,000 in New England. The nursing home staff numbered about 200 and was comprised of nursing assistants (70%), ancillary service staff (20%), and trained professionals (10%). Additional medical services were provided by consultants according to need. The nursing home employed one full-time activities director and one half-time social worker. Regularly scheduled recreational activities such as exercise class, bingo, church services, and singing were available. However, no direct psychological services were provided, and there was no programmatic effort to train or enhance reisdents' social skills.

Experimental Design

The experimental design followed a multiple baseline design across behaviors (Hersen, 1982). This design involved conducting the conversational skills training in sequential steps, with each subject being trained to criterion on one skill component before training was introduced on another skill component. Criterion was defined as a marked sta-

Table 1

Descriptions of, and Directions for Using, Each
Conversational "Rule" (i.e., Training Component)

Rule	Directions
Be polite	Say "Hello."
	Ask if they have time to talk.
	Tell them you like talking to them.
	Say "Good-bye."
Be entertaining	Tell them what's new.
	Elaborate—tell them *lots* about each topic.
	Talk about things you like.
Keep them talking	Ask lots of "you" questions.
	Give them a few moments to answer.
	Ask follow-up questions.
	Remember the five Ws: Who? What? When? Where? Why? (and How?)
Show interest	Repeat back their last three words.
	Show some reaction to what they say: for example, "That's nice."
	Say "Uh-huh."

ble improvement in the subject's performance determined by inspection of a visual plot of the data.

Training Procedure

Training focused on developing qualitative conversational skills appropriate to use during telephone conversations. One advantage of focusing on telephone conversations, as opposed to face-to-face conversations in general, was that it was possible to concentrate on verbal content. The other advantage was that the relative ease and convenience of telephone communication increased the likelihood that enhanced skills might extend to increased contact with persons living outside the nursing home (cf. Goldstein & Baer, 1976).

Training was conducted individually during sessions held in the facility's activities room, a large, pleasantly decorated room used primarily for recreational events. During training, the subject was seated in front of a long table. A telephone, a large clock, and a microphone were on the table directly in front of the subject. A female research assistant

served as a conversational role-play partner and sat approximately 4 feet to the right of the subject, facing the table. A cloth partition separated the two so that the subject could easily hear, but not see, the research assistant. A male conversational skills trainer sat to the left of and facing the subject. Audiotape recorders were directly to the left of the trainer.

Training sessions were held on Monday, Wednesday, and Friday afternoons over 6.5 months. Each session lasted approximately 30 min and followed the same general format. At the outset of each session, the subject was praised for coming. Then training proceeded with a review of previously covered material. This review involved asking the subject to recall any learned conversational skill component(s) and to provide examples illustrating it (them). Subjects were praised for every correct response; incorrect responses were gently but directly modified through corrective feedback. The trainer prompted any components that were not recalled and encouraged the subject to either elaborate further on the abstract component description or give concrete examples of the prompted component, depending on what was appropriate. As the subject provided examples of each component, the trainer took notes of them for the subject on large index cards.

After the review period was completed, a new conversational skill component was introduced, and a rationale for using the new component was provided. Components were presented as rules, and they were described in direct and simple language (see MacDonald, in press). These four rules were designated on the basis of previous social skills research (Kelly, 1982), as well as informal observations of both nursing home and community-dwelling elders. Descriptions of and directions for using each rule are presented in Table 1. As the trainer introduced each new conversational component, he placed a large index card, on which the rule and the elements involved in carrying it out were printed, in front of the subject.

Following the explanation of each new skill component, a modeling exposure was presented using an audiotape of several male and female

elderly persons giving clear examples for each conversational rule. A large index card preprinted with the model's response was placed in front of the subject during exposure, so that the subject could simultaneously hear and read the model's statement.

The next portion of the training session was devoted to practice of the conversational rule. The subject was asked to provide a one-sentence example of the component just described and illustrated. Incorrect use of the rule was corrected through immediate and direct verbal feedback. Correct use was praised. The subject was then asked for another example demonstrating use of the skill component, and the feedback and reinforcement process was repeated. During this practice, the subject was encouraged to use the component in as many novel ways as possible.

At the end of the training session, the subject was given a copy of the index card used in the training of the skill component, and was told that a helpful way to learn the component was reading and thinking about the information on the card a few times between training sessions.

Role-Play Assessment

After each day's training session, each subject enacted two 4-min telephone conversations with a trained research assistant who was out of view; the first 10 role-plays, which occurred before training was begun, served as a baseline assessment. During conversations, the research assistant portrayed a specific friend or family member designated by the subject as someone living outside the nursing home and as someone with whom he or she was on friendly terms; the person portrayed was held constant through all assessments.

At the start of each role-play, the subject was instructed to pick up a prop telephone and to initiate a 4-min conversation with the research assistant while pretending that she was the designated friend or relative. Laid out in front of the subject were cue cards containing the rules trained to that point and notes of rule examples the subject had generated during behavioral practice. Also in front of the subject was a large stop clock. Each

role-play was followed by nonspecific praise. A second role-play immediately followed the first.

The research assistant carried out her part of the role-played conversation according to a structured plan that limited her responses in order to give the subject maximum control over the conversation's flow. To ensure that the assistant followed the plan, she was trained to record the type of each discreet response on a checklist in front of her during enactments.

Each role-play was audiotaped. These tapes were later rated, out of order and independently, by two different raters who had not been associated with the training, who had no knowledge of what components were trained for each subject, and who did not know when training was applied. Raters were given definitions for four skill components: expressing common courtesies, asking conversational questions, making conversational interjections and acknowledgments, and stating positive self-disclosures. Using these definitions, raters listened to each enactment and coded each response according to whether it was or was not an instance of any of these four skills.

After all the enactments had been coded, 12 tapes were randomly selected for each of the four subjects, and interrater reliability was computed using a Kappa coefficient, a statistic that takes chance agreement into account (Hartmann & Wood, 1982). Kappa coefficients ranged from 0.97 to 0.81 (median K = 0.87).

After reliability was computed, a third independent rater was assigned the task of arbitrating rating differences. Differences in coding resulting from a difference of opinion were left to stand; differences resulting from the primary rater's incorrectly following the coding procedure were corrected.

Community Members' Perceptions of Conversational Skillfulness

For each subject, the assessment tapes that were most representative of his or her performance during the baseline and the final training phases were identified by determining which tapes had scores most closely approximating the subject's average performance on each behavioral component, cal-
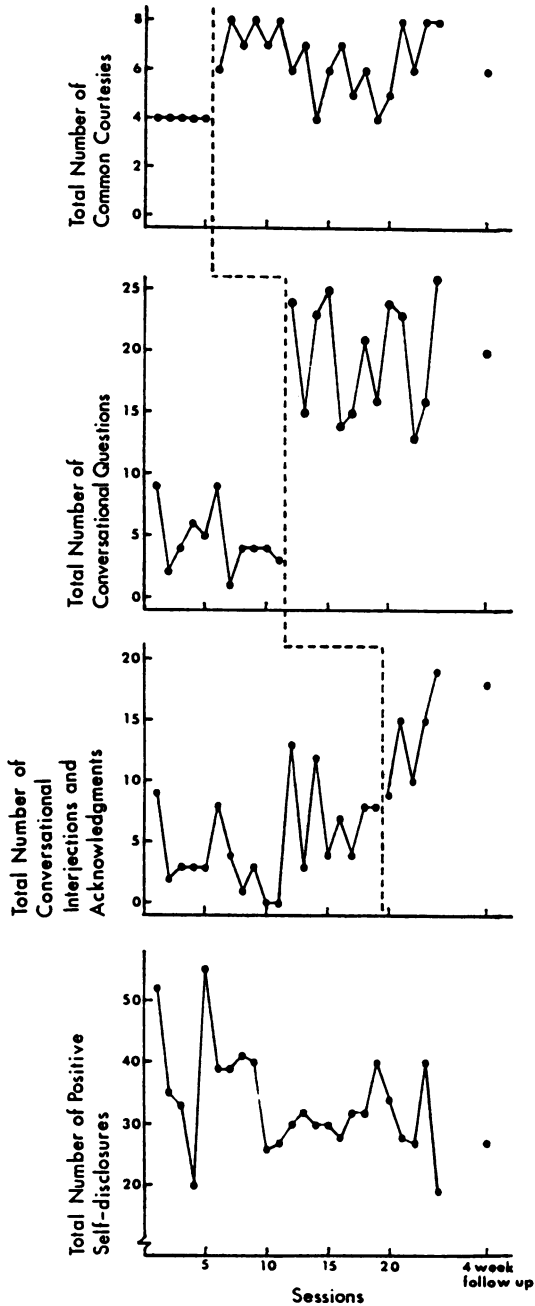
Figure 1. Conversational component performance levels during role-play assessments for Subject 1.

culated across sessions within conditions. These baseline–final training phase tape pairs were presented, in one of four randomly designated and counterbalanced orders, to a sample of 85 un-

trained observers (21 males, 64 females; mean age, 20.2 years) drawn from university psychology classes. The observers were asked to listen to the two tapes for each subject, and to indicate which of them evidenced more conversational skillfulness. Conversational skillfulness was not defined for the observers.

Follow-Up Assessment

Two to 4 weeks after the final training session, subjects again enacted two 4-min telephone conversation role-plays. The procedures and personnel for these follow-up role-plays were identical to those used for the role-plays conducted during baseline and after training sessions.

RESULTS

Role-Play Assessment

Figure 1 presents results for Subject 1. During baseline, Subject 1 emitted a moderate number of common courtesies ($M = 4.0$), a high although variable number of positive self-disclosures ($M = 33.7$), and few conversational questions ($M = 4.6$) or conversational interjections and acknowledgments ($M = 5.0$). The introduction of training was associated with a subsequent performance increase on each deficient skill component; for common courtesies, a 62% increase (to $M = 6.5$); for conversational questions, a 339% increase (to $M = 19.6$), and for conversational interjections and acknowledgments, a 172% increase (to $M = 13.6$).

Figure 2 presents results for Subject 2. During baseline, Subject 2 emitted a low number of common courtesies ($M = 1.8$), a moderate number of positive self-disclosures ($M = 29.8$), an initially high but later low number of conversational questions (overall baseline $M = 10.3$; baseline sessions 13 through 34 $M = 6.1$), and a low number of conversational interjections and acknowledgments ($M = 3.0$). The introduction of training was associated with a subsequent performance increase on each skill component; a 294% increase for common courtesies (to $M = 7.1$), a 36% increase on positive self-disclosures (to $M = 40.6$), an 87% increase on conversational questions (to $M = 19.3$),
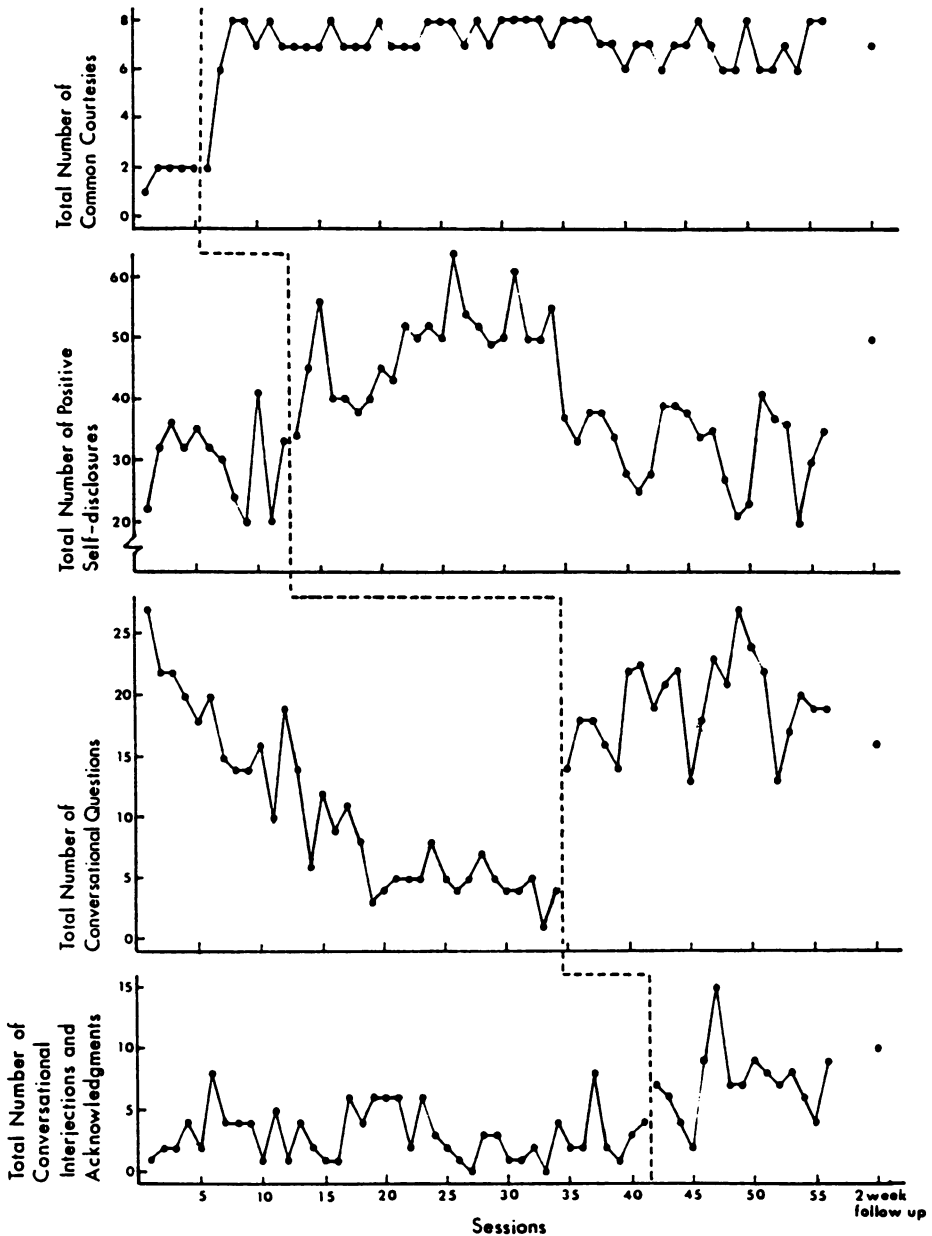
Figure 2. Conversational component performance levels during role-play assessments for Subject 2.

and a 140% increase on conversational interjections and acknowledgments (to $M = 7.2$).

Results with Subject 3 may be seen in Figure 3. During baseline, Subject 3 emitted few common courtesies, ($M = 0.8$) and virtually no conversational questions ($M = 0.2$) or conversational interjections and acknowledgments ($M = 0.9$). His

number of positive self-disclosures was moderate ($M = 23.6$). The introduction of training was again associated with increases on each skill component, although with one clear exception, the increases were less marked than had been the case with Subjects 1 and 2, and there was an extenuating circumstance. Percentage increases observed for each
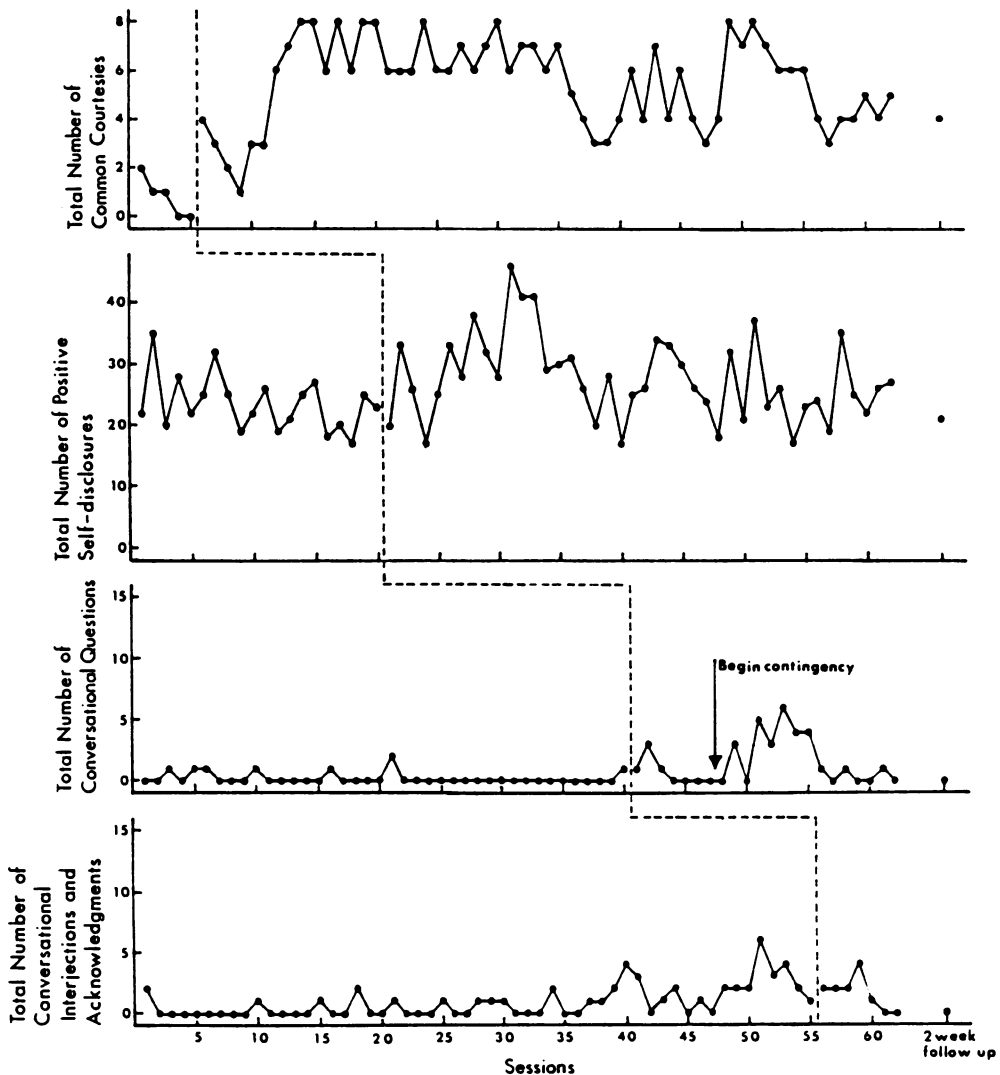
Figure 3.   Conversational component performance levels during role-play assessments for Subject 3.

skill component were 588% with common courtesies (to M = 5.5), 14% with positive self-disclosures (to M = 26.9), 650% with conversational questions (to M = 1.5), and 56% with conversational interjections and acknowledgments (to M = 1.6). The extenuating circumstance was an additional contingency; because Subject 3's motivation to do his best during role-plays seemed to lessen after session 43, he was instructed at session 48 that improved role-play performances would result in his receiving a phonograph record for his prized collection. This additional contingency appeared to

be associated with a subsequent performance increase on conversational questions.

Figure 4 presents results with Subject 4. Baseline data indicated that Subject 4's performance was characterized by few common courtesies (M = 1.8), and few interjections and acknowledgments (M = 5.4). She also tended to ask few conversational questions (M = 5.2) and to make a high number of positive self-disclosures (M = 45.6), although performance on both components was quite variable. The introduction of training was again associated with increases on each deficient
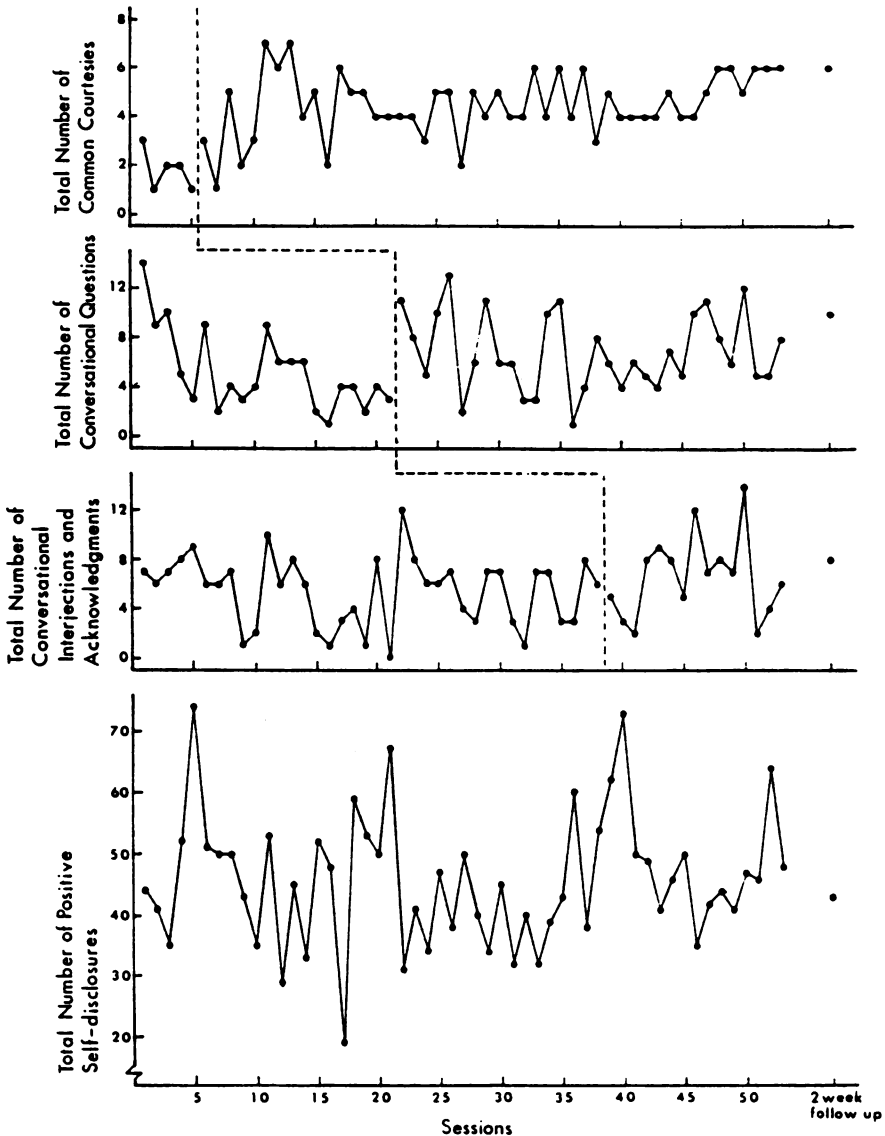
Figure 4. Conversational component performance levels during role-play assessments for Subject 4.

skill component; as was the case with Subject 3, however, these increases, with one exception, were not marked. Observed percentage increases were 150% for common courtesies (to $M = 4.5$), 32% for conversational questions (to $M = 6.9$), and 24% for conversational interjections and acknowledgments (to $M = 6.7$).

Perceptions of Conversational Skillfulness

The data shown in Figures 1–4 indicate that training resulted in some gains for all four subjects.

However, marked behavioral improvements were observed with only two subjects (Subjects 1 and 2). To determine whether these improvements were associated with greater perceived conversational skillfulness, results from the untrained observers' comparisons of baseline and final training phase assessment tapes were subjected to statistical analysis. These data (i.e., comparative judgments) were dichotomous. However, the large sample size called for the use of parametric statistics to test whether the number of times the final training phase tape

was judged as more conversationally skillful than the baseline tape was significantly more often than would be expected by chance. One-tailed Z-tests (α set at 0.05) were computed on the data for each subject. Results yielded significance for Subject 1 ($Z = 2.71$) and Subject 2 ($Z = 4.80$); results with Subjects 3 and 4 ($Z = -2.84$ and -3.27, respectively) were not significant.

Follow-Up Assessment

Follow-up role-play assessments were conducted either 2 (Subjects 2, 3, and 4) or 4 (Subject 1) weeks after training (see Figures 1–4). These data indicated that increases observed at the end of training on all four conversational components with Subjects 1 and 2 were maintained over time. With Subjects 3 and 4, gains made during training on common courtesies were maintained at follow-up but no gains on other components were apparent.

DISCUSSION

Results suggest that a program incorporating instructions, modeling, behavior rehearsal, feedback, and reinforcement can be effective for training content-related, qualitative conversational skills in socially isolated and impaired elderly residents of a nursing home. Training effects were pronounced with Subjects 1 and 2. Before training, Subject 1 generally failed to ask questions and only occasionally acknowledged her partner during a conversation; training resulted in immediate and lasting performance gains on common courtesies, conversational questions, and conversational interjections and acknowledgments. Assessment role-plays before training indicated that Subject 2 tended to be passive during conversations; she expressed few common courtesies, made few positive self-disclosures, asked few questions, and made few conversational interjections or acknowledgments. Training resulted in gains on all four components. For both subjects, observed gains were maintained well over time. In addition, these gains were associated with untrained observers' judging the subjects as significantly more conversationally skillful after training.

Gains were observed as a function of training with Subjects 3 and 4, but on a much smaller scale. For both subjects, gains on only one of the trained components (common courtesies) were evident at follow-up; in addition, neither subject's role-play from final training phase sessions was judged by untrained observers to be more skillful than baseline performances.

It is encouraging that the two subjects who showed marked behavioral improvement (Subjects 1 and 2) were judged by untrained observers as having become more conversationally skillful over time. In addition to validating the training program content, these data suggest that altering qualitative features of elders' conversations can result in their being perceived more positively. To the extent that such perceptions do actually influence how, and how much, friends and relatives in the community continue to interact with institutionalized elders, these data are suggestive of ways to prevent and reverse institutionalized elders' social isolation from the community.

We hoped that increased telephone conversational skillfulness would lead to increased telephone contact with friends or relatives living in the community. However, subjects reported having no calls either to or from friends or family. This finding may be partially explained by the fact that these particular subjects knew almost no one in the community whom they could call. Informal staff reports did suggest, however, that Subjects 2 and 3 did become slightly more sociable as a function of training. Several staff noted that Subject 2 appeared to be in a happier mood, often greeting the staff and asking conversational questions where she had not previously done so. Even more striking were changes seen in Subject 3. Prior to training, Subject 3 typically isolated himself in his room. By the middle of training, he was more frequently seen outside of his room, either walking through the corridors or sitting in the main common area. After training, Subject 3 participated in a field trip to a local park; this was the first field trip in which any of the staff could remember Subject 3 participating.

This study has several limitations. For example,

intervention effectiveness was demonstrated clearly with only two of the four subjects. Also, the length of time over which the maintenance of gains was evaluated was relatively short. Most importantly, the changes that were observed were limited to role-play performances; it would have been preferable to document effects during natural telephone conversations.

Nonetheless, this study does contribute to the growing literature demonstrating that behavioral procedures known to be effective with younger populations can also be used effectively with older ones (cf. Hussian & Davis, 1985; MacDonald, in press). In addition, this study illustrates that behavioral interventions can effect change in the more subtle, qualitative—as opposed to more obvious, quantitative—features of elders' interactions (cf. Carstensen, 1986), at times even when those elders are quite impaired.

Additional work is needed, both to confirm results obtained in this study and to establish what parameters influence the effectiveness of skills training with socially isolated, impaired elders. Also, to increase the practical effectiveness of skills training with elders whose social isolation has advanced to the point of being cut off from the community, it might be beneficial to pair training with adjunct interventions designed to link elders with family and old, or even new, friends living in the community.

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