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IMPROVING COMMUNICATIVE COMPETENCE:
VALIDATION OF A SOCIAL SKILLS TRAINING WORKSHOP

THESIS

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The effectiveness of a social skills training workshop was assessed by comparing the rated competence of participants in an Interpersonal Skills Training Program (a 2-session, 12-hour workshop) to the rated competence of nonparticipants. This comparison was operationalized through a study design of the pre- and posttesting of 12 experimental and 22 control subjects. The assessment instruments used were Spitzberg's Conversational Skills Rating Scale (CSRS) and Curran's Simulated Social Interaction Test (SSIT). Two rating judges were utilized. Results, although modest, are in the expected direction. Measured competence on the CSRS failed to show significant improvement in the rated competence of the experimental group as compared to the rated competence of the control group. However, the SSIT did reveal significant improvement of the rated skill and anxiety of experimental subjects while the control group showed no significant improvement. In addition to assessing the effectiveness of the workshop, this study sought to find a positive correlation of the CSRS instrument to the SSIT instrument. As expected, the CSRS showed a positive correlation to the SSIT.

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IMPROVING COMMUNICATIVE COMPETENCE: VALIDATION OF A SOCIAL SKILLS TRAINING WORKSHOP

There is little disagreement about the importance of social interaction in human activities. Because most human activities involve some kind of social interaction, the ability to manage one's conduct and communication in social contexts is crucial for producing interpersonal success. Social dexterity enables an individual to interact successfully and manage communication behavior appropriately in a variety of contexts and conditions.

Social skills training has developed with a fairly narrow focus on ameliorating constraining factors of effective social interaction. Training programs traditionally have emphasized areas such as lack of assertiveness, shyness (e.g., inadequate dating), social anxiety, and inadequate social behavior due to psychological impairments (e.g., mental retardation) and institutionalization. However, social skills training has remained focused on skills deficits or anxiety (Ladd & Mize, 1983).

Social skills training has been a topic for research for decades; as yet, however, there has been little agreement on the most effective model for training programs. Different grounding theories of learning lead to very different skills training programs (Ellis &

Whittington, 1981). Recently, training programs with eclectic learning approaches have increased in popularity (Kurtz et al., 1985). These social skills training programs are combining role-playing, modeling, cognitive restructuring, and behavioral conditioning with successful results, at least for short-term changes in behavior (Ellis & Whittington, 1981). However, while the eclecticism in social skills training shows promise for the successful transfer of learning, there is a distressing lack of conceptual coherence upon which to build and validate social skills training programs.

The relational competence model developed by Spitzberg and Cupach (1984) offers a potential solution to this lack of conceptual coherence. Their model of relational competence is organized around three components: motivation, knowledge, and skill. If eclectic learning activities can be organized according to the three components of relational competence and interpersonal skills are positively affected, a major step will have been taken in validating a unifying framework for social skills training.

Purpose

The effectiveness of workshops based on a comprehensive model of communication competence is untested. This study has tested the effectiveness of a social skills workshop based on a comprehensive model of

communication competence by examining the workshop's effects on the ratings of participants' interpersonal competence as determined through a pre- and postassessment and a comparison to a control group of workshop nonparticipants.

The primary thrust of this study has been to examine the efficacy of an interpersonal skills training program (ISTP). In order to address this issue, the validity of the measures used for assessment is first necessary. If the Conversational Skills Rating Scale (CSRS) and Simulated Social Interaction Test (SSIT) are valid measures of interpersonal skill, they should be positively correlated to each other.

Hypothesis 1: The Conversational Skills Rating Scale (CSRS) will show a positive correlation to the Simulated Social Interaction Test (SSIT).

Presuming that there is validity for the CSRS and SSIT, the expectation follows that subjects receiving training in interpersonal skill will show significant and positive improvement relative to subjects receiving no training.

Hypothesis 2: Participants in an interpersonal skills training program will show significant positive improvement in their rated interpersonal skills, while a control

group of subjects not participating in the training program will show no significant change in their rated interpersonal skills.

Significance of the Study

As the practice of social skills training proliferates, it is vital that an approach toward interactive skills and skills learning be operationalized and proved effective. Because social skills training models have become more eclectic in recent years, it seems an important research priority to validate such training approaches. If an eclectic skills workshop can produce significant improvement in interpersonal competence, fidelity to a "pure" learning theory becomes less important to the acceptability of a training program.

In addition, since the workshop in this study does indeed show significant improvement for the participants' rated communication behavior, it has added validity to the framework of social skills as put forth in the conceptualization of communication competence.

Scope of the Study

The focus of this study has been on determining the effectiveness of a two-session, 12-hour workshop designed to improve communication competence in college students who have received a low interpersonal competence rating in the basic communication course at North Texas State University.

Main consideration has been given to the training model, study design, and assessment procedures. Follow-up measurements or generalization effects are beyond the scope of this study.

A review of relevant literature, which follows, covers the nature of social skills, the concept of communicative competence, and a background of social skills training. The "Method" section discusses the study design, selection of subjects, choice of assessment instruments, and raters. The "Results" section presents the statistical findings and is followed by more in-depth analysis in the "Discussion" section.

Review of the Literature

The Nature of Social Skills

The term "social skills" is a common one and refers to general social interaction skills such as conversing with others or "getting along" with people. More formally, social skills are "identifiable, learned behaviors individuals use to obtain or to maintain reinforcement from their environment" (Kelly, 1982). Because it is impossible to exist and function in a culture without interacting socially with others, ineffective communication almost inevitably leads to problems. Spitzberg (1985) summarizes research showing social and communicative skills as causal factors in the etiology and/or maintenance of various

psychosocial disorders such as delinquency, mental illness, depression, social anxiety, and loneliness.

While the concept of social skills is rarely given adequate attention in research studies, Spitzberg and Cupach (1984) offer a comprehensive conceptualization of social skills and refer to it as communication competence. Because competence is a quality perceived by others, it is a relational concept:

Relational competence can be defined conceptually as the extent to which objectives functionally related to communication are fulfilled through cooperative interaction appropriate to the interpersonal context. Therefore, relationally competent communication is conceptualized as a function of perceived appropriateness and effectiveness (p. 100).

Social skills deficits. Training programs have generally focused on facilitating improvement of participants' social behavior and extinguishing ineffective behaviors. Some training programs have addressed shyness or heterosexual-social anxiety. Other training programs have achieved wide popularity in a specific remedial area, e.g., assertiveness training. Still other training has focused on improving psychiatric patients' and mentally retarded individuals' abilities to function more effectively in society and to be more self-reliant. Because social skills training is an arena for instructing

and learning, the learning theories have been major influences on how the causes for inappropriate and ineffective communication behaviors are identified for treatment, and how the transfer of learning is facilitated (Ellis & Whittington, 1981).

Etiology of social skills deficits. One cause of ineffective social behaviors has been identified as heterosexual-social anxiety (Curran, 1977). Because there are potentially stressful social situations that some individuals find difficult to manage with finesse, such social encounters (e.g., dating) can produce interpersonal performance anxiety, inhibiting effective social behaviors. Curran specifies three major concepts for the cause and maintenance of heterosexual-social anxiety: 1) conditioned anxiety, 2) skills deficits, and 3) faulty cognitive evaluative appraisal. Clark and Arkowitz (1975) have shown that conditioned anxiety can influence subjects' attributions of their own behavior. An inadequate or inappropriate behavioral repertoire is another cause of anxiety; anxiety occurs due to the reactions to perceiving few behavioral options in preventing negative social outcomes. Anxiety can also be maintained by a person's faulty self-statements that negatively evaluate his or her performance and project negative consequences.

Cognitive approaches to identifying the causes of social skills deficits point to a lack of skills that leads

to ineffective social interaction. Twentyman and Zimering (1979) caution against assuming that a client has effective social skills that are prevented from performance by the client's anxiety; in reality, effective skills may not exist at all in that client's repertoire. For that client social skill training would consist of increasing his or her knowledge of appropriate behaviors to facilitate more effective social interaction.

It is evident that anxiety, lack of knowledge and/or an inadequate social skills repertoire affects an individual's performance in social situations. Therefore, a learning theory which includes both motivational and information-processing elements would allow the utilization of both elements in training situations. Bandura's social learning theory (1977) offers a unifying approach to social skills training. Anxiety in performance of social behaviors can be addressed as needed, in combination with providing new information regarding effective social behaviors.

The Nature of Social Skills Training

Social skills training programs as remedies for ineffective communication behaviors fall into two categories of training rationale: 1) response practice approach and 2) response acquisition/skill deficit approach. The first approach, response practice, is represented by training programs that assume clients have

an adequate behavioral repertoire and only need practice in order to employ or improve those skills (Curran, 1977). Response practice training focuses on exposing clients to appropriate situations and facilitating the reduction of performance anxiety so that approach behavior will increase.

Response acquisition approaches to social skills training are based on a "deficit hypothesis" and focus on improving social interaction. Ladd & Mize (1983) identify three types of skills deficits that influence training programs for children: 1) lack of knowledge, 2) lack of behavioral abilities, and 3) deficiency in self-feedback. These three types of deficits correspond to social skills training methods that utilize information exchange (through lectures, modeling), behavioral practice (e.g., role-plays), and feedback about performance (e.g., from peers, videotape viewing) (Twentyman & Zimering, 1979).

Training methods incorporated into social skill training models reflect how trainers approach the process of learning (Kurtz et al, 1985; Ellis & Whittington, 1981). Ellis and Whittington (1981) present four paradigms for skills acquisition that have influenced the evolution of social skills training.

The conditioning paradigm is represented in social skills training as behavior modification and includes Pavlov's classical conditioning and Skinner's operant

conditioning. Social skills training has its historical roots in conditioning via early assertiveness training programs where skills (molar) were reduced to more easily acquired subskills (molecular).

The second influence, the cybernetics paradigm, is based on cognitive learning theory. Training occurs through the emphasis on "planned control of behaviour and upon the modification of plans (strategic or tactical) in the light of environmental feedback or knowledge of the results of action" (Ellis & Whittington, 1981). Skill acquisition is explained in cognitive terms and the influence of internal events is inferred. This paradigm also assumes that even negative feedback can be useful and that knowledge of results can be motivating.

The experiential paradigm is the third approach to social skills training and represents training activities such as role-plays and psychodrama which are common practice components of social skills training. In this paradigm, trainees develop their own unique set of responses to a meaningful set of problem situations; they learn by experience and discovery.

The fourth and final model is the teleological paradigm. The assumption in this approach is that the commitment to the goals (ends) sought "will automatically generate effective means". If inordinate focus is placed on the means, pursuit of the goals can be ineffective. The

teleological paradigm has had only minor impact on social skills training -- except, perhaps, in the area of assertiveness training models where discussion is conducted concerning the differences between assertive and aggressive behavior and what "rights" individuals have.

The Trend Toward Eclectic Models

In recent years, more and more training programs are appearing where no coherent training model is specified or a combination of different training methods is being used (Kurtz et al., 1985). In the field of training counselors to be more empathic and to increase their interpersonal communication skills, eclectic training models dominate. Ladd and Mize (1983) indicate that social skills training programs utilize a combination of components from different learning theories:

Modeling procedures tend to be constructed from social learning theory, shaping procedures from operant conditioning paradigms, and coaching procedures from either social learning or information-processing theories (p. 129).

The impact of Bandura's social learning theory on the new eclectic social skills training programs is becoming more and more apparent, especially where instruction/knowledge, modeling, coaching, role-play, and feedback (all learning components of social learning theory) are included as training components. In social skills training studies

since 1980, every training program included modeling, role-play, or both. These eclectic training programs cover a broad range of social skills: assertiveness (Berah, 1981; Hammond & Oei, 1982; Kazdin & Mascitelli, 1982; McGuire & Thelen, 1983; McIntyre et al., 1984), anger reduction (Moon & Eisler, 1983), and job interviewing (Heimburg, 1982; Harrison et al., 1983).

Despite the proliferation of eclectic training programs and the encouraging results of those efforts, there is a growing need to identify and "make explicit models of skill learning that can be used as guides for the formulation of more complete, theoretically consistent training procedures" (Ladd & Mize, 1983).

Because Bandura's social learning theory is somewhat "eclectic" in nature, blending behaviorist reinforcement theory (e.g., feedback) and purposive cognitive psychology (Bigge, 1982), it appears to be a strong candidate for resolving the theoretical chaos of eclectic social skills training models. In addition, the model of relational competence incorporates components that correspond with the processes of social learning theory (motivation/anxiety, knowledge/information-processing, and skills/behavioral deficits). Thus, a social skills workshop organized according to Spitzberg and Cupach's model of relational competence would offer an ideal opportunity to study the effectiveness of these training methods and theories.

Method

Background

At North Texas State University, the basic communication course is required for all majors in Business and Education, and is part of the distribution requirement for Arts & Sciences. One of the graded components of the course is a rating of students' conversational competence.

It has been a goal of the Division of Communication and Public Address to supplement the graded activity by offering extracurricular remedial workshops, known as Interpersonal Skills Training Program (ISTP), to those students who receive low ratings on the interpersonal competence activity by their instructor. These ISTP workshops have been projects of communication graduate students either in a formal graduate course or in independent study. However, ISTP workshops are now offered under the aegis of the university through the counseling center, along with other training programs such as assertiveness or writing.

In the fall of 1985 such an interpersonal skills training workshop was conducted. That workshop provided an ideal opportunity to test the effectiveness of its eclectic training model on the participants' resultant rated competence.

Study Design

In order to determine what improvement, if any, such a workshop could facilitate, a pre- and posttest design with an experimental group of participants and a control group of nonparticipants was chosen. Such a design would provide relatively unambiguous results with clear comparisons of posttest ratings of competence to the pretest ratings, as well as a comparison of the experimental group to a control group. Isolation of observed differences would therefore be enhanced.

Selection of Subjects

Since this study required both experimental and control subjects, study subjects were recruited from 38 sections of the basic communication course. In addition to the experience of participating in an interpersonal skills training program, a regraded interpersonal competence activity served as an incentive. Students who qualified for workshop participation but could not attend served as a nonworkshop control group and received a fixed number of extra points. The stipulations were that, in order to receive any credit, workshop participants had to attend (1) the preassessment session, (2) BOTH workshop sessions, and (3) the postassessment session; nonparticipants had to attend both the pre- and postassessment sessions in order to receive any extra grade points.

At the beginning of subject recruitment, qualification for study participation (whether as experimental or as control) was set to a rating limit of approximately 60% of the possible classroom competence grade. However, due to high classroom grades for most course students, the qualification level had to be raised to 85% of the grade in order to increase the number of qualified subjects to obtain a higher sample size. This restriction in range may have limited the magnitude of potential change of the assessment. The final tally of workshop participants completing both training sessions and completing the pre- and posttest videotaping was 12; nontreatment control subjects, 22.

All workshop participants (experimental group) and nontreatment volunteers (control group) were videotaped in dyadic conversations and in simulated role-plays individually. Videotaping of experimental subjects and controls was done the week preceding and the second week following the workshop; a period of three weeks separated the pretest session and the posttest session.

There were no restrictions imposed on subject combinations in the dyadic conversations. Conversation pairs consisted of a variety of experimental and control subject combinations: experimental/control, experimental/experimental, and control/control. Matching was based entirely upon the subjects' signing up for pre-

and posttest time slots consistent with their individual schedules.

After all subjects were videotaped in chronological order (pre- and posttest), rating tapes were then engineered from the master tapes. Dyadic conversations and role-plays were separated and rerecorded on different videotapes. All conversations were thus rerecorded, mixing pretests and posttests, on videotapes for conversation rating purposes; likewise, all role-plays were similarly mixed and rerecorded for role-play rating purposes.

Assessment Instruments

Three communication competencies widely accepted as essential in human learning are listening, public speaking, and conversational (interpersonal) skills (Spitzberg & Hurt, 1985). In his analysis of social skills measures, Spitzberg (in press) has identified and reviewed 138 measures, all of which fall into one of several categories. Such diversity of assessments makes it clear that there is a need for a flexible and convenient perceptual measure of skills.

For the assessment of the social skills or communication competence of videotaped subjects, the ideal measurement required should be simple and uncomplicated yet valid and reliable enough to assess communication competence accurately. The Conversational Skills Rating

Scale (CSRS) (Spitzberg & Hurt, 1985) met this need (see Appendix A).

CSRS. Developed initially through pilot studies and literature search, molecular-level, discrete behaviors that can be observed and rated (Spitzberg, 1985) comprise 25 of the 30 items on the CSRS. The skill items identified on the CSRS include such behaviors as "use of eye contact;" "vocal volume (neither too loud nor too soft);" "asking of questions." The remaining five items are molar-level evaluations of overall conversational skill, expressiveness, altercentrism, composure, and appropriateness/effectiveness. The 30 items are rated on a 5-point Likert-type scale, anchored as follows: 1 = INADEQUATE (use was awkward, disruptive, or resulted in a negative impression of communicative skills); 3 = ADEQUATE (use was sufficient but neither very noticeable nor excellent. Produced neither positive nor negative impression); 5 = EXCELLENT (use was smooth, controlled, and resulted in positive impression of communicative skills).

In addition to providing diagnostically useful assessment of 25 molecular conversation behaviors and 5 molar competence ratings, the CSRS is self-explanatory and easy to use by untrained raters.

Spitzberg and Hurt (1985) assessed the CSRS both as a self-report measure and as an observational measure of in-class student "get-acquainted" conversations. The

results of that study validated the reliability, convenience and powerful relationship of the behavioral items to the molar ratings of interactants' communicative performance.

SSIT. In addition to ratings of 25 molecular behaviors provided by the CSRS, another measure was desired to serve as a comparison for the CSRS. Curran's (1982) Simulated Social Interaction Test (SSIT), a proven role-play instrument, was chosen because of its empirical validity and for its ease of administering. Careful training can ensure high interrater reliability for judges.

The SSIT is composed of a role-play orientation narrative (see Appendix B) and a script of eight problematic situations (see Appendix C) that are presented to individual subjects who respond verbally in role-play fashion. The eight role-play situations consist of three parts: the narrator describing the situation; a confederate delivering the situational prompt; and the subject's response to the prompt. The eight situations address situations many people have trouble with, e.g., dealing with disapproval or criticism, expressing interpersonal warmth, and receiving compliments. For example, the situation dealing with disapproval or criticism is set up for the respondent as follows:

NARRATOR: You are at work, and one of your bosses has just finished inspecting one of the jobs that you have completed. He says to you:

CONFEDERATE: "That's a pretty sloppy job. I think you could have done better."

The subject then responds to the confederate's remark as if he or she were actually in that situation, e.g., "I'm sorry. In what way did I" Raters make molar evaluations on an 11-point Likert-type scale the subject's response to each situation on two dimensions: social skillfulness and anxiety (see Appendix D).

For this study, both experimental and control subjects were videotaped and given the SSIT individually before the workshop and after (pre/post); the researcher served as both the narrator and as prompt confederate.

The SSIT has been thoroughly tested (see Curran, 1982). The eight situations have good generalizability "to a universe of similar brief scenes differing in content". Curran also demonstrated that the SSIT has differentiated contrasting groups (i.e., normal vs. psychiatric patients). In his review of competence measures, Spitzberg (in press) indicates that the SSIT is one of the best validated measures available.

Raters

It was decided that raters should be individuals with advanced knowledge in interpersonal communication, in order

to facilitate orientation to the study. Since the CSRS is one of the grading forms used in the basic communication course, instructors of the course are already fluent in using it as an observation rating for their students' communication competence activity. Instructors could be solicited as raters for this study. However, due to the time demands of serving as a rater for this study, few of these graduate student/teaching assistants were free enough to volunteer 20 hours of their valuable time to be trained to use the SSIT and to rate subjects. If interrater reliability were controlled, two raters could provide the necessary ratings.

Because of this familiarity with the CSRS, rater training could be streamlined and compressed to address the SSIT ratings solely. One training session was conducted utilizing the following training components:

- (a) familiarization with the SSIT role-play situations;
- (b) criterion behaviors provided as behavioral observation anchors;
- (c) videotaped sample role-plays utilized as practice; and
- (d) discussion and comparison of ratings.

After the two rater trainees were familiarized with the text and format of the SSIT role-plays, previously identified criterion behaviors were discussed in order to anchor judges' perceptions of subjects' skillfulness and anxiety behavior. The criterion behaviors identified for

The rater trainees then viewed two sample videotaped SSIT role-plays and practiced rating the subjects. Under the guidance of this researcher, the raters then compared their ratings for the two subjects and discussed similarities and disparities in their rating perceptions. Negotiations were encouraged in order to facilitate commonality of ratings. A third videotaped practice role-play was rated and again discussed afterward. Rater agreement improved acceptably on the third rating. Percentage of near-agreement of the SSIT items on the first two practice ratings averaged about 63%, improving to 81% agreement on the third one, after thorough discussion and negotiation of criterion behaviors.

Considering the similarity of the two raters' graduate and teaching experiences, and the positive outcome of the intensive training session, rater agreement ranging between 70% and 80% was expected.

Results

The average construct scores are examined first; that is, the ratings by the two raters on the major variables are summed and divided by two to provide a mean construct rating. In cases where these findings do not meet with expectations, or are anomalous, individual rater analyses are performed. It is hoped that by examining the individual raters in such cases the reasons for the anomalous results can be elucidated.

Reliability

Interrater reliability was assessed by Pearson correlations between raters' scores on the CSRS, SSIT/skill, and SSIT/anxiety constructs. Coefficients, shown in Table 1, are low in spite of preliminary rater training and indications in prior research that the SSIT should have achieved higher coefficients (Curran, 1982). Despite these discouraging results, there are several reasons to continue analysis. First, published research has reported lower reliabilities for subjective rating instruments (e.g., Waltz & Gough, 1984). Second, for exploratory purposes, results should still be examined to determine if there is reason for further research. Third, to the extent that significant results are found despite rater disparities, we can conclude that the constructs studied are powerful enough to overcome these statistical problems. And last, given that validity is ultimately a more important question than reliability, experts have recommended using averaged scores to enhance both the reliability and validity of ratings (Strahan, 1980; Horowitz et al., 1979).

Internal consistency of the measure was assessed by the coefficient alpha reliability. Since this statistic is a function of sample size, the coefficient produced can be considered an extremely conservative estimate of internal reliability. The CSRS produced coefficients for the pre-

and posttest conditions for Rater 1 of .75 and .85, respectively. The CSRS coefficients for pre- and posttest conditions for Rater 2 were .78 and .86, respectively. The higher coefficient for the posttest condition suggests a possible learning effect in using the SSIT.

Examination of the coefficient alpha for the SSIT is more complicated. In addition to having a small sample, broken down on the subscales, the SSIT constructs of skill and anxiety consist of only eight items each. Since coefficient alpha is a function of the number of items, the coefficients produced are certainly deflated. Table 2 displays the coefficient alpha for the SSIT skill and anxiety constructs broken down by rater and condition. Interestingly, opposite learning effects seem to have occurred by the raters. Rater 1 appears to have become less reliable whereas Rater 2 became more reliable.

Validity

Support was found for Hypothesis 1; the CSRS instrument correlated positively to the SSIT instrument ($r=.55$, $p<.01$). It is interesting to note that, in addition to the extensive research literatures supporting both the CSRS and SSIT, the averaged CSRS competence pretest ratings were significantly related to SSIT/skill posttest ratings three weeks later ($r=.55$, $p<.01$) and to SSIT/anxiety pretest ratings ($r=.67$, $p<.001$). This provides evidence of the utility of the CSRS instrument.

Table 1
Interrater Correlation Coefficient Assessed
by Simple Pearson Correlation

Variable	Coefficient	Significance
CSRS		
Pretest	.53	.01
Posttest	.54	.01
SSIT/Skill		
Pretest	.53	.001
Posttest	.56	.001
SSIT/Anxiety		
Pretest	.53	.001
Posttest	.58	.001

Table 2
Coefficient Alpha for the SSIT
by Rater and Time

SSIT Dimension	Rater 1	Rater 2
Skill		
Pretest	.79	.67
Posttest	.68	.81
Anxiety		
Pretest	.79	.65
Posttest	.73	.82

As would be expected, SSIT/skill pretest ratings are significantly related to SSIT/anxiety pretest ratings ($r=.74$, $p<.001$), SSIT/skill posttest ratings ($r=.45$, $p<.01$), and SSIT/anxiety posttest ratings ($r=.48$, $p<.01$). CSRS competence pretest ratings are substantially related to CSRS competence posttest ratings ($r=.78$, $p<.001$).

In short, the constructs appear to be relating to one another in ways that would be expected and, in some cases, reveal impressive power for such a small sample.

Test of the Workshop

The essential purpose of this study was to assess the effectiveness of an interpersonal skills training program (ISTP). To determine this, three constructs were used as dependent variables: CSRS ratings, SSIT/skill ratings, and SSIT/anxiety ratings. As mentioned above, these constructs are averaged across raters except in instances where results are counterintuitive. The expectation for these constructs was that each would show significant increases in the experimental (ISTP) condition but not in the control condition.

Hypothesis 2 was partially supported. CSRS ratings, shown in Table 3, did not reveal a significant change in the experimental or control conditions. The female experimental subjects have some improvement over the control, while male experimental subjects do not; Figures 1 and 2 illustrate this disparity.

In order to assess the reason for observing no significant change in the experimental condition, an analysis of rater differences in the CSRS is performed; Table 4 shows the results. Raters 1 and 2 varied significantly in their ratings of the experimental group; Rater 1 found no significant difference in those subjects' behavior in a pre/posttest comparison. On the other hand, Rater 2 did indeed perceive significant change in the experimental subjects' behavior in the CSRS pre/posttest comparison. In short, it appears that Rater 2 clearly perceived positive improvement in workshop subjects, whereas Rater 1 perceived no such change, as assessed by the CSRS instrument. A possible reason for this is addressed in the Discussion section below.

In the examination of the SSIT/skill ratings, results, shown in Table 5, were found that supported the efficacy of the skill training program. Subjects were rated as significantly more skillful in the experimental condition while no change was observed in the control condition.

The SSIT anxiety ratings in Table 6 reveal a similar pattern to the SSIT skill ratings. Subjects in the experimental condition were perceived as significantly less anxious after the workshop, whereas no change was observed in the control subjects.

Analysis of variance using the SSIT/Skill posttest ratings as the dependent variable crossed by condition and

Table 3

Correlated T-Tests Comparing Pre- and Posttest
Competence Ratings in the Experimental
and Control Groups

	<u>Experimental</u>		<u>Control</u>	
	<u>Pre</u>	<u>Post</u>	<u>Pre</u>	<u>Post</u>
Sample Means	51.69	53.88	50.13	50.05
S.D.	3.62	5.59	5.33	6.64
S.E.	1.28	1.98	1.38	1.71
t Value		-1.57		0.08
p		.16		.94
n		8		15

Table 4

Correlated T-Tests Comparing Pre- and Posttest
Competence Ratings by Raters

	<u>Rater 1</u>		<u>Rater 2</u>	
	<u>Pre</u>	<u>Post</u>	<u>Pre</u>	<u>Post</u>
Means	50.38	51.38	51.80	56.60
S.D.	3.19	5.66	6.61	7.39
S.E.	1.13	1.20	2.09	2.34
t Value		-0.41		-3.52
p		.689		.006
n		8		10

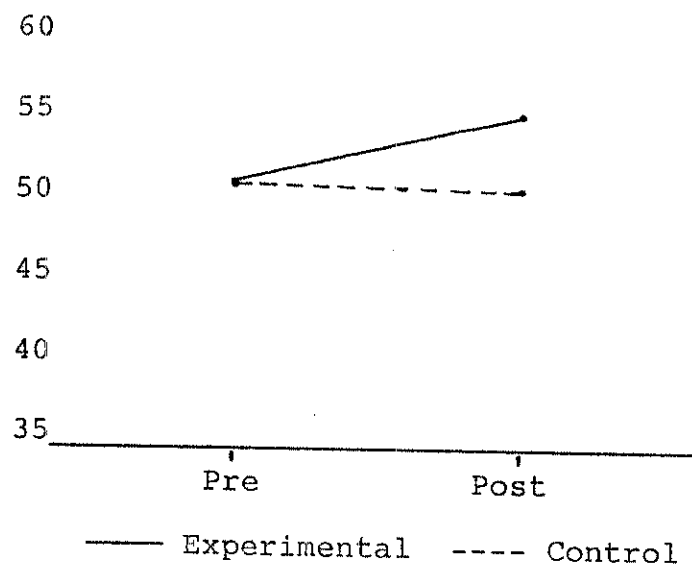


Fig. 1--A comparison of CSRS mean ratings of female subjects.

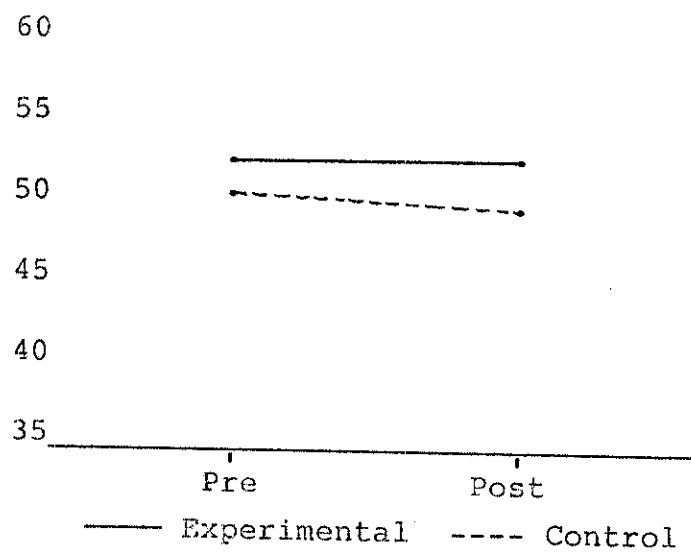


Fig. 2--A comparison of CSRS mean ratings of male subjects.

Table 5
Correlated T-Tests Comparing Pre- and Posttest
SSIT Skill Ratings in the Experimental
and Control Groups

	<u>Experimental</u>		<u>Control</u>	
	<u>Pre</u>	<u>Post</u>	<u>Pre</u>	<u>Post</u>
Sample Means	42.59	54.41	47.05	47.68
S.D.	10.09	7.52	8.92	11.46
S.E.	3.04	2.27	1.99	2.56
t Value		-3.93		-0.32
p		.003		.752
n		11		20

Table 6
Correlated T-Tests Comparing Pre- and Posttest
SSIT Anxiety Ratings in the Experimental
and Control Groups

	<u>Experimental</u>		<u>Control</u>	
	<u>Pre</u>	<u>Post</u>	<u>Pre</u>	<u>Post</u>
Sample Means	44.09	52.55	45.18	45.97
S.D.	9.01	4.66	7.99	9.87
S.E.	2.72	1.40	1.83	2.26
t Value		-3.49		-0.54
p		.006		.595
n		11		19

sex reveals an interaction effect. While condition produced a nonsignificant main effect and sex a significant main effect, the variables reveal a significant interaction effect, explaining almost 22% of the variance ($r=.46$) (see Table 7). Figures 3 and 4 illustrate comparisons of SSIT skill mean ratings by treatment condition and sex of subjects.

Using the SSIT/Anxiety posttest ratings as the dependent variable crossed by condition and sex, analysis of variance reveals significant main effects and nonsignificant effects for each of the variables in isolation and interaction. The overall model approaches significance and explains a substantial amount of variance ($r = .21$) (see Table 8). Figures 5 and 6 illustrate comparisons of SSIT anxiety mean ratings by treatment condition and sex of subjects.

Discussion

The purpose of this study has been to determine if an interpersonal skills training program (ISTP) would facilitate significant improvement in participants' interpersonal skills or competence. For the most part, the results have proved that this training program has indeed shown effectiveness, despite some reliability problems.

Rater Differences

Although reliability coefficients were far below the .70 level anticipated for this study, there is

Table 7

Analysis of Variance of SSIT Skill
Posttest Ratings Crossed by
Condition and Sex

	<u>Sum of Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Main Effects	763.334	2	381.667	4.52	.02
Condition	196.667	1	196.667	2.33	ns
Sex	375.456	1	375.456	4.45	.04
Interactions	345.455	1	345.455	4.10	.05
Explained	1108.790	3	369.597	4.38	.01
				$r^2 = .22$	
				$r = .46$	

Table 8

Analysis of Variance of SSIT Anxiety
Posttest Ratings Crossed by
Condition and Sex

	<u>Sum of Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Main Effects	503.641	2	251.820	3.75	.04
Condition	190.924	1	190.924	2.84	ns
Sex	166.779	1	166.779	2.48	ns
Interactions	39.431	1	39.431	0.59	ns
Explained	543.071	3	181.024	2.70	ns
				$r^2 = .21$	
				$r = .46$	

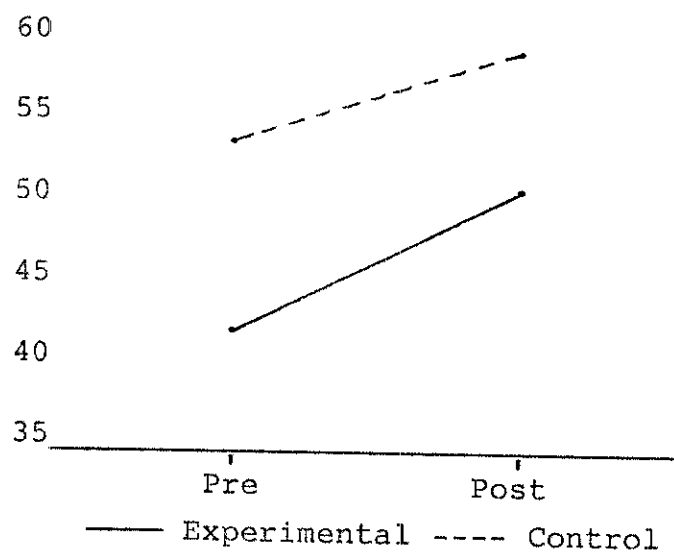


Fig. 3--A comparison of SSIT skill mean ratings of female subjects.

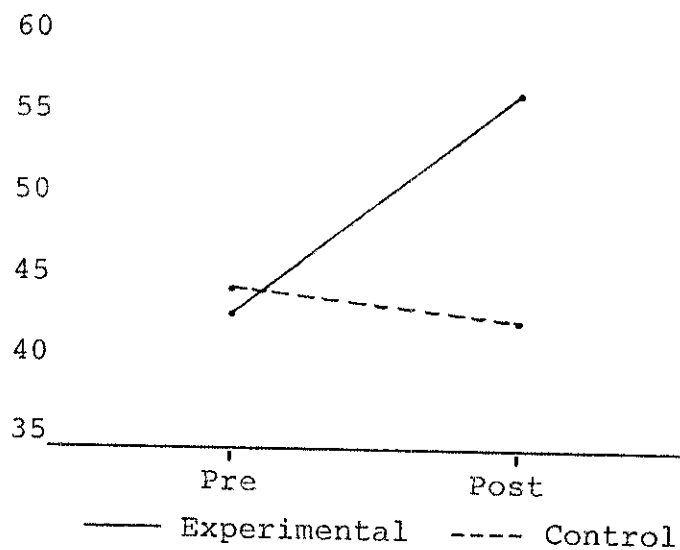


Fig. 4--A comparison of SSIT skill mean ratings of male subjects.

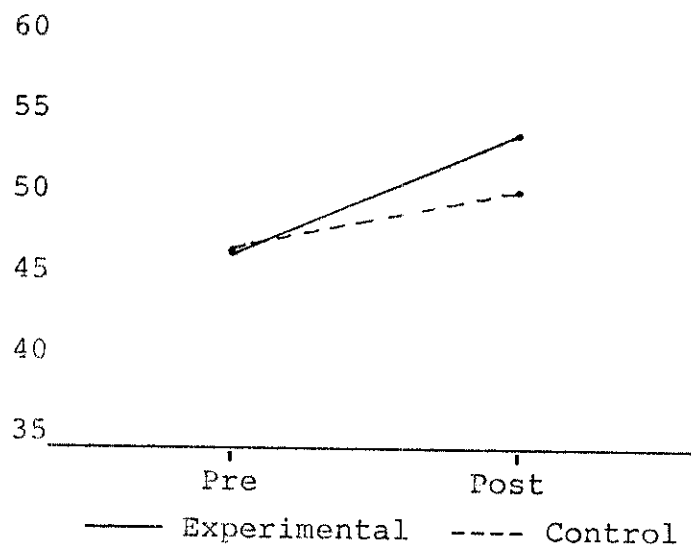


Fig. 5--A comparison of SSIT anxiety mean ratings of female subjects.

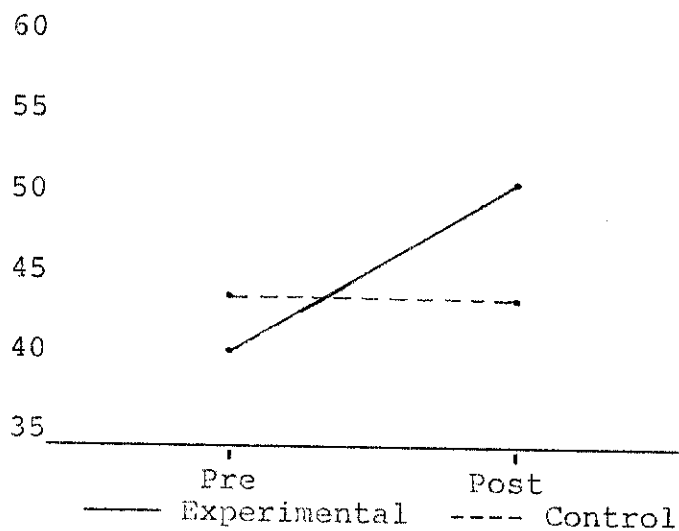


Fig. 6--A comparison of SSIT anxiety mean ratings of male subjects.

encouragement that these low coefficients can be improved substantially with more rigorous rater training.

In contrast to the rater training in this study, Curran (1982) trained raters in the following method. Communication specialists as well as lay people were employed to participate as judges and were thoroughly trained. Training procedures included viewing bogus-subject role-plays, followed by practice ratings, viewing the taped role-play again with added criterion ratings (obtained previously by senior members of the research team) for comparison with their own ratings for calibration purposes. The tapes also explained the rationale for the criterion ratings. After viewing the practice tape, judges then spent 12 hours rating practice tapes, during which sessions, judges announced and discussed their ratings and rationales. Only judges with a degree of agreement with the criterion rating of .80 or better were selected to rate the experimental tapes.

The rating of the experimental tapes was conducted formally, with the sessions proctored by a research team member. After each rating, judges announced their ratings, criterion feedback was given, and judges were then prevented from changing their ratings. The result of the training procedures described above lead to high interrater reliability and agreement with criterion ratings.

Unfortunately, such a pool of volunteer (or paid) judges is not always feasible due to the extreme time demands of such participation or to budgetary limitations. In the case of this study, graduate students in communication management were limited in number, and few, if any, had spare time to devote to rating approximately 15 hours of experimental material, even with remuneration. However, two graduate students in communication management volunteered to be raters for this project. Therefore, one 5-hour training session was designed to anchor behavioral criteria for the SSIT ratings, and interrater reliability was close to .70 at the end of that training session.

Because both volunteer raters were also teaching assistants in the department, as discussed earlier, they were already familiar with the CSRS instrument. Extensive rater training in the CSRS has been an integral component of teaching assistants' training each fall. Previous studies validating the CSRS instrument (Spitzberg & Hurt, 1985; Spitzberg, 1985; Spitzberg, 1986) have found generally high interrater reliability, localizing rater differences.

Unfortunately, despite ratings of significant improvement in the experimental group as compared to the control group on the SSIT by both raters, the CSRS ratings proved contradictory to expectations: Rater 1 observed no

significant improvement in either experimental or control group subjects, while Rater 2 did observe significant improvement in the experimental group but not in the control group.

Several factors could be contributing to such disparity. One factor that stands out is that the two raters were perceiving subjects' behavior differently. In fact, some items reveal an inverse relationship: the higher one rater scored the behavior, the lower the other rater scored it. This phenomenon occurred on only a few, isolated items, but it is perplexing nonetheless, considering the raters' common teaching experience.

Another factor that could have contributed in the rater differences is that, although both raters were peer teaching assistants, the raters participated in different teaching assistant training programs (one year apart). The training methods and criterion behaviors utilized in the two different sessions to anchor ratings on the CSRS could very well have been substantially different to cause lower coefficients. It is even possible for each rater to be highly correlated with his own training group, yet not significantly correlate with another teaching assistant from another training group. It would be interesting to see how well individuals with no specialized knowledge in interpersonal communication might correlate with one

another with training similar to that in this study. Curran (1982) had success with such raters.

Finally, the measures used in this study are subjectively scaled instruments, and the criteria for judging competence are inherently subjective. Consequently, high reliability is not expected. Therefore, averaged scores are more consensual in the present study.

Effectiveness of the Workshop

Despite the problems with interrater reliability, the results show improvement of the experimental group subjects in comparison to the control group subjects. Although the overall CSRS competence ratings indicate no significant change in the experimental subjects, means are in the expected direction. The SSIT skill and anxiety ratings are stronger in showing significant change in the experimental group over the control group.

The results show movement in the expected direction and indicate the potency of the training program to facilitate improvement in participants' rated competence and social skills. By tightening up the rater training component and examining students who are in greater need of training (i.e., with lower baseline skill levels), it seems realistic to expect that the limited improvement of experimental subjects' ratings for this study points to

a stronger showing of improvement in future studies of this type.

An interesting result of the analysis of the SSIT skill and anxiety ratings reveals an interaction effect between males in the experimental condition and males in the control group. There was generally some increase in ratings of the posttest over pretest ratings for both groups of females and for experimental males; yet, control group males' rated skill and anxiety decreased. An explanation could be that the control group males perceived the exercise (pre- and posttesting for extra credit points) as a negative one. Since they had no increase in knowledge about the utility of such an exercise, they may have considered it a waste of their time were it not for their need for the extra credit points. However, due to the small sample size of the experimental-group males ($n=4$), this result must be considered cautiously.

Instrument Validation

Disappointingly, the CSRS instrument revealed a lack of significant results in measuring the experimental group's improvement after attending the workshop. On the CSRS, the raters were perceiving different things in the subjects' behavior. Nevertheless, the CSRS, like all other observation measures, is based on raters' subjective evaluations, and raters apply different standards because

they are individuals. However, the beauty of the CSRS assessment is that it fills an assessment gap by providing specific information that can be diagnosed in almost any interpersonal context; it can be used as a self- or other-reference; and it can be used by trained or untrained raters. The caveat, however, is that the procedures for using it must be critically defined. In fact, Spitzberg (in press) warns "if 'objective' information is desired, rater training and further scaling refinement is likely to be necessary for the raters to provide consistent information."

Regardless of its lack of significant results, the CSRS pretest scores did show a positive correlation with the SSIT/skill posttest scores -- ratings made three weeks later -- as well as with the SSIT/anxiety pretest ratings. This correlation is important because it reveals that the CSRS is doing what it was intended to do -- identifying competent behavior. As it should be, the CSRS is also positively correlated to itself, pretest to posttest. Heeding Spitzberg's caveat about rater training could indeed enable CSRS assessment to be a powerful instrument in measuring behavior comparisons such as this study.

Implications

Methodologically speaking, for study designs like this one to provide more sensitive results, more thorough and highly structured rater training should be emphasized.

More raters are also needed to facilitate higher reliability of the assessment instruments. If the time element is constrained (as it was for this study), using only one measure is recommended.

The workshop schedule itself could be modified. As presented, the workshop took place in two 6-hour sessions, three weeks apart. Dissipation of results of the first session could have occurred in the interim.

The Interpersonal Skills Training Program could easily fill the time requirements for an entire 3-hour university course; perhaps more solid results could be obtained in that way. The workshop as it was conducted in this study was designed and produced by graduate students in fulfillment of a course assignment. Up to now and including the workshop that was measured in this study, there has been no real standard or continuity of design for presenting the workshop since a different group of graduate students individualized it each semester (within the framework of the course guidelines). Now that the ISTP has been approved by the university, the training program's standard protocol should solidify and become more consistent. Future studies such as this one could possibly find stronger and more positive results for program participants.

Summary

This study shows mixed results by instrument and by rater. However, taken as a whole, the data suggest considerable improvement for workshop participants' rated competence. The Interpersonal Skills Training Program offers significant potential for the enhancement of students' skills, as deduced from the improvement of workshop participants' skill ratings on the Simulated Social Interaction Test and, according to one rater's scores, the Conversational Skills Rating Scale.

It is the opinion of this author that better rater training and stricter selection criteria for subject participation (i.e., low competence levels) would facilitate significant, uniform improvement of participants' rated interpersonal skills.

APPENDIX A

CONVERSATIONAL SKILLS RATING SCALE

Subject ID _____ Rater _____

Rate the conversant according to how skillfully he or she used, or didn't use, the following communicative behaviors in the conversation, from:

- 1 = INADEQUATE (use was awkward, disruptive, or resulted in a negative impression of communicative skills)
- 3 = ADEQUATE (use was sufficient but neither very noticeable nor excellent. Produced neither positive nor negative impression)
- 5 = EXCELLENT (use was smooth, controlled, and resulted in positive impression of communicative skills)

Circle the single most accurate response for each behavior:

- | | | | | | |
|---|---|---|---|---|--|
| 1 | 2 | 3 | 4 | 5 | Use of eye contact |
| 1 | 2 | 3 | 4 | 5 | Initiation of new topics |
| 1 | 2 | 3 | 4 | 5 | Maintenance of topics and follow-up comments |
| 1 | 2 | 3 | 4 | 5 | Use of time speaking relative to partner |
| 1 | 2 | 3 | 4 | 5 | Interruption of partner's speaking turns |
| 1 | 2 | 3 | 4 | 5 | Speaking rate (neither too slow nor too fast) |
| 1 | 2 | 3 | 4 | 5 | Speaking fluency (avoided pauses, silences, "uh", etc.) |
| 1 | 2 | 3 | 4 | 5 | Vocal confidence (neither tense nor nervous sounding) |
| 1 | 2 | 3 | 4 | 5 | Fidgeting or playing with things (e.g., pencil, rings, hair, etc.) |
| 1 | 2 | 3 | 4 | 5 | Shaking or nervous twitches (weren't noticeable) |
| 1 | 2 | 3 | 4 | 5 | Posture (neither too closed/formal nor too open/informal) |
| 1 | 2 | 3 | 4 | 5 | Unmotivated movements (avoided tapping feet or fingers, etc.) |
| 1 | 2 | 3 | 4 | 5 | Asking of questions |
| 1 | 2 | 3 | 4 | 5 | Nodding of head in response to partner's statements |
| 1 | 2 | 3 | 4 | 5 | Lean toward partner (neither too far forward nor too far back) |
| 1 | 2 | 3 | 4 | 5 | Speaking about partner (involved partner as a topic of conversation) |
| 1 | 2 | 3 | 4 | 5 | Speaking about self (didn't talk too much about self or own interests) |
| 1 | 2 | 3 | 4 | 5 | Encouragements or agreements (encouraged partner to talk) |
| 1 | 2 | 3 | 4 | 5 | Use of humor and/or stories |
| 1 | 2 | 3 | 4 | 5 | Vocal variety (avoided monotone voice) |
| 1 | 2 | 3 | 4 | 5 | Vocal volume (neither too loud nor too soft) |
| 1 | 2 | 3 | 4 | 5 | Expression of personal opinions (neither too passive nor aggressive) |
| 1 | 2 | 3 | 4 | 5 | Facial expressiveness (neither blank nor exaggerated) |
| 1 | 2 | 3 | 4 | 5 | Use of gestures to emphasize what was being said |
| 1 | 2 | 3 | 4 | 5 | Smiling and/or laughing |

For the next five items, rate the person's overall conversational performance:

- | | |
|--|----------------------------|
| UNSKILLFUL CONVERSATIONALIST: 1 2 3 4 5: | SKILLFUL CONVERSATIONALIST |
| INEXPRESSIVE: 1 2 3 4 5: | EXPRESSIVE |
| INATTENTIVE & UNRESPONSIVE: 1 2 3 4 5: | ATTENTIVE & RESPONSIVE |
| ANXIOUS & NERVOUS: 1 2 3 4 5: | RELAXED & CONFIDENT |
| INAPPROPRIATE & INEFFECTIVE: 1 2 3 4 5: | APPROPRIATE & EFFECTIVE |

- Circle one: 1.....Student is female
 2.....Student is male
 Circle one: 1..... Partner is female
 2..... Partner is male

- Cultural Group:
 1=Asian
 2=Black
 3=Hispanic
 4=White
 5=Other

APPENDIX B

SOCIAL SKILLS INTERACTION TEST

NARRATIVE

The purpose of this procedure is to find out how college students react in role play situations. The idea is for you to respond as you would if you were in a particular situation like the one described. For example, you may be asked to imagine yourself in a store or restaurant, and you should react as you would in that situation.

I will describe a situation to you, and I would like you to imagine that you are really there. Then, I will play the role of the other person described in the scene. I will say something to you. Say what you normally would in that situation.

APPENDIX C

THE SIMULATED SOCIAL INTERACTION TEST

Script

1. Disapproval or criticism

You are at work, and one of your bosses has just finished inspecting one of the jobs that you have completed. He says to you...

"That's a pretty sloppy job. I think you could have done better."

2. Social assertiveness or visibility

Let's suppose you respond to an ad in the newspaper and go for a job interview. As the interview goes on, the interviewer says...

"What makes you think that you're a good person for the job?"

3. Confrontation and anger expression

For the past two weeks you have been saving your money to go out to dinner. Now you are at the restaurant with some friends. You order a very rare steak. The waitress brings a steak to the table that is so well done it is burnt and tastes awful. After you have a few bites, the waitress comes over and says...

"Are you enjoying your steak?"

4. Heterosexual contact

You are at a party, and you notice a man/woman has been watching you all evening. Later he/she walks up to you and says...

"Hi, my name is Gene/Jean."

5. Interpersonal warmth

You are seated in a very quiet restaurant with your date. He/she has been looking depressed all evening. You ask him/her what's wrong, and he/she says...

"I'm really down. Everything seems to be turning out badly."

6. Conflict with or rejection by parent or relative

One of your close relatives has come to visit you. Although you enjoy him, tonight he is dominating the conversation and is very critical and rejecting of you. At one point in the conversation, your relative says...

"The way you are running your life is a disgrace."

7. Interpersonal loss

You have had an argument with a close friend. She says to you...

"I don't want to talk about it anymore. I'm leaving."

8. Receiving compliments

You just helped one of your neighbors move several large pieces of furniture. He is very grateful for your help. He says to you...

"Thanks a million. Not many people would have given me a hand. You're a really good friend."

APPENDIX D
SOCIAL SKILLS INTERACTION TEST
RATING FORM

Subject #: _____ Rater: _____

Situation 1: Disapproval or criticism

a. To what extent was the subject socially skilled?

NOT AT ALL SKILLED - - - - - EXTREMELY SKILLED

b. To what extent was the subject anxious?

EXTREMELY ANXIOUS - - - - - NOT AT ALL ANXIOUS

Situation 2: Social assertiveness or visibility

a. To what extent was the subject socially skilled?

NOT AT ALL SKILLED - - - - - EXTREMELY SKILLED

b. To what extent was the subject anxious?

EXTREMELY ANXIOUS - - - - - NOT AT ALL ANXIOUS

Situation 3: Confrontation and anger expression

a. To what extent was the subject socially skilled?

NOT AT ALL SKILLED - - - - - EXTREMELY SKILLED

b. To what extent was the subject anxious?

EXTREMELY ANXIOUS - - - - - NOT AT ALL ANXIOUS

Situation 4: Heterosexual contact

a. To what extent was the subject socially skilled?

NOT AT ALL SKILLED - - - - - EXTREMELY SKILLED

b. To what extent was the subject anxious?

EXTREMELY ANXIOUS - - - - - NOT AT ALL ANXIOUS

Situation 5: Interpersonal warmth

a. To what extent was the subject socially skilled?

NOT AT ALL SKILLED - - - - - EXTREMELY SKILLED

b. To what extent was the subject anxious?

EXTREMELY ANXIOUS - - - - - NOT AT ALL ANXIOUS

Situation 6: Conflict with or rejection by parent or relative

a. To what extent was the subject socially skilled?

NOT AT ALL SKILLED - - - - - EXTREMELY SKILLED

b. To what extent was the subject anxious?

EXTREMELY ANXIOUS - - - - - NOT AT ALL ANXIOUS

Situation 7: Interpersonal loss

a. To what extent was the subject socially skilled?

NOT AT ALL SKILLED - - - - - EXTREMELY SKILLED

b. To what extent was the subject anxious?

EXTREMELY ANXIOUS - - - - - NOT AT ALL ANXIOUS

Situation 8: Receiving compliments

a. To what extent was the subject socially skilled?

NOT AT ALL SKILLED - - - - - EXTREMELY SKILLED

b. To what extent was the subject anxious?

EXTREMELY ANXIOUS - - - - - NOT AT ALL ANXIOUS

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