# Toward the Assessment of Social Competence

Robert W. Levenson Indiana University John M. Gottman University of Illinois

Two studies directed toward development and validation of a self-report measure of social competence in dating and assertion situations are described. An 18-item questionnaire consisting of items that assessed the likelihood of certain specific behaviors occurring and the degree of discomfort and expected incompetence in specific situations was derived. This questionnaire discriminated between client and normal populations and between clients with dating and assertion problems, has psychometric properties of reliability and validity, and measures differential improvement following a variety of 8-week intervention programs.

There has been a great deal of recent interest in social skills training, which has been extended from the skill of refusing unreasonable requests (McFall & Lillesand, 1971; McFall & Marston, 1970; McFall & Twentyman, 1973) to more general assertion skills by a number of investigators (Eisler, Hersen, & Miller, 1973; Hersen, Eisler, & Miller, 1973).

The social skills training literature has also expanded to include general social skills training for lower-income clients in mental health centers (Goldstein, 1973), male psychiatric inpatients (Goldsmith & McFall, 1975), and dating skills (Curran, 1975; Curran & Gilbert, 1975; Glass, Gottman, & Shmurak, 1976; Twentyman & McFall, 1975).

In a recent review of social skills training as applied to heterosexual social anxiety, Curran (1977) reviewed 13 studies, concluding that a major issue in the social skills training literature is the assessment of social skills. He noted that "little data exist with regard to the psychometric properties and construct validity of most of the instruments used in previous heterosexual—social anxiety research" (p. 154). Goldfried and Linehan (1977) called for mea-

sures that demonstrate content validity by empirical generation of a content domain (rather than relying on face validity) with attention to the situational context of the behavioral referents assessed. They suggested that discriminant validity studies that demonstrate the separateness of two behavioral concepts will clarify the conceptual ambiguity in behavioral concepts such as assertion.

The present series of investigations is an attempt to develop a self-report assessment measure of social competence that has demonstrated psychometric properties of reliability and validity. Despite the fact that there is a general suspicion of all self-report measures among behavioral scientists, recent research has indicated that under certain specific conditions self-report measures may meet psychometric standards of reliability and validity (Goldfried & Kent, 1972).

Mischel's (1968) review of personality assessment literature led him to conclude that although observation of past behavior in situations with similar role requirements is the best predictor of future behavior in a specific situation, the next best predictor of future behavior is obtained from self-predictions. Furthermore, the research investigations of McFall and his associates have found that although global self-assessments of competence do not relate well to judges' ratings of tapes of behavioral role-playing assessment, self-reports of discomfort and incompetence in *specific* situations (as measured by the Conflict

The authors wish to thank Dave Schlundt, John Embry, Nancy Levin, and Jim Barrett for their help in carrying out this research.

Requests for reprints should be sent to John M. Gottman, Department of Psychology, University of Illinois, 505 East Green Street, Champaign, Illinois 61820.

Resolution Inventory) do correlate well with behavioral assessments. For example, McFall and Lillesand (1971) wrote:

The results obtained on the assertive score, nonassertive score, and difference score measures [of the Conflict Resolution Inventory], all of which assessed responses in specific refusal situations, were in sharp contrast to the nonspecific effects obtained on the global measure. (pp. 316–317).

This general finding has been replicated by other investigators (e.g., Schwartz & Gottman, 1976). In a social skills training study with male psychiatric inpatients, Clark (1975) used a global self-assessment of improvement, a situationally specific self-assessment, and a behavioral role-playing assessment. The control group, which received didactic lectures, showed no improvement on the behavioral assessment measure and no improvement on the situationally specific assessment measure but did show improvement on the global selfassessment measure. The social skills training group showed improvement on all three measures. There is thus some initial evidence suggesting that a situationally specific selfreport measure of social competence would have validity with respect to laboratory roleplaying assessments.

The current investigation requires a selfreport measure of social competence to demonstrate several specific kinds of validity. First, it must discriminate between competent and incompetent populations, with competence independently defined. Second, it must discriminate among specific types of social incompetence; for example, nonassertive subjects should show a different scale pattern profile than subjects with heterosexual dating problems. Third, in cases in which treatment is used, the self-report measure must predict differential improvement in treatments designed for the amelioration of specific problems. For example, nonassertive subjects should generally improve on assertion items but not on dating items, compared to dating-problem subjects, who should improve on dating but not assertion items, compared to nonassertive subjects. This latter criterion of validity is dependent on intervention programs that target specific skills for training, and will probably not be met to the extent that dating skills training programs and assertion training programs overlap in the skills they teach.

The present series of investigations was undertaken to design a self-report measure that meets the three criteria of validity described above, as well as internal consistency and test-retest reliabilities. The present investigations also followed the recommendation of Goldfried and D'Zurilla (1969) in empirically constructing a domain of problematic social situations. From this domain, items that involved two specific self-reports were constructed: (a) self-report of discomfort or incompetence—dimensions that have shown validity with behavioral assessments in McFall's Conflict Resolution Inventory—and (b) self-report of the likelihood of engaging in specific behaviors. Items were selected from the larger domain in the two subdomains of assertion and heterosexual dating. A series of reliability and validity studies were undertaken using these items.

# Study 1

### M ethod

# Subjects

During the second week of the fall 1976 semester, a notice announcing the availability of social skills training programs for students having problems in dating and assertion situations was placed in the student newspaper and posted on dormitory bulletin boards. The approximately 200 students who responded to the notice were mailed a package that included information about the training programs and three questionnaires (described below). Respondents were requested to complete the three questionnaires and return them along with a \$5 deposit if they wished to be included in a training program. They were informed that the deposit would be refunded when they completed a second set of questionnaires at the end of the program. When registration was terminated 3 weeks after the notice first appeared, 92 students had completed the pretest materials, and these students became the "client" population for the study.

At the same time, a group of 69 students who had not signed up for the training program were recruited from the introductory psychology classes and were given the complete set of questionnaires. These students were the "normal" population for the first experiment.

### Procedure

Three questionnaires were administered to the client and normal populations: (a) a situations questionnaire, (b) a behavior inventory, and (c) a symptom checklist. A description of these questionnaires follows.

Situations questionnaire (40 items). A domain of items was generated by eight undergraduates (four

Table 1
Client and Normal Subject's Pretest Data on Overall and Subscale Scores

	M		
Test	Client	Normal	F(1, 157)
Situations			
Overall	3.0	3.6	55.575***
Refusal	3.5	3.7	4.127*
Getting What You Want	3.1	3.4	5.521**
Expressing Feeling	2.8	3,6	56.364***
Requesting Behavior Change	3.2	3.7	17.494***
Formal Situations	2.8	3.5	53.734***
Conversation Skills	2.6	3.6	75.947***
Close Interpersonal Situations	3,3	3.7	25.177***
Dating	2.6	3.3	40.133***
Behavior			
Overall	1.0	2,5	84.222***
Friendship	1.9	2.7	71.480***
Self-confidence	1.9	2.3	32.613***
Assertiveness	2.4	2,6	9.171***
Intimacy	1.9	2.3	32.290***
Dating	1.8	2.5	54.271***
Symptom			
Overall	2,2	1.8	20.917***

<sup>\*</sup> p < .041.

males and four females) who signed up for a topical seminar on interviewing. Each member of the seminar interviewed 10 undergraduates and obtained a description of four social situations that the interviewee had recently found to be "difficult to handle." A description of each situation, written by the interviewer, summarized the situational context, the roles of the principal characters in the situation, the action, and the time of key difficulty that preceded a response demanded of the interviewee. The original list of 320 situations was used to generate 97 nonredundant items that could be potentially relevant to both sexes and that struck a balance between being overly general or overly specific. The items were sorted into seven a priori scales by the content of the task posed by the situation: (a) refusing unreasonable requests, (b) getting what you want, (c) expressing how you feel, (d) requesting behavior change from someone, (e) dealing with formal situations (such as a dinner party), (f) initiating and continuing conversations, and (g) dating situations (such as asking for a date and getting close to someone of the opposite sex).

Durham (Note 1) tested these a priori scales with 126 undergraduates. He used three phrasings of the self-report question: (a) a phrasing that confounded discomfort with incompetence, (b) a discomfort phrasing, and (c) an incompetence phrasing. The confounded phrasing showed the best a priori scale test-retest reliabilities (.75) between administrations 3

weeks apart and the best Cronbach alpha coefficient (.97) and split-half reliability coefficient (.94). Using an item analysis of the correlation of items with a priori subscale totals, Durham reduced the original 97-item questionnaire to 40 items. Durham also conducted analyses of selected subject characteristics and found no differences between subjects' scores as a function of sex, year in college, or marital status.

The following excerpt from the social situations questionnaire illustrates the format used:

After each situation, circle one of the numbers from 1 to 5 which best describes you using the following scale:

- 1 = I would be so uncomfortable and so unable to handle this situation that I would avoid it if possible.
- 2 = I would feel very uncomfortable and would have a lot of difficulty handling this situation.
- 3 = I would feel somewhat uncomfortable and would have some difficulty in handling this situation.
- 4 = I would feel quite comfortable and would be able to handle this situation fairly well.

<sup>\*\*</sup> p < .019.

<sup>\*\*\*</sup> p < .001.

<sup>&</sup>lt;sup>1</sup> This was the phrasing used in the Conflict Resolution Inventory.

5 = I would feel very comfortable and be able to handle this situation very well.

Your friend's relatives invite you over for dinner. You accept, then begin to feel nervous about making a good impression. You arrive at their house, and everyone sits down to talk before dinner. One of the relatives smiles at you and seems to expect you to say something. 1 2 3 4 5

Behavior inventory (26 items). Construction of the behavior inventory was considerably less formal than that of the social situations questionnaire. Five a priori subscales were established based on five social skills training groups that had been offered by clinical psychology graduate students supervised by us during the spring 1975 semester. The five groups were (a) friendship, (b) self-confidence, (c) assertion, (d) intimacy, and (e) dating. Behaviors that were seen as being particularly difficult for participants in each group were converted into items on the inventory. The inventory was constructed to assess the likelihood of a respondent to exhibit these behaviors. The following excerpt illustrates the nature of the inventory, with examples from the self-confidence, assertion, and dating subscales.

How much were you bothered by:

	Not at all
Headaches	1
Nervousness or shakiness inside	1
Trouble remembering things	1

## Results and Discussion

The presentation of the results is divided into three sections: One section is related to the first validity claim, namely, discrimination of clients from nonclients; one section is related to the second validity claim, namely discrimination of assertion clients from dating skills clients; and a third section is related to psychometric properties of the measures.

### Clients and Nonclients

Data were analyzed separately for a priori subscales, individual items (on the situations questionnaire and the behavior inventory) for overall average item score for each questionnaire and for the total symptom checklist score. These data were analyzed in a two-way (clients vs. normals) analysis of variance. An unweighted means solution was used because of the unequal sample sizes. These analyses revealed that clients had greater difficulty on all subscale scores for both the situations

We are interested in finding out something about the likelihood of your acting in certain ways. Below you will find a list of specific behaviors you may or may not exhibit. Use the following rating scale:

1	2	3	4
I never	I sometimes	I often	I do this
do this	do this		almost always

Now after each of the items on the following list, place the number which best indicates the likelihood of your behaving in that way. Be as objective as possible.

Volunteer to do something where there is a good chance you might fail.

Say "no" when you feel like it.

Start a conversation with a member of the opposite sex you would like to date.

Symptom checklist (90 items). A questionnaire normally used with hospital inpatients<sup>2</sup> was adopted for use. Items on this questionnaire reflect anxiety, depression, and somatic symptoms. Subjects rated each item to the extent they are troubled by that problem on a 1 to 5 scale. The following excerpt illustrates the nature of the checklist:

A little bit	Moderately	Quite a bit	Extremely
2	3	4	5
2	3	4	5
2	3	4	5

questionnaire and the behavior inventory, greater difficulty on the overall average item score on all three questionnaires, and greater difficulty on 21 of 26 items on the behavior inventory and 35 of 40 items on the situations questionnaire. In all cases, the significance level of these differences was less than .05. Table 1 presents means, F ratios, and  $\phi$  levels for the subscale and overall average item scores for the clients and normals. The F ratios indicate a considerable degree of discriminative power. Note that the means refer to the item scale values described above for each questionnaire and that smaller numbers indicate greater difficulty on the situations questionnaire and behavior inventories, whereas larger numbers indicate greater difficulty on the symptom checklist.

<sup>&</sup>lt;sup>2</sup> This symptom checklist was used as part of a standard clinical intake procedure by the Illinois State Psychiatric Institute and the Family Institute of Chicago.

Table 2
Dating and Assertion Subjects' Pretest Data on Overall and Subscale Scores

	-	M		
Test	Dating	Assertion	F(1, 86)	p <
Situations				
Overall	3.0	3.0		
Refusal	3.6	3.5	2.674	.102
Getting What You Want	3.2	3.0	2.818	.093
Expressing Feelings	2.9	2.9		
Requesting Behavior Change	3.3	3.2		
Formal Situations	2.9	2.8	1.214	.273
Conversational Skills	2.5	2.8	1.777	.183
Close Interpersonal Situations	3.2	3.4		
Dating	2.4	2.8	8.224	.005
Behavior				
Overall	2.0	2.0	_	
Friendship	1.9	2.0		
Self-confidence	2.0	1.8	8.635	.005
Assertiveness	2.5	2.3	4.684	.030
Intimacy	1.8	2.0		
Dating	1.6	2.0	11.934	.001
Symptom				
Overall	2.1	2.3	3,420	.064

The results clearly indicate that students who signed up for social skills training reported much greater difficulty across the range of social dimensions measured by our instruments than did normal students. Interestingly, they also reported a greater prevalence of "psychiatric" and somatic symptoms. A picture emerged of a subpopulation that may present itself as generally less socially competent and more problem ridden than its peers.

The results offer some initial validation of the a priori subscales used in the situations and behavior questionnaires: The subscales successfully discriminated between client and normal populations. The first validity criterion was therefore satisfied.

# Assertion Clients and Dating Skills Clients

This analysis was carried out using the same data, except that only the 92 clients were used: the assertion groups clients (n = 46) and the dating skills clients (n = 46).

Two-way (dating subjects vs. assertion subjects) analyses of variance were performed for overall questionnaire scores, a priori subscales, and individual items. Results indicate that dating subjects showed significantly greater difficulty as compared to assertion subjects on the dating subscales of both the situations questionnaire and the behavior inventory. Assertion subjects showed significantly greater difficulty on the "self-confidence" and "assertiveness" subscales of the behavior inventory. Means, F ratios, and p levels are presented for these differences in Table 2. Analysis of the individual items revealed that 8 of 40 items on the situations questionnaire and 8 of 26 items on the behavior inventory significantly differentiated dating subjects and assertion subjects at p < .05.

Knowing the training program for which clients had registered allowed a second empirical test of the validity of several of our subscales. The results of this experiment indicate that clients with dating and assertion problems tend to score accordingly on dating-related and assertion-related subscales. Moreover, the use of two different kinds of self-report measures (i.e., the situations question-naire and behavior inventory), and the tendency of clients to score appropriately on both, provided us with convergent evidence that true differences existed between the dating and

assertion subpopulations and that these were measurable independently using self-report measures.

To enhance the validity of the dating and assertion scales, we decided to focus on the dating and assertion subpopulations, to concentrate on developing one questionnaire containing only the dating and assertion subscales, and to subject this new questionnaire to standard reliability tests prior to continuing with additional validation procedures.

## Psychometric Properties

An 18-item questionnaire was developed with a 9-item dating subscale and a 9-item assertion subscale. This new questionnaire was tested scalewise for internal consistency and test—retest reliability. In addition, previous validity tests for discriminating clients versus normals and dating versus assertion problems were recomputed using these new subscales.

The original 92 clients (46 dating, 46 assertion) and 69 normals were studied again for computing internal consistency and for performing concurrent validity checks. Seventy additional subjects who had not registered for the training programs were recruited from the introductory psychology classes to serve as a sample for performing a test-retest reliability analysis.

The original 26-item behavior inventory and 40-item situations questionnaire were transformed into an 18-item questionnaire by selecting only those items that both successfully discriminated clients from normals and successfully discriminated dating clients from assertion clients. Of the 18 items that met these criteria, dating clients indicated having greater difficulty with 9 of the items (5 from the original behavior inventory and 4 from the original situations questionnaire), whereas assertion clients indicated greater difficulty with the other 9 (4 from the original behavior inventory and 5 from the original situations questionnaire). Thus, these sets of items became our 9-item dating and assertion subscales (see Appendix), which were tested for their psychometric properties as follows: (a) A Cronbach alpha was computed for assessing the internal consistency of the dating and assertion subscales using the data from the original clients and normals; (b) comparisons of clients versus normals and of dating clients versus assertion clients were made on the two subscales using the original client and normal sample; (c) to assess test-retest reliability, 6 weeks prior to the end of the semester 40 normal subjects were administered the original test battery. An additional 30 normal subjects took the test battery 4 weeks later. All 70 subjects took the battery again 2 weeks later. Usable data were obtained from 28 subjects for the 2-week test-retest interval and from an independent group of 39 subjects for the 6-week interval.

Analysis of internal consistency yielded a Cronbach alpha of .92 for the dating subscale and an alpha of .85 for the assertion scale. Concurrent discriminant validity analyses revealed clients to have significantly greater difficulty than normals on both the dating subscale, F(1, 159) = 52.60, p < .001, and the assertion subscale, F(1, 159) = 34.33, p < .001. Dating clients had more difficulty than assertion clients on the dating subscale, F(1, 86) = 17.55, p < .001. Assertion clients had more difficulty than dating clients on the assertion subscale, F(1, 86) = 21.00, p < .001.

To assess test-retest change, a  $2 \times 2$  (2 Week vs. 6 Week × Pretest vs. Posttest) analysis of variance was computed for the 2-week and 6-week groups. The results indicated no change at retesting at either interval for either the dating subscale or the assertion subscale. The test-retest correlations for both subscales at both testing intervals (ns = 28 and 39, respectively) were: For dating at 2 and 6 weeks, rs = .71 and .62. For assertion, rs = .71 and .70 (p < .001).

The results indicate that the dating and assertion subscales have demonstrable psychometric qualities of reliability and validity. Of particular interest was the finding that the scales had internal consistency despite the fact that items were selected on the basis of their ability to discriminate between populations. This suggests that the scale items are in fact measuring the same dimension and that this dimension is one for which salient differences do exist between the populations in question.

The test-retest experiment was performed to determine whether the subscales would fluctuate greatly over the measurement periods in question. Especially important for Study 2 was the determination of whether significant changes in self-report of dating and assertion difficulties would occur as the end of semester approached. On the basis of our findings, there is no reason to expect these kinds of difficulties to spontaneously increase or decrease over the course of our testing intervals. However, these test-retest data were obtained using normal subjects, and their applicability to client populations was not tested.

# Study 2

In this section the results of an 8-week intervention directed toward amelioration of specific social skills problems is presented. This intervention was used to test the abilities of our instrument to measure differential changes as a function of the type of social skills training program.

#### Method

#### Procedure

The 46 dating clients who had completed the pretest materials in Experiment 1 were assigned to one of three treatment conditions: (a) group meeting (n = 11), (b) self-help manual plus consultant (n = 11), or (c) self-help manual (n = 24).

In a similar manner, the 46 assertion clients were assigned to either group meeting (n = 8), self-help manual plus consultant (n = 12), or self-help manual (n = 26) conditions. A description of the three treatment conditions follows.

Group meeting. Clients assigned to this condition attended weekly 90-minute sessions for 8 weeks under the leadership of male and female cotherapists. The focus of these groups was on behavioral rehearsal, role-playing, and skill acquisition exercises.

Self-help manual plus consultant. Original manuals were written that contained information and exercises relevant to assertion skills and dating skills. These manuals were divided into eight sections, with each containing information and exercises for 1 week.

In addition to the manual, clients in this condition were assigned an undergraduate "consultant" who met with the client at the start of the 8-week period, called them periodically to check on their progress, and was available for phone consultation if the client so desired.

Self-help manual. Clients in this condition received the appropriate self-help manual as in the previous condition but were not assigned a consultant.

At the end of the 8-week period, all clients in all conditions were mailed a package of posttest questionnaires and were reminded that their \$5 deposits would be refunded as soon as the materials were completed and returned.

Table 3
Pretest and Posttest Subscale Scores for Dating
and Assertion Clients

Group	Dating	Assertion	
Dating			
Pre (46)	1.95	2.91	
Post (38)	2.41	3.02	
t	5.55*	1.34	
Assertion			
Pre (46)	2.45	2.48	
Post (35)	2.76	3.02	
t	3.75*	6.51*	

Note. Numbers in parentheses are ns.

#### Results and Discussion

We were able to obtain a fairly high rate of return from clients completing the program for our posttest materials. There was also a small number of clients who chose to drop out of the program prior to its completion. The overall return rate was 79%, and by treatment was group meeting (89%), self-help manual plus consultant (78%), and self-help manual (76%).

Data obtained from these clients were analyzed in a  $2 \times 2$  (Dating Clients versus Assertion Clients × Pretest versus Posttest) analysis of variance for the dating and assertion subscales. Results indicated a significant pretest versus posttest main effect for both the dating subscale, F(1, 67) = 48.31, p < .001, and the assertion subscale, F(1, 67) = 37.87, p < .001. Significant Client × Test interactions were obtained for the dating subscale, F(1, 67) = 4.40, p = .037, and for the assertion subscale, F(1, 67) = 21.11, p < .001.

Of greatest interest for the present investigation were the data concerning changes on the dating and assertion subscales for clients working in dating and assertion training programs. Pretest and posttest means for these clients and subscales are presented in Table 3. These results indicate that significant improvement occurred only for the dating subscales for dating clients. Assertion clients improved

<sup>\*</sup> p < .001.

<sup>&</sup>lt;sup>3</sup> The authors are extremely grateful to John Embry, Jennifer Parkhurst, and David Schlundt who helped write and edit the manuals.

on both subscales but showed more improvement on the assertion scale than on the dating scale.

The results obtained from Study 2 indicate measurable improvement in both client populations over the 8-week period. Despite the fact that a no-treatment control was not included, it can be argued for several reasons that these changes are most readily attributable to the interventions that occurred during this period. First, the most pronounced change occurred on the subscale related to the targeted problem. This was especially true for the dating clients, who showed no change on the assertion subscale. In addition, test-retest data on normal subjects in Study 1 over a similar time period indicated no change on either subscale. There is little reason to expect that client populations would spontaneously improve over this time period.

Study 2 provides an extension of the utility of the dating and assertion subscales. Prior to initiating these pretreatment versus posttreatment comparisons, we were not optimistic about the likelihood that these subscales would be useful for measuring change following an 8-week intervention. It had seemed to be the case that the utility of a scale to register changes on a personality dimension was quite independent of its ability to satisfy static criteria of reliability and validity. The additional expectation of differential changes as a function of specific types of intervention thus serves as an additional validity check. The discriminant validity of the dating and assertion scales may clarify the frequent ambiguity inherent in the behavioral concept of social skills; it would seem reasonable to hypothesize that social competence consists of a set of relatively independent skills.

This article is a step toward the assessment of specific aspects of social competence. We should add that these two scales should be used cautiously; the two questionnaires contain a narrow sampling of items from a larger domain (cf. Durham, Note 1) and should not be equated with social competence. We also stress the limitation of this article in only using self-report measures in the validation procedure. Still to be demonstrated is that these measures correlate with relevant extralaboratory criteria and with measures obtained by coding behavior samples.

Our primary interest was the construction of measures that successfully differentiate people who have a given difficulty from those who do not, that discriminate among people who have different kinds of related difficulties, and that indicate change in the level of this difficulty differentially as a function of the treatment received. The results of the studies presented here indicate that one kind of selfreport measure that satisfies all of these criteria can be constructed by assessing the likelihood of certain behaviors occurring and the degree of discomfort and expected incompetence in specific situations. A useful assessment device was thus constructed from items that combined behavioral specificity with the phenomenology of expected difficulty and discomfort.

### Reference Note

1. Durham, R. The social questionnaire: A new measure of social competence among college students. Unpublished manuscript, Indiana University, 1976.

#### References

Clark, K. W. Evaluation of a group social skills training program with psychiatric inpatients: Training Viet Nam era veterans in assertion, heterosexual and job interview skills. (Doctoral dissertation, University of Wisconsin, 1974). Dissertation Abstracts International, 1975, 35, 4642B. (University Microfilms No. 74-28, 795).

Curran, J. P. An evaluation of a skills training program and a systematic desensitization program in reducing dating anxiety. *Behaviour Research and Therapy*, 1975, 13, 65-68.

Curran, J. P. Skills training as an approach to the treatment of heterosexual-social anxiety: A review. *Psychological Bulletin*, 1977, 84, 140-157.

Curran, J. P., & Gilbert, F. S. A test of the relative effectiveness of a systematic desensitization program and an interpersonal skills training program with date-anxious subjects. *Behavior Therapy*, 1975, 6, 510-521.

Eisler, R. M., Hersen, M., & Miller, P. M. Effects of modeling on components of assertive behavior.

Journal of Behavior Therapy and Experimental Psychiatry, 1973, 4, 1-6.

Glass, C. R., Gottman, J. M., & Shmurak, S. S. Response acquisition and cognitive self-statement modification approaches to dating skills training. Journal of Counseling Psychology, 1976, 23, 520-526.

Goldfried, M. R., & D'Zurilla, T. J. A behavioralanalytic model for assessing competence. In C. D. Spielberger (Ed.), Current topics in clinical and community psychology (Vol. 1). New York: Academic Press, 1969. Goldfried, M. R., & Kent, R. N. Traditional versus behavioral personality assessment: A comparison of methodological and theoretical assumptions. *Psychological Bulletin*, 1972, 77, 409-420.

Goldfried, M. R., & Linehan, M. M. Basic issues in behavioral assessment. In A. R. Ciminero, K. S. Calhoun, & H. E. Adams (Eds.), Handbook of behavioral assessment. New York: Wiley, 1977.

Goldsmith, J. B., & McFall, R. M. Development and evaluation of an interpersonal skill-training program for psychiatric inpatients. *Journal of Abnormal Psychology*, 1975, 84, 51-58.

Goldstein, A. P. Structured learning therapy: Toward a psychotherapy for the poor. New York: Academic Press, 1973.

Hersen, M., Eisler, R. M. & Miller, P. M. Effects of practice, instructions, and modeling on components of assertive behavior. Behaviour Research and Therapy, 1973, 11, 443-451. McFall, R. M., & Lillesand, D. B. Behavior rehearsal with modeling and coaching in assertion training. *Journal of Abnormal Psychology*, 1971, 77, 313-323.

McFall, R. M., & Marston, A. R. An experimental investigation of behavior rehearsal in assertive training. *Journal of Abnormal Psychology*, 1970, 76, 295-303.

McFall, R. M., & Twentyman, T. T. Four experiments on the relative contributions of rehearsal, modeling, and coaching to assertion training. *Journal of Abnormal Psychology*, 1973, 81, 199-218.

Mischel, W. Personality and assessment. New York: Wiley, 1968.

Schwartz, R. M., & Gottman, J. M. Toward a task analysis of assertive behavior. Journal of Consulting and Clinical Psychology, 1976, 44, 910-920.

Twentyman, C. T., & McFall, R. M. Behavioral training of social skills in shy males. *Journal of Consulting and Clinical Psychology*, 1975, 43, 384-395.

# Appendix

# Dating and Assertion Questionnaire (18 items)

We are interested in finding out something about the likelihood of your acting in certain ways. Below you will find a list of specific behaviors you may or may not exhibit. Use the following rating scale:

1 = I never do this

2 = I sometimes do this

3 = I often do this

4 = I do this almost always

Now after each of the items on the following list, place the number which best indicates the likelihood of your behaving in that way. Be as objective as possible. [Subscale loadings for items are indicated in parentheses. A = assertion subscale; D = dating subscale.]

(D)

(A)

(A)

(A)

- 1. Stand up for your rights (A)
- 2. Maintain a long conversation with a member of the opposite sex
- Be confident in your ability to succeed in a situation in which you have to demonstrate your competence
- 4. Say "no" when you feel like it5. Get a second date with someone
- you have dated once (I)
- 6. Assume a role of leadership
- 7. Be able to accurately sense how a member of the opposite sex feels about you
- feels about you (D)
  8. Have an intimate emotional relationship with a member of the opposite sex (D)

Have an intimate physical relationship with a member of the opposite sex (D)

The following questions describe a variety of social situations that you might encounter. In each situation you may feel "put on the spot." Some situations may be familiar to you, and others may not. We'd like you to read each situation and try to imagine yourself actually in the situation. The more vividly you get a mental picture and place yourself into the situation, the better.

After each situation circle one of the numbers from 1 to 5 which best describes you using the following scale:

- 1 = I would be so uncomfortable and so unable to handle this situation that I would avoid it if possible.
- 2 = I would feel very uncomfortable and would have a lot of difficulty handling this situation.
- 3 = I would feel somewhat uncomfortable and would have some difficulty in handling this situation.
- 4 = I would feel quite comfortable and would be able to handle this situation fairly well.
- 5 = I would feel very comfortable and be able to handle this situation very well.
- 1. You're waiting patiently in line at the checkout when a couple of people cut right in front of you. You feel really annoyed and want to tell them to wait their turn at the back of

the line. One of them says, "Look, you don't mind do you? But we're in a terrible hurry."

2. You have enjoyed this date and would like to see your date again. The evening is coming to a close and you decide to say something.

3. You are talking to a professor about dropping a class. You explain your situation, which you fabricate slightly for effect. Looking at his grade book the professor comments that you are pretty far behind. You go into greater detail about why you are behind and why you'd like to be allowed to withdraw from his class. He then says, "I'm sorry, but it's against university policy to let you withdraw this late in the semester."

4. You meet someone you don't know very well but are attracted to. You want to ask them out for a date.

5. You meet someone of the opposite sex at lunch and have a very enjoyable conversation. You'd like to get together again and decide to say something.

6. Your roommate has several obnoxious traits that upset you very much. So far, you

have mentioned them once or twice, but no noticeable changes have occurred. You still have 3 months left to live together. You decide to say something.

7. You're with a small group of people who you don't know too well. Most of them are expressing a point of view that you disagree with. You'd like to state your opinion even if it means you'll probably be in the minority.

8. You go to a party where you don't know many people. Someone of the opposite sex approaches you and introduces themself. You want to start a conversation and get to know him/her.

9. You are trying to make an appointment with the dean. You are talking to his secretary face-to-face. She asks you what division you are in and when you tell her, she starts asking you questions about the nature of your problem. You inquire as to why she is asking all these questions and she replies very snobbishly that she is the person who decides if your problem is important enough to warrant an audience with the dean. You decide to say something.

Received February 28, 1977 ■