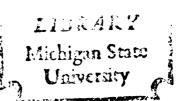
# THE TREATMENT OF DATING PROBLEMS: PRACTICE DATING, DYADIC INTERACTION, AND GROUP DISCUSSION

Dissertation for the Degree of Ph. D.
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LEON DARRYL THOMANDER
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This is to certify that the

thesis entitled

# THE TREATMENT OF DATING PROBLEMS: PRACTICE DATING, DYADIC INTERACTION, AND GROUP DISCUSSION

presented by

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has been accepted towards fulfillment of the requirements for

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#### ABSTRACT

THE TREATMENT OF DATING PROBLEMS: PRACTICE DATING, DYADIC INTERACTION. AND GROUP DISCUSSION

By

### Leon Darryl Thomander

The present study was undertaken to explore the nature of dating problems experienced by infrequently dating college students and to evaluate the effectiveness of certain action oriented intervention techniques in alleviating dating inhibition. The subjects were 26 Michigan State University students who dated infrequently, were anxious in dating situations, and expressed a desire for help in overcoming their dating problems.

Information was obtained from the participants regarding their dating history, sexual attitudes and experience, reactions to "hurt" in dating relationships, social fantasies, dating partner values, social anxiety, anxiety on dates, internal-external control orientation, self-concept, daily contacts with the same and opposite sexed peers, and dating frequency. They were found to be higher in social anxiety than the college norm and reported having a high level of anxiety while on dates. Three major reasons for not dating more often were represented among the participants: (1) not asking (males) or not being asked (females), (2) excessive choosiness (both sexes), and (3) deficiencies in social skills which interfered with the development of dating rela-

tionships. The most frequently mentioned areas of skills inadequacy were beginning and carrying on conversations, behaving as one's natural self, showing liking for the other person, and discerning whether or not one is liked by the other.

The majority of the participants reported having been "hurt" emotionally in a dating relationship and most responded to the hurt with withdrawal or distancing reactions. A large number expressed dissatisfaction with either the level of their sexual activity or the quality of the relationships in which sexual behavior occurred. The evidence obtained suggests that certain kinds of fantasies may be characteristic of some persons with dating problems. Those who fantasized having negative social experiences tended to have higher social anxiety scores, and participants who reported fantasies in which they adopted a passive role in romantic relationships tended to have the lowest dating frequency during the post-treatment follow-up period. Both males and females were found to value dating partners who were pleasant, demonstrative, and intelligent and straight forward, thus suggesting that a primary motive for dating was to obtain companionship.

The participants made up three small groups, each containing an equal number of males and females. The groups were given differing amounts of practice dating, dyadic interaction, conversational skills training, and group discussion. Treatment entailed from six to eight hours of time spread over a three week period. Each week during treatment the participants reported how they felt while talking to opposite sexed peers, how much they had been worrying about not having enough dates, and worry over school, work and interpersonal problems. Follow-up measures on dating frequency and self-concept were taken at intervals

ranging from one month to two school terms after the termination of treatment.

During the month prior to the beginning of the treatment period, the participants averaged less than one date per person. When the data was pooled across groups, both the males and females were found to have increased significantly in dating frequency from the month prior to treatment to the post-treatment follow-up period. However, there was a significant sex by group interaction. The males in each experimental group improved to approximately the same extent but improvement for the females followed a linear trend which corresponded with the number of practice dates they had. These results suggest that it was some constant aspect of all treatment conditions which caused the males to increase uniformly. Going on practice dates appeared to be the most effective aspect of treatment for the females. Hypotheses were suggested to account for these findings in terms of different change processes for each sex.

The results for treatment effects on self-concept paralleled those obtained for dating frequency. Both the males and the females showed significant enhancement of self-concept from pre to post treatment follow-up. The pattern of change for each sex across treatment conditions was similar to that for frequency of dating. Self-concept change was found to be significantly positively correlated with change in dating frequency. An attempt was made to explicate the causal processes which might account for this relationship but no clear evidence for direction of cause and effect was obtained.

# THE TREATMENT OF DATING PROBLEMS: PRACTICE DATING, DYADIC INTERACTION, AND GROUP DISCUSSION

Вy

Leon Darryl Thomander

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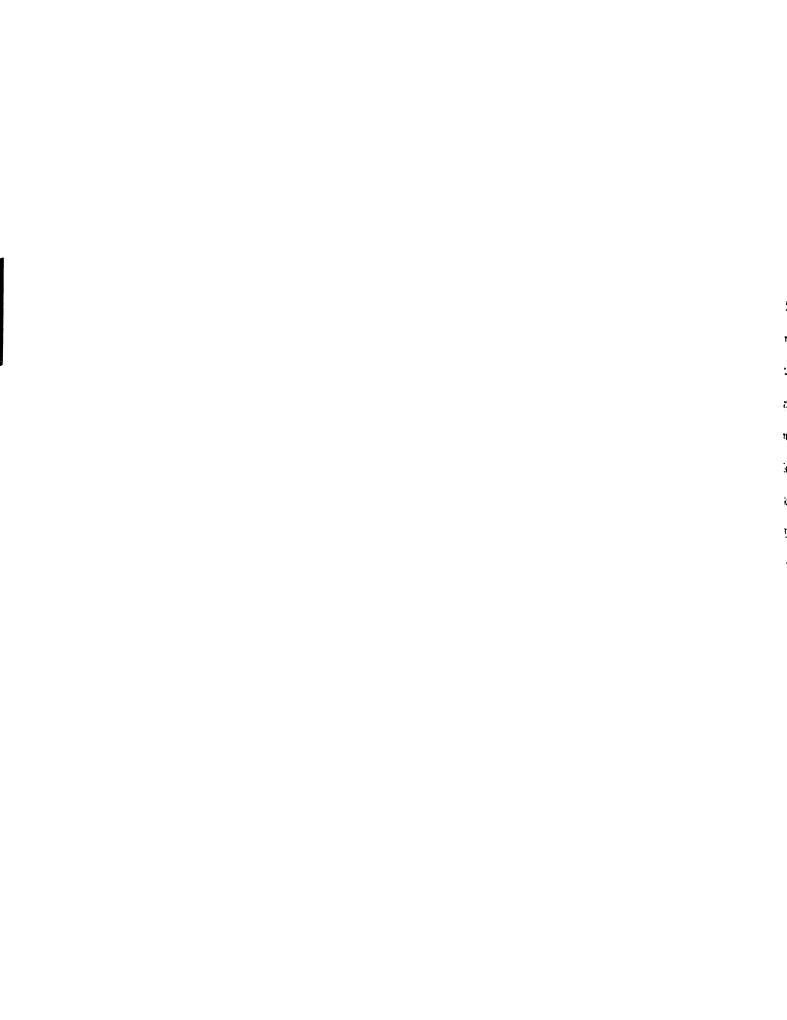
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# Chapter 1

#### Introduction

During the past decade there have been increasing demands on professional mental health practitioners to demonstrate empirically the value and effectiveness of their services. Recent reviews of psychotherapy process and outcome studies attest to the fact that a large group of researchers are now beginning to systematically evaluate a variety of the psychotherapeutic techniques in use today (Begin & Garfield, 1971; Carkhuff & Berenson, 1967; Franks, 1969; Luborsky, Auerbach, Chandler, Cohen, & Bachrach, 1971; Mann, 1972; Meltzoff & Kornreich, 1970; Strupp & Bergin, 1969). The present study was undertaken with the intent of making a contribution toward the development and empirical validation of effective methods for producing psychotherapeutic change in college students with dating problems.

There are several reasons why college student dating inhibitions constitute an appropriate problem for treatment evaluation research.

(1) Dating inhibitions are a genuine clinical problem toward which a good deal of psychotherapy is currently directed. (2) It affords clear-cut critera of improvement (e.g., number of dates in a given period of time). (3) There are large numbers of students with dating problems available for study by researchers who are based on college campuses.

There is little hard data regarding the actual number of college

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da: to: students for whom dating is a serious problem, but the information which has been gathered suggests that problems associated with dating relationships are a concern for many students. Calhoun (1973) reported that about 10% of a college sample reported severe anxiety in dating situations. Thirty percent of the participants in a computer dating study on a midwestern campus said they were interested in obtaining treatment for anxiety regarding dating (Curran, 1973a). In a 1967 survey taken at the Indiana University Counseling Center, students using the center facilities reported a greater desire for assistance in learning how to get along better with the opposite sex than for counseling regarding vocational or academic problems (Martinson & Zerface, 1970).

# Functions of Dating

Dating has been defined by Christensen and Johnsen (1971) as,
"the early friendship activities of young people whereby they seek to
have fun in pairs (p. 149)," and as, "an uninvolved, opposite-sex
relationship which is not consciously intended to lead to marriage, or
at least is not expected to carry this meaning (p. 154)." Of course,
dating often does entail involved and intense relationships and while
it may not necessarily lead to marriage, in most western cultures
marriage is nearly always preceded by a period of dating. Dating can
be just for fun or it can be pursued with serious intent. Apparently
most persons of college age approach dating with a good deal of
trepidation. In a 1949 study using 332 male and 342 female Purdue
University students the most frequently checked self-criticism as a
dating partner was "self-conscious and shy, isn't calm or at ease,
acts nervous and rattled (Christensen and Johnsen, 1971, p. 160)."

This was also the only item on which both sexes said they thought this was more of a problem for them than it was for the opposite sex.

Winch (1968) has suggested five functions of dating in American society: recreation, status grading and status-achieving, socialisation, identity clarification, and mate selection. Coons (1970) has discussed the importance of college students gaining the capacity for interpersonal intimacy and has stressed the importance of making close friends of both sexes in order that this developmental goal may be achieved. Erikson (1950) has emphasized the importance of the identity achieved.

Some empirical evidence has been gathered to support the notion that identity clarification is a major function of dating relationships. Identity clarification here refers to comparing and contrasting one's attitudes, values, and beliefs with those of others in the process of a person deciding how he is similar and different from others and determining immediate and long term goals for himself. Bolton and Kammeyer (1967) gathered information on the topics 195 students at the University of California at Davis discussed in bull sessions and on dates. They found that on dates the students were more likely to discuss personality or identity problems. long-run orientations, and intellectual topics, especially those dealing with religious and philosophical questions. Dating was ranked as second in importance in the development of their self-definition by a group of 50 juniors and seniors. Experiences with same-sex peers ranked first. Classes and professors were ranked third. The average student in their study had 2.15 dates per week and spent approximately 1.2 hours per day in the immediate company of a person of the opposite sex (including dates,

excluding class time). Females averaged slightly more dates per week (2.25) than males (2.02).

There are a variety of possible motives for dating. In a study of the male students at Harvard, Vreeland (1972a) identified four major dating motive patterns. The companion dating pattern involved the search for a friend and sympathetic listener. The need for the resolution of identity problems and relief of loneliness appeared to be high areas of need for these men. The instrumental dating pattern was seen by Vreeland as typified by a striving for sexual conquest or enhancement of the male's social status. The traditional dating pattern primarily involved the search for a wife. The intellectual dating pattern placed an emphasis on the brains and intellectual stimulation provided by the date over most other qualities. Vreeland (1972b) discovered a trend in the Harvard samples of change over the past ten years from recreational motives for dating to a search for "informal, but intense, heterosexual friendships (p. 68)," Just how general these changes are and how they affect the non-dating student are yet to be determined.

### Problems of Non-daters

There is a paucity of studies reported in the literature in which an attempt has been made to identify the specific nature of the difficulties students encounter in regard to dating. To the extent they attach social status to having many dates, nondating students are likely to feel somewhat inferior. The parents of shy or withdrawn children often encourage them to "break out of their shell" and lead active social lives. Non-daters of this category may suffer from the nagging feeling that they are not living up to their parent's expectations.

A group of socially anxious nondating college males were described by Martinson and Zerface (1970) as tending to be "selfconscious about their physical appearance, to worry over humiliating experiences, to remain in the social background, to experience recurrent loneliness, to lack self-confidence, to become discouraged easily." and to display "glaring misconceptions about a female's perspective on dating (Pp. 39-40)." Misconceptions between sexes may be fairly common. Survey studies have found evidence of misconceptions between sexes regarding the characteristics valued by each sex in their dating partners (Blood, 1956; Hewitt, 1958), and misperceptions of sexual role behavior expected by each other on dates (Balswidk & Anderson, 1969). It seems likely that misconceptions and misinformation about the opposite sex contribute to communication problems between dating partners, may lead to unrealistic behavioral expectations, and could, in turn, lead to unnecessarily high levels of anxiety in dating situations.

Some students who do not have many dates may also tend to have low levels of interaction with their peers of the same sex.

Adinolfi (1970) obtained peer ratings for approximately 600 freshmen from a sociometric questionnaire on which the students nominated their dormitory mates to four positive and four negative categories. Based on these ratings, groups of highly accepted, highly rejected and anonymous (rarely nominated in either direction) students were formed. Both the male and female anonymous group tended to stay in the background socially, avoided typical dating behavior, and required proportionately more personal-emotional counseling than typical freshmen.

A group of researchers at the University of Oregon, in connection with an investigation of dating inhibitions, have recently reported analyses of the social skills of high versus low socially anxious college men. Judges who listened to tape recordings of the men in conversation with two different female confederates rated the high socially anxious men as equal in social skill to the low socially anxious men. The high socially anxious men, however, rated themselves as exhibiting a lower level of social skill during the conversations than did the low socially amxious men. The researchers concluded that the high socially anxious men tended to underestimate their social skills (Valentine & Arkowitz, 1973). In another study (Arkowitz, Lichtenstein, MGovern, & Hines, in press), a more detailed behavioral assessment of social skills was undertaken. College males who frequently had dates and reported feeling relaxed and comfortable in social situations with girls were compared with males who rarely dated and felt either "somewhat anxious" or "very anxious" in social situations with girls. Quantitative measurements were taken on a number of behavioral indices from recorded conversations the men had with female confederates. High frequency daters were found to have greater talk time, use more words, have shorter speech latencies, and have fewer silences than the low frequency dating men. None of the verbal, stylistic, or content measures showed significant differences between the two groups. Nor did nonverbal indices such as head nods, number of smiles, or facial gazing time discriminate the high from the low frequency daters. These results suggest that quantity of verbal output is the major conversational skill factor which differentiates nonanxious dating males from anxious nondating males.

Based on clinical contacts with socially inhibited clients and the results of the evaluative studies conducted so far by the Oregon group, these researchers believe that nondating college students who are anxious in social situations often have adequate social skills. They feel that these students inhibitions stem primarily from overly negative judgements of their own social competence which leads to anxiety and avoidance of social situations (Arkowitz, 1973).

These speculations suggest that non-dater's self-concept may be an important factor in limiting their heterosexual activity. There is at least one laboratory study which lends support to the notion that self-concept may act as a mediator for dating behavior. Kiesler and Baral (1970) exposed 18 males to self-esteem enhancing conditions and 19 males to conditions designed to lower self-esteem. Both sets of subjects were given what was said to be an intelligence test. In the high self-concept condition, subjects were given feedback which led them to believe that they had done much better than average. low self-concept condition subjects were led to believe that they had done much worse than average. They then took a short break during which time the experimenter found a reason for excusing himself and left the subject sitting at a table with a female confederate. In one condition she was dressed and made up to look very attractive; in another condition she was only moderately attractive. The amount of "romantic behavior" (expressed compliments, offered to buy coffee, asked for a date, etc.) shown by each male was recorded. The results showed that the high self-esteem subjects expressed more "romantic behavior" toward the highly attractive girl and the low self-esteem subjects showed most such behavior toward the moderately attractive

girl. However, there was little difference in the total percentage of romantic behavior shown by each group. The results were interpreted in terms of a cost-benefit model. Thus, if a male sees himself as relatively undesirable, the chances of being turned down may appear to be so high that the potential "reward" is exceeded by the probable "cost." If this analysis is accurate, it may help to explain the correspondence between low self-evaluation and infrequent dating in males.

It seems likely that dating experiences may also have an effect on self-concept. During adolescence a person may, to some extent, infer his self-worth from the way he is treated by opposite sexed peers to whom he is attracted. Rejection may make him question his own value as a person and certainly as a dating partner. On the other hand, finding that one is desired by many as a dating partner may give a person an unrealistically high estimate of his self-worth. Operating on the theory that accomplishing goals and covertly rewarding oneself with praise will enhance self-esteem. Rehm and Marston (1968) treated male students who reported amxiety in social situations involving females by giving them assignments to do the things they feared. They worked their way up a hierarchy of feared behaviors, evaluated their own performance and rewarded themselves with self-approval points for appropriately completing goals like "calling up a girl for a date," or "extending the conversation to other topics." They found weak evidence that self-concept as measured by the Gough Adjective Check List increased as a result of the procedure. In another therapy outcome study using the Gough Adjective Check List and infrequently dating males, no treatment

differences were found on self-concept between control and modeling and behavior rehearsal experimental groups (Melnick, 1973).

Treatment of Dating Problems

It has only been in the last five or six years that studies have been published in which different therapeutic techniques were compared for their effectiveness in treating students with dating inhibitions. One of the treatment methods reported has been conventional one to one verbal interaction psychotherapy (Hay, 1972; Martinson & Zerface, 1970: Melnick, 1973: Morgan, 1970: Rehm & Marston, 1968). Several action oriented approaches have been used including social skills training using modeling (Melnick, 1973; Morgan, 1970; Newman, 1969). using behavior rehearsal or role playing (Curran, 1973b; Hay, 1972; Melnick, 1973; Morgan, 1970; Newman, 1969), and using video-tape feedback (Melnick, 1973). Another action oriented approach has been to use target behavior goal setting (Hay, 1972; Rehm & Marston, 1968). Other treatment methods have included counseling by peers (Hay, 1972), systematic desensitization (Curran, 1973b), practice dating (Christensen & Arkowitz, 1974; Christensen, Arkowitz & Anderson, 1973) and arranged interactions with opposite sexed peers (Martinson & Zerface, 1970).

Six of the above studies used dating frequency as a measure of the effectiveness of the therapy. Using this criterion two studies reported no difference in dating frequency between subjects who experienced verbal interaction therapy and those who had action oriented therapies which emphasized behavior rehearsal in one case (Melnick, 1973) and role playing and target behavior assignments in the other (Hay, 1972). Four of the studies reported a positive

effect for dating frequency. Each of these four used procedures which required the participants to interact with the opposite sex in their natural environment separate and apart from meetings with the therapist.

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Rehm and Marston (1968) found that males who were treated with an action oriented approach which emphasized self-reinforcement for achieving target behavior goals were averaging twice as many dates per month at a seven to nine month follow-up than were a combined group of controls who received either nondirective psychotherapy or worked on their own with a weekly report to a therapist. Martinson and Zerface (1970) reported that males who participated in a program in which they telephoned and arranged a meeting with a female peer once a week to have a conversation about dating problems were dating more three and eight weeks after treatment than males who either received eclectic conversational therapy at the university counseling center or were in a no treatment control group.

The other two successful treatments used practice dating. In this procedure male and female students who volunteer for the program go on dates with each other in their natural environment. Once a week each male is given the name of a different female volunteer with whom he arranges a date on his own initiative. Communication with the therapist is by mail. Christensen and Arkowitz (1974) did not use a control group but obtained statistically significant pre-post increases in dating frequency with this form of intervention. Christensen, Arkowitz, and Anderson (1973) compared practice dating with and without evaluative feedback from the dating partner and used a waiting list control group. They found that the two practice dating

groups did not differ significantly on most of the measures used but that they were marginally higher (p < .10) in post-treatment dating frequency than the waiting list control group. When a composite score using dating frequency and frequency of casual interactions with the opposite sex was taken as a criterion, the treatment-control group difference reached the .05 level of significance.

Reduced levels of amxiety have also been used as criteria for the effectiveness of treatment. In several cases action oriented therapies have been reported as being more effective than verbal interaction approaches in reducing amxiety and fears associated with dating (Hay, 1972; Melnick, 1973; Morgan, 1970; Rehm & Marston, 1968). Martinson and Zerface (1970) found arranged peer interactions to be more effective in reducing amxiety than eclectic conversational therapy. Christensen and Arkowitz (1974) and Christensen, Arkowitz and Anderson (1973) found a significant decrease in self-reported anxiety after practice dating experience.

In only three on the investigations reported have the dating problems of college women been treated. Curran's (1973b) study had three female participants. Christensen and Arkowitz (1974) used equal numbers of males and females in practice dating. Christensen, Arkowitz, and Anderson (1973) found that on the composite score using dating frequency and frequency of casual interaction with the opposite sex, females in the treatment groups scored significantly higher than the males after treatment.

In summary, there has been very little systematic study of the causes of the anxieties, fears, and other problems which are often associated with dating relationships. The extent and nature of

dating inhibitions are poorly understood. In spite of this lack of basic understanding, a variety of treatment methods have been used in attempts to alleviate the problem. The majority of these have been used in treating male rather than female nondaters. The evidence obtained so far suggests that for short term treatment (none of the studies cited used more than six therapy sessions or dates over a six week period) action oriented approaches which focus directly on changing behavior patterns in the natural environment are more effective than conventional verbal interaction therapy both in reducing anxiety and increasing dating frequency.

#### Psychotherapy as Training

Psychotherapists often function as teachers. In a variety of ways they influence their clients to change the way they think, feel, or act (Frank, 1961). Thus they "teach" people to be different.

Using this conceptualization, clients may be thought of as "learners."

Murray and Jacobson (1971) argue that "...many of the changes occurring in psychotherapy that are ordinarily attributed to personal growth or personality reorganization can be more profitably viewed as resulting from cognitive, emotional, and social learning (p. 717)."

Therapists may teach some things unintentionally. By subtle use of head nods and verbalizations such as "mm hmm," therapists can train the client to restrict his speech to certain categories favored by the therapist (Krasner, 1962). This may occur even when the therapist is trying to be "nondirective" (Truax, 1966). Investigators have shown that clients often tend to adopt their therapist's attitudes, values, and language (Ehrenwald, 1957; Heine, 1953; Rosenthal, 1955).

When thinking along these lines the question arises. "What should the therapist teach?" and "How should he teach it?" One choice which needs to be made is whether to train a client to modify his performance of a criterion behavior through direct practice or to work on other areas which may eventually lead to change of the criterion. There is some experimental evidence which bears on this issue. Lazarus (1966) used three different treatment methods which varied in the directness with which the patient's problem was approached. Therapy which emphasized reflection-interpretation. advice giving, or behavior rehearsal was given to one of each of three groups of 25 patients with a variety of problems for a maximum of four sessions. The criterion of improvement was overt behavior change in the problem area in question. Clinical judgement of improvement showed that 32% of the reflection-interpretation patients improved, 44% of those given direct advice, and 92% of those receiving behavior rehearsal improved. Twenty seven of those who did not appear to benefit from reflection-interpretation or advice were subsequently treated with behavior rehearsal, after which 81% showed evidence of behavior change in their daily life. Bandura. Blanchard and Ritter (1969) treated snake phobic subjects with either live modeling with participation, modeling via motion pictures, or systematic desensitization. The most anxiety reduction, attitude change, and positive behavior change toward snakes was found in the live modeling group, the motion picture modeling group was next, and the least change was found with systematic desensitization. The investigations of the treatment of dating inhibitions resulted in findings similar to those of the Lazarus (1966) and Bandura, et. al. (1969)

studies, i.e., directed practice with the criterion behavior was the most effective intervention.

#### The Present Investigation

Due to the general scarcity of reliable information as to the specific reasons for dating inhibitions, the present study was designed to explore the nature of the problem and at the same time assess the effectiveness of treatment interventions. Thus, the study has both a diagnostic and evaluative aspect.

The major treatments used were primarily action oriented and consisted mostly of the participants discussing their problems with each other, directed practice with conversational skills, and practice dating. The format for practice dating was somewhat different from that followed in the Christensen and Arkowitz (1974) and Christensen, Arkowitz and Anderson (1973) studies. The students in the Christensen, et. al. investigations did not meet each other before the date was arranged. The participants in the present study met in small groups for one or more sessions before having practice dates with other members of their group. Thus, these practice dates may have been less anxiety provoking, at least in the arrangement phase.

The design of the present study along with hypotheses to be tested unfolded in stages. The first group of nondating (or low frequency dating) students were studied in the fall of 1973 primarily for diagnostic purposes. But a follow-up check the next term showed that the group had significantly increased their dating frequency after having a brief treatment of discussion, skills training, and practice dating. During winter term 1974 a second group was given a more extensive form of discussion and skills training treatment. By

this time investigative questions had arisen which were not thought of with the first group, so an expanded set of measuring instruments were prepared for use with the group studied during winter term. A third group which was intended to be a control was treated during spring term 1974 with practice dating increased, discussion reduced, and conversation skills training absent. In the present study these three groups and sets of treatment conditions were compared on a large number of process and outcome variables.

#### Chapter 2

Method: Subjects, Procedures, and Instruments

# Subjects

The subjects were 26 Michigan State University students who expressed a desire for help in overcoming their dating problems. All but one were recruited from sign-up sheets placed in introductory psychology course classrooms. One female was obtained by referral through a dormitory resident assistant. On the sign-up sheets the study was given the title "Dating Problems." Instructions on the sign-up sheet restricted the study to males or females who wanted to go out on more dates but did not because of timidity, shyness, fears about dating, etc.

Volunteers left their first name and phone number on the sign-up sheet. They were screened over the telephone by the author within a week from the time they signed up. Students were selected who had no more than three dates during the previous month, who said they were nervous when talking to members of the opposite sex that they might like to date, who had trouble meeting people to go out with, and who, after learning more about the study, expressed a desired to participate. The study was described as one designed to investigate the problems students are having in their dating life and to find effective means of helping them overcome these difficulties. It was explained that they would be attending some group meetings with other volunteers

during which they would discuss their concerns about dating. They were also told that they would be asked to fill out a number of questionnaires, and they were informed as to the approximate number of hours per week they would be required to devote to participation in the project. They received some course credit for their participation.

The subjects made up three groups each recruited during a different term (quarter) of the 1973-74 school year. Four males and four females were in the Fall Group; three males and three females composed the Winter Group, and six males and six females constituted the Spring Group. The total number of participants was 26, but one female from the Spring Group was not included in the main analysis. She participated in full but was dropped from the analysis because she had much more dating experience than the rest of the subjects and she was seeing a professional counselor during the period of the study. All but one of the participants were undergraduates; one male in the Fall Group had already graduated but was taking more undergraduate course work.

#### Procedure

The Fall Group was treated during November and December 1973 (last half of fall term), the Winter Group was treated during February 1974 (last half of winter term), and the Spring Group was treated during April and May 1974 (first half of spring term). Four different elements of treatment were used.

Group Discussion. Part of the time in group meetings was devoted to filling out questionnaires. The rest of the time was spent discussing dating. These discussions usually lasted from 30 to 45 minutes. The author acted as moderator. His role was to encourage

all to participate in sharing their dating concerns in an atmosphere of open exchange. Personal concerns were generally expressed in the context of a discussion of issues of interest to the group members. Typical topics discussed were; how to tell if someone of the opposite sex is interested in going out, social pressure to date, sexual behavior expectations, romantic vs. friendship relationships between sexes, stereotyped sex roles in dating, and the importance of money in dating. The goal of these meetings was to acquaint the participants with the ideas, attitudes, and experiences of other persons of both sexes who felt they had problems with dating.

Dyadic interactions. Each dyadic interaction session was structured as follows: For 30 minutes one male and one female group member met in a small room and talked about their dating concerns. They were given verbal instructions to share their dating problems and experiences. The author instructed them to be open and completely honest when talking, and to be accepting, nonjudgemental and understanding when listening. These instructions were intended to encourage mutual self-disclosure. The dyadic interaction sessions were designed to provide an opportunity for sharing deeper and more personal concerns and feelings than the group discussions. The author observed through a one-way mirror and recorded the sessions on tape.

Silence-Volubility Training. Each session of silence-volubility (S-V) training had the same structure: one female and one male group member sat facing each other in a small room. One person talked about personal interests or concerns for 1 minute while the other listened and said nothing. Then the other participant talked nonstop for 1 minute while the former listened. Talk time was increased to three,

then to five minutes. After the last person had talked for his or her five minute turn, both persons sat in silence and tried to maintain constant eye contact for 10 minutes. The above procedure which was used with the Fall Group was modified slightly for use with the Winter Group. For the Winter Group talk time began with the five minute level. Each took a turn talking then both sat in silence for 10 minutes while holding each other's hands and attempting to maintain constant eye contact. For both groups, if during the time when a participant was supposed to be talking and he (or she) was unable to think of anything to say, he was to take a card off a pile, turn it over and talk about the topic suggested. The topics were chosen to encourage self-disclosing talk. Some examples are: "How you feel about not being able to think of something to talk about." "What you like about yourself," "The most unpleasant dating experience you have had." The author observed these sessions through a one-way mirror. They were intended to foster a feeling of intimacy between the participants, help desensitize them to fears of silence in conversations, give them practice in producing continuous speech, and encourage careful listening.

Practice dating. Each female gave her phone number to each male in her group at a group meeting. It was then up to the males to arrange a date with each female. The Fall Group was actually made up of two subgroups of two males and two females each. The Spring Group also met in two subgroups of three males and three females each. The Winter Group met together as a single unit of six people. The only stipulations put on the dates were that they should last at least two hours and that during that time the two should be together rather than

participating with others in a group activity. Talking together in one of their rooms or while walking on campus, going out to eat or to a movie were all acceptable activities for the dates.

# Design

Table 1 shows the average number of practice dates had by each group and the average amount of time spent by the group with each of the treatment procedures. The Fall Group members were assigned two practice dates each, but did not complete all of them. Two males and two females had one date each and two males and two females had two dates each. The Winter Group members were assigned three practice dates apiece. Two males and two females had one date each, and one male and one female did not go on any practice dates. The members of the Spring Group were assigned three dates apiece and all dates were completed. The number of practice dates completed were significantly different for each group  $(p \leqslant .05)$ .

The groups may be ordered from low to high according to the average number of practice dates that were completed, i.e., Winter & Fall & Spring. Treatment time not spent in practice dating was spent in either group or one-to-one discussion of dating problems. Hence the groups may be ordered low to high for percent of treatment time spent in discussion as opposed to dating. This gives the reverse of the order obtained with number of practice dates—Spring Group (25%), Fall Group (5%), Winter Group (84%). Since practice dating is the major variable under consideration, the groups will be referred to as Low, Medium, and High Practice Dating groups. Thus, this three group, three levels design was arrived at post hoc.

Table 1
Group Means on Treatment Variables

Treatment Variable	Low Practice Dating (Winter Group)	Med. Practice Dating (Fall Group)	Hi Practice Dating (Spring Group		
	Mean	Mean	Mean		
Number of Practice Dates	0.67	1.50	3.00		
Duration of Treatment (wks)	3.00	3.00	3.00		
Hours of Group Discussion	2.50	1.50	2.00		
Hours of Dyad Discussion	3.00	0.75	0		
Hours of Silence- Volubility Training	1.50	1.00	0		
Total hrs. 1 to 1 (dyads, S-V, practice dates)	5.84	4.75	6.00		
Total hrs. treatment	8.34	6,25	8.00		

Note, -- Practice dates lasted an average of 2 hours.

#### Measurement

Copies of the measuring instruments that were designed for the present investigation may be found in the appendix. Since some of the instruments were not fully developed until winter term 1974, the Fall Group did not receive some measures which were used with the Winter and Spring Groups.

History Questionnaire. This was a nine page questionnaire made up mostly of open ended and multiple choice items. Topics covered were: number of dates had; percent of dates, or requests for dates, accepted; reasons for not having 2nd or 3rd dates; reactions to being turned down; problems determining interest of others in having a date; dating problem area; and reactions to; compliments, confidence level of potential dating partners, and the impact of same sexed third persons on conversations. Only the number of dates and dating problem areas portions were included in the version used with the Fall Group. The History Questionnaire was administered during the first group meeting held for each group.

Sexual Attitude and Experience Questionnaire. This questionnaire was four pages long and consisted mainly of open ended and multiple choice items. The following topics were covered: experience in sexual behavior, effects of any negative sexual experiences, dealing with guilt associated with sexual behavior, satisfaction with sex life, areas of concern regarding sex, personal sexual behavior standards, and self-judged physical attractiveness. The last portion of the questionnaire did not deal directly with sex but with fantasies involving interaction with the opposite sex. Respondents were asked to briefly describe fantasies or daydreams they had in each of five areas:

(1) meeting new potential dates, (2) social activities, (3) long-term relationships, (4) terminating relationships, and (5) sexual activities. The questionnaire was filled out by the Spring and Winter Groups during the 1st or 2nd group meeting. The participants were assured that when the information was reported, their individual identities would remain anonymous.

Reactions to Hurt Questionnaire. This one page questionnaire contained mostly open ended questions. The first question asked, "Have you ever been "hurt" emotionally by a person of the opposite sex to whom you were attracted?" If the respondent answered "yes" to this question he or she was then asked to briefly describe the experience and report his or her emotional, cognitive and behavioral reaction. It was filled out by the Winter and Spring Groups during a group meeting.

Date Value Rating. The fifty items on this instrument were written to measure values of characteristics which could be possessed by dating partners. The areas of social skill, interpersonal warmth, naturalness, assertiveness, social status, sex, and religion were represented. Each respondent was asked to place a number by each characteristic to rate its importance to them in their dating partners and then to rate the same characteristics as they thought most of their opposite sexed peers would rate them. Thus, each male indicated which "traits" he valued in girls he might date, and he predicted how important he thought those "traits" were to most girls in the boys they might date. The females did the same for themselves and made predictions for their male peers. The Date Value Rating scale was filled out during the lst and last group meeting of both

the Winter and Spring Groups.

Self-Concept Scales. Two different self-concept scales were used -- the self scale of the Miskimins Self-Goal-Other Discrepancy Scale (Miskimins & Braucht, 1971) and a self-concept scale (SCS) prepared by the author. Only the Miskimins scale was used with the Fall Group. When that group's responses were studied, it became apparent that some important aspects of self-concept related to dating were not represented. Therefore the SCS was prepared which contained 20 five point bipolar items; five each were written to measure self-concept in the areas of assertiveness, friendliness, genuineness, and social skill. Five items on the Miskimins scale were also on the SCS. The Fall and Spring Groups filled out the Miskimins scale in the 1st and last group meetings. The Spring Group also filled it out two weeks after the end of treatment. All three groups took the Miskimins scale at the end of the school year. The SCS was filled out by the Winter and Spring Groups in the 1st group meeting and two weeks after treatment was terminated. The Winter Group also filled it out seven weeks after treatment. All three groups completed the SCS at the end of the school year.

State Anxiety Scale. During the first group meeting all participants completed the state anxiety form of the State-Trait

Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970). The respondents were instructed to answer each item according to how they usually felt on one-to-one dates. Upon being questioned, participants indicated that they interpreted the instructions to mean lst or 2nd dates rather than how they felt after having many dates with the same person.

Social Avoidance and Distress Scale. The Social Avoidance and Distress Scale (SAD) is said by its authors to be a measure of social anxiety (Watson & Friend, 1969). They found that persons who scored high on the SAD tended to avoid social interactions, preferred to work alone and reported that they talked less than those with low scores. Watson and Friend (1969) reported a KR-20 reliability of .94 and a one month test-retest reliability of .68. The SAD was administered to all three groups in the present study, but only the Winter and Spring Groups had both pre and post treatment measurements.

Internal-External Scales. Two internal-external orientation scales were used. For the purposes of the present study the first will be called the General I-E Scale. This scale contains eight items from Rotter's I-E scale (Rotter, 1966). These were taken from a group of items on Rotter's scale which were identified through factor analysis by Gurin, Gurin, Lao, and Beattie (1969) to represent a factor they called "personal control." These items are written in the first person and are said to measure the extent to which a person believes that he can control what happens in his own life (internal orientation) as opposed to believing that luck, fate, or chance account for most of the variance in what happens to him (external control). Using responses from 432 subjects in a cluster analysis Kent (1973) identified the eight items used in the present study to be the most internally consistent of personal I-E items identified by Gurin, et. al. (1969).

The other internal-external scale used was developed by the author to measure belief in personal control in the specific area of finding a mate or marriage partner. It will be called the Mate I-E

Scale. It is made up of eight items. No reliability or validity information is avilable on this scale, hence, any conclusions based on responses to it in the present study are extremely tentative.

Both scales used a true-false format. Each was given to the Winter and Spring Groups in the first group meeting and again at the termination of treatment.

Weekly Self-Ratings. At each weekly meeting of the Spring and Winter Groups the participants filled out a self-rating form on which they indicated how they felt while talking to opposite sexed peers during the recent few days and how much they had been worrying about a variety of topics during the same period. The feeling ratings were five point Likert items. Two items were used as indices of the nervous-calm dimension, two for friendly-rejecting, two for genuine-phony, one for assertive-shy, and one for confident-unsure of self. The worry items covered worry about not having enough dates, not being happy, getting along with peers and parents, school work, and job situation. A four point scale was used that went from "none" to "constantly" worry. The Winter Group filled out the weekly measure again seven weeks after the termination of treatment and at the end of the school year. The Spring Group filled it out again two weeks after termination and at the end of the school year. The Fall Group filled it out only at the end of the year.

Daily Diary. During the first week of treatment the members of the Winter and Spring Groups kept a daily diary in which they recorded their interactions with the opposite sex. They were instructed to take a moment at the end of each day and recall the people with whom

they had talked. Talking to someone was defined as more than saying hello but not necessarily having an extended discussion. They recorded the number of males and females talked to who were people they already knew and the number who they talked to for the first time. They also estimated the total amount of time they spent each day talking with members of each sex.

Dating Frequency. In the first group meeting each participant wrote down how many dates he or she had in their life, during the past year. during the past school term, and during the past month. The number of dates each participant had with persons not part of the group but which occurred during treatment were also recorded. At the end of treatment participants were told to keep track of their future dates so that they could give the author accurate dating information when he contacted them at a later time. Number of dates had by each member of the Fall Group during Christmas break, winter term and spring term were obtained by telephone at the end of winter and spring terms. Number of post-treatment dates for the Winter Group were obtained by telephone in the middle and at the end of spring term. Post-treatment dating records were obtained from the Spring Group by telephone at the end of spring term. Thus, the Fall Group had a one month, one term, and two term follow-up; the Winter Group had a one month and a one term follow-up, and the Spring Group had a one month follow-up.

## Cluster Analysis of Measuring Instruments

The Date Value Rating, Miskimins self-concept scale and SCS self-concept scale were cluster analyzed. This was done to faciliate a better understanding of the factors measured by each instrument.

While these questionnnaires were prepared with a priori factors in mind, it was decided that a cluster analysis of each instrument would add a great deal to the confidence with which they could be interpreted.

Responses were pooled across all measurements and persons to give a total of 68 observations on the Date Value Rating, 63 observations on the Miskimins scale, 77 observations on the SCS, and 82 observations on the Dyad Self-Rating Form. Cluster analyses were performed on each set of data using Hunter and Cohen's (1969) PACKAGE system of computer routines for the analysis of correlational data. The first step in each analysis was to perform a principle axis factor analysis with communalities. This was then subjected to a varimax rotation and the resulting factors were formed into blind multiple groups. These groups of items were then refined into homogeneous clusters.

The following criteria were used in forming homogeneous clusters:

(a) internal consistency—all the items in a cluster should be correlated more highly with their own cluster than with any other cluster and coefficient alpha must be reasonably large, (b) external parallelism—the sign and magnitude of the correlation between all items within a cluster and any other cluster should be similar, and (c) homogeniety of cluster content—it should be reasonable, based on content, that the items which make up a cluster share some common variance.

The obtained clusters for the Date Value Rating are presented in Table 2. Names were chosen for each cluster with the intent of summarizing the factor represented by each. The actual items may be referred to for clarification of the meaning of the cluster names. The items with the highest loadings on each cluster may be considered to be the most representative of the cluster dimension. Ten items did

Table 2

Date Value Rating Clusters

Cluster Name	Coef. alpha	Content	I tem loading
1. Physically attractive	.97	26. Has a physically attractive face 27. Has a physically attractive body	.97 .97
2. Fashionable	.78	34. Acts in the way that is "socially in" 29. Dresses in up-to-date fashions 30. Has lots of friends 32. Is sought after as a date by many 38. Observes the current fads	.79 .67 .65 .56
3. Pleasant	.73	17. Is fun loving and adventurous 16. Is natural and authentic 8. Makes it easy for you to relax and be yourself 20. Is open to your point of view	.82 .75 .51 .48
4. Demonstrative	.78	13. Is warm and friendly with you 11. Clearly shows he/she likes you 14. Freely shows affection 12. Is a good listener, attentive	.73 .68 .68 .66
5. Ambitious	.67	31. Is outstanding in some field of endeavor or activity 9. Has high self-confidence 24. Is a leader 21. Is ambitious in chosen field 33. Gets high grades in school	.72 •57 •57 •48 •36
6. Status	.88	35. Has money, i.e., lots of it 36. Has chosen a profession of high prestige 37. Has chosen a profession which earns a high income 39. Comes from a family of high social status	.85 .85 .84 .69

Table 2 (cont'd.)

Cluster Name	Coef.	Content	Item loading
7. Religious	.91	50. Prays regularly 49. Attends church regularly 50. Believes in God in the religious sense	1.00 .85 .79
8. Intelligent & straight forward	.63	5. Is knowledgeable in many different areas -18. Plays gameshard to get, etc. 10. Is considerate of your feelings 28. Has high intelligence 19. Is honest and forthright in expressing + and - feelings	.69 .54 .52 .24
9. Sexually permissive	.76	45. Will engage in petting on the first date 47. Will have sexual intercourse when going steady 46. Will have sexual intercourse on the first date 44. Will kiss on the first date 43. Likes to read Playboy magazine	.81 .70 .65 .51 .46
10. Flattering	.71	3. Says flattering things to you 6. Flirts with you 4. Says witty things	.74 .73 .56
Residual		15. Believes in equality of the sexes 22. Engages in friendly teasing 7. Shows you an unusually exciting time 25. Asserts his/her own rights in the relationship 1. Is an interesting conversation— alist 2. Observes the social graces 23. Is talkative 40. Is naive about sex 41. Likes to talk about sex 42. Has not had sexual intercourse	

Note. -- Item loadings are Pearson r correlations (corrected downward for attenuation by using communalities) of each item with its own cluster.

not fit in any of the clusters or form clusters of their own according to the criteria outlined above and were therefore put into a residual set. Table 3 gives the Date Value Rating cluster intercorrelations.

Table 4 presents the clusters obtained from the self form of the Miskimins Self-Goal-Other Discrepancy Scale. The Social cluster is the same as Miskimins and Braucht's (1971) social subscale. The Global, Emotional Well Being, and Intellectual clusters, however, are made up of items from both their general and emotional subscales.

The Global cluster seems to tap general or overall self-esteem. The Intellectual cluster looks almost like a measure of arrogance. Persons with high scores on this cluster would see themselves as smart, creative, and good looking: This combination in reality is probably quite rare.

The clusters obtained from the SCS are shown in Table 5. Five clusters were formed and three items went into a residual set. The Extraverted cluster contains four of the five a priori items for assertiveness. With the highest loading on "spontaneous," Extraverted seemed like a more accurate summary name for this group of items. There appears to be little ambiguity as to the meaning of the other clusters.

Table 6 gives the SCS cluster intercorrelations, the Miskimins cluster intercorrelations, and the correlations between the Miskimins and SCS clusters for the end-of-the-year measurement. In general the SCS and Miskimins scales tend to be very highly correlated. In particular the Miskimins Social and SCS Extraverted and Social Comfort

Table 3

Date Value Rating Cluster Intercorrelations (N = 68)

		٦.	_2	3	4	5	6	2	8	0	10
Physical Attrac.	1	100	75	53	48	28			n	33	14
Fashionable	_2	65	100	27	29	26	48	-12	43	29	20
Pleasant	3	44	19	100	56	52	<b>-0</b> 6	-12	41	-02	-18
<b>Demonstrative</b>	4	43				04				23	-09
<b>Ambitious</b>	5	22	17	34	03	100	44	43	44	-50	-03
Status	6	27	40	-07	-06	35	100	03	-24	16	33
Religious	7	-23	-12	-11	-23	34	03	100	30	43	-14
Int. & St. Fwd.	8	08	-34	29	33	27	-20	22	100	-19	-36
Sex. permissive	9	31	23	02	21	-36	13	-35	-13	100	27
Flattering	10	13	18	-14	-07	-02	26	-15	-28	24	100

Note. -- Correlations above the diagonal are corrected for attenuation.

Table 4
Miskimins Clusters

Cluster Name	Coef.	Content	I tem loading	
1. Social	•79	6. Unfriendly and cold - Friendly and warm  9. Awkward socially - Socially skillful  8. Poor relations with opposite sex - Good relations with opposite sex  7. Prefer being alone - Prefer being with people  10. Not concerned for others - Con- cerned for others	.76 .72 .71 .61	
2. Global	13. Lack self-confidence - High self-confidence 10. Lack self-confidence - High self-confidence 12. Tense - Relaxed 4. Unsuccessful in life - Successful in life			
3. Emotional well- being	.81	14. Can't handle personal problems - Handle personal problems 11. Sad - Happy 15. Dull and lifeless - Active and alert	.96 .73 .63	
4. Intellectual	•59	<ol> <li>Ignorant - Intelligent</li> <li>Physically unattractive -         Physically attractive     </li> <li>Not creative and original -         Creative and original     </li> </ol>	.69 .53	
Residual		5. Not fit for any job - Competent for many jobs		

Note. — Item loadings are Pearson r correlations (corrected downward for attenuation by using communalities) of each item with its own cluster.

Table 5
SCS Clusters

Cluster Name	Coef.	Content	Item loading
1. Extraverted	.82	1. Reserved - Spontaneous 2. Follower - Leader 10. Shy - Assertive 9. Quiet - Talkative	.78 .76 .70 .68
2. Social Comfort (skill)	.77	7. Unsure of self - Self-confident 20. Say & do all the wrong things - Say & do all the right things 15. Socially awkward - Socially skill- ful 6. Tense, nervous - At ease, relaxed	.77 .69 .68 .56
3. Friendly and Happy	.78	4. Unfriendly and cold - Friendly and warm 3. Sad - Happy	.81 .81
4. Sensitive to others	.64	ll. Selfish - Considerate 16. Can't tell what others feel - Perceptive of other's feelings 18. Critical - Tolerant	.74 .67 .45
5. Genuine	.80	13. Artificial - Genuine 5. Phony - Authentic 19. Play a part - Natural 14. Dishonest - Honest	.85 .74 .65
Residual		8. Boring - Interesting 17. Self-conscious - Unaware of self 12. Rejecting - Affectionate	

Note. -- Item loadings are Pearson r correlations (corrected downward for attenuation by using communalities) of each item with its own cluster.

Table 6
Self-Concept Scales Cluster Intercorrelations

	Mis	kimin	s Clu		Inter = 63)	correl	ation <sup>a</sup>
Social Global Emot. well-bng Intellectual	1 2 • 3 4 sex	100 57 20 25 -11	2 81 100 48 31 10	27 66 100 00 14	29 44 -01 100 10	sex <sup>c</sup> -09 11 15 11 100	
Extraverted		scs c	lus te		ercor = 77) 4 -15	relati	ons <sup>a</sup>

	303 0	luste		ercor = 77)	relat	lons
	1	2	<u>3</u>	4	_5_	sex C
Extraverted 1	100	76	61	-15	32	-34
Social Cmfrt. 2	60	100	73	41	42	-19
Friendly 3	48	55	100	17	55	-03
Sens. to others 4	-11	30	12	100	<i>5</i> 8	11
Genuine	26	33	43	44	100	26
s ex	-30	-18	-03	09	23	100

# Miskimins and SCS Cluster Correlations<sup>b</sup> (N = 23)

			SCS	Clus	ters		SCS	Misk.
	,	$\frac{1}{\sqrt{2}}$	2	7.5	4	<u> 5</u>	<u>to</u> t,	
	1	69	81	42	<del>3</del> 6	<u>60</u>	89	86
Miskimins	2	56	85	59	35	36	81	91
<b>Clusters</b>	3	40	59	79	10	14	55	69
	4	50	35	14	03	24	42	55
SCS	tot.	76	89	67	37	64	100	90
Misk.	tot.	69	89	68	<b>3</b> 0	45	90	100

A Correlations above the diagonal are corrected for attenuation.

b Based on observed scores for measurement at the end of the year.

C High score was assigned to females.

clusters are highly related, suggesting that they measure very similar factors. There is also a strong relationship between the Miskimins Emotional Well Being cluster and the SCS Friendly and Happy cluster. These two clusters share one item in common.

## Data Analysis

The cluster analyses described above decreased the number of dependent variables markedly. A very large number of variables still remained, however, from the many open ended questionnaire items.

For practical reasons it was necessary to limit the data analysis to those measures which seemed most likely to be related to the major dependent variable, change in dating frequency from prior to post-treatment. Change on dating frequency and other dependent variables was tested for statistical significance with t tests within each group separately. Between group differences on pre, post, and change scores were tested with t or F tests. Tests were also made for the significance of sex differences and sex by group interactions. Correlations were computed between various dependent and independent measures in order to determine which variables were related to change. Cross lagged panel analysis was used in a search for cause and effect relationships between change in dating frequency and self-concept change.

# Chapter 3

Description of the Sample and Discussion of Dating Problems

# Age and Year in College

The average age of participants in the study was 19.2 years (range 18 to 24). This is very similar to the ages of students who participated in other outcome studies. Christensen, Arkowitz and Anderson (1973) report a mean age of 19.6 years for their subjects. Christensen and Arkowitz (1974) report an age range of 18 to 25 years, and the students in Curran's (1973) study ranged in age from 17 to 23 years.

Fifteen of the participants in the present investigation were freshmen, six were sophomores, three were juniors, and one was a fifth year student. The mean year in college for the total group was 1.64. Freshmen were probably over represented in the sample because subjects were taken from introductory psychology courses which enroll more lower than upper classmen.

## Social and Dating Anxiety

The total group mean on the Social Avoidance and Distress scale was 13.56. The mean for males was 12.92 and for females was 14.17. Watson and Friend (1969) published norms on the SAD for 297 college undergraduates showing a grand mean of 9.11 (s. d.= 8.01), and means of 11.20 and 8.24 for males and females respectively. Thus, the males in the present sample were slightly higher than the college norm in

pants were similar in social anxiety to Christensen and Arkowitz'

(1974) low dating group (mean = 11.90) and Valentine and Arkowitz'

(1973) low socially competent males (mean = 14.94).

The mean for total group on the state anxiety form of the STAI was 51.04. The mean for males was 49.38 and the mean for females was 52.83. The scale was filled out by the participants according to how they usually felt on first or second one-to-one dates. Spielberger, Gorsuch and Lushene (1970) report the following means for 109 undergraduate males and 88 undergraduate females: normal administration conditions—males 36.99, females 37.24; while taking an IQ test—males 43.01, females 43.69. Thus the participants in the present study report being more anxious while on dates than the college student norm for examination conditions. As was the case with the SAD results, the females had a higher average anxiety score for dates than the males. This sex difference, however, was not statistically significant.

# Dating Frequency

Vreeland (1972a) found that Harvard males dated less during their freshman year than they did during high school or later years of college. Because it takes a certain amount of time to get one's bearings and make acquaintances upon arriving at college for the first time, freshmen, especially freshmen men, may tend to date less than they would like. However, outgoing assertive freshmen may not suffer this temporary drop in dating frequency. Unfortunately, data is not yet available to test this possibility.

The average number of dates per week reported by the total group in the present study during the month preceding treatment was .22 (range 0 to .75). The mean for males was .20 and for females was .25. Christensen, et. al. (1973) report a group pre-treatment dating frequency of .25 dates per week and a range identical to that of the present sample.

Pre-treatment dating frequencies for the high dating group in the Christensen and Arkowitz (1974) study was 1.46 per week and .82 per week for their low dating group. A much lower pre-dating frequency was reported in the sample used by Hay (1973) in her treatment study for males only, .08 dates per week. The range of total dates in each participants life was similar to those reported in the Curran (1973b) study. On the whole the present sample looks quite comparable to those used in other studies of treatment effectiveness for dating inhibitions.

Bolton and Kammeyer (1967) found a mean dating frequency of 2.15 dates per week in a 1962 sample of college students. Although she gave no figures, Vreeland (1972a) reported that dating frequency increased over the past decade for the college population she studied. Based on the above information, it appears that compared to the average student the participants in the present study were, in fact, dating infrequently prior to the beginning of treatment.

## Dating Problems

History Questionnaire. The History Questionnaire was prepared and administered to provide information regarding the nature of the dating problems experienced by participants in the study. Many of the questions were open ended, allowing individuals to express their concerns in their own words. A cross section of these responses is given below.

#### Males

I am too shy to ask out a woman because I think they might laugh at me so I back off at the slightest hint of confrontation. I believe I am more intelligent than most people, and therefore project an image that makes other people feel put down.

I fear that I am not the most important or significant other person in her life. The other person is not too interested in my attitudes or endeavors. I am slightly snobbish and not too understanding of others. Sometimes I feel she is putting on an act, and I don't know how to tell.

I am very tense. I never know how the girl feels towards me. I never know what kind of person she is and whether or not she is putting on a show or false image to impress me. I have trouble letting a girl know I like her. I'm more passive than I think I should be. If I think she likes someone else, or if I get the slightest impression she doesn't like me, I feel I have to limit our relationship to a simple friendship.

I'm not always at ease around someone I don't know very well, although I have no trouble at all if I'm around people I know well. I wish the opposite sex would be as natural and authentic as I try to be.

Suffer from feeling of inferiority brought upon me by being overweight from grade 8 through frosh year of college. Sometime get tongue tied, feel I get too dull or boring.

Scared of rejection. I like being close to a person and am myself very open about myself, but many other people aren't. Refusals tend to deflate me quite a bit.

I'm not sure what I want. I'm afraid that I'll get turned down or that the girl will like me but I don't feel the same way. I don't know if I should give up or if I should "prod" her into saying yes. I don't know what to look for I guess. What I interpret as a "green light" might just be a friendly gesture. It's confusing.

Not meeting a girl who really interests me and being afraid to ask girls out. I am afraid I may select someone whose ideas and beliefs are nothing like mine, and may result in a bad relationship. I really get frustrated when the girl and I stop saying things to each other, it makes me nervous that I may say something extremely stupid and make a fool of myself.

I enjoy stability. Dislike of rejection. Oversensitivity.

Anxiety and feeling of incompetency in reaching the stage where I could comfortably talk to a girl.

I now find it hard to get back the habits or talents that I haven't had to use (in the 1st date sense) for about three years. I usually pick someone who is appealing physically but appalling mentally. If she refuses once, almost always I don't ask again.

I feel very secure with just going with a group. I just don't know what to do with someone I'd like to date after I find one.

#### Females

I'm very quiet and never know what to say. I'm very nervous and sort of stutter when I talk.

I always act either too loud or too quiet. I guess it's because I am nervous and unsure.

I feel that at times I put on an act of being rather free, much more free than I really am. I am always afraid, not in just relations with the other sex, that they will not accept me as I am, so I come off kind of phony and impersonal at times.

I would like to have more self-confidence.

I never know what to start talking about. Usually run out of conversation. Nervous, think I'll do something so he won't like me.

I don't meet the kind of guys I would like to go out with. I'm looking for someone with whom I can have a meaningful and lasting relationship. If I really like the guy I will be extra shy and timid, but if I don't particularly care, then I act myself.

I have too many hang-ups that people don't want to deal with. I'm too afraid to be myself and have fun or disagree. I get scared and avoid dudes. I don't really know how to play the game well. My shyness makes them uptight. I tend to want a perfect person only.

I'm too picky. Afraid to get involved. I get scared of seriousness. I usually don't like anybody enough to pursue it. If I like a guy, but he doesn't know me, it's sometimes hard to get myself in a situation to become acquainted.

No one asks me out. I talk too little usually. I'm a great listener, but it takes some prying to bring me out of myself.

I'm not as outgoing and friendly as I should and wish to be. I have trouble in telling whether a guy is being just friendly or whether he's showing a little interest when talking to him for the first time.

I am withdrawn with people I don't know. Most of the people who seem to be interested in me I am not at all interested in going out with. I don't start conversations, in fact, I go out of my way to avoid it. If the guy is not at ease, I cannot put him at ease.

Guys always act like they're interested in you when they rarely are. I have trouble thinking of things to talk about. I never get asked a 2nd time.

The expression of shyness, feelings of inadequacy, nervousness, and fear of rejection tend to predominate in the above statements of both males and females. A tally was made of the number of males and females who responded affirmatively to each open ended question regarding problems in dating. The number and percent of each sex responding to these questions is shown in Table 7 for the ten most frequently mentioned areas of concern. One male did not respond to this portion of the questionnaire, hence is left out of the totals.

Keeping a conversation going once it has been started heads the list as the most frequently reported problem for both males and females. Beginning conversations was reported as a problem by fewer persons. Apparently, meeting someone and starting a conversation is easier for some people than keeping up an interesting verbal exchange for an extended period of time. Vreeland (1972b) found that private activities such as sitting around the room talking were the most popular dating activities reported in the recent sample of Harvard students she studied. Being a good conversationalist was also reported as one of the most valued characteristics in dating partners. If this is a general trend, it would explain the intense awareness the persons in the present sample have of their deficits in conversational ability.

A sex difference is apparent in Table 7 for "getting too easily hurt or discouraged," the males being the more frequent respondents. This may reflect the difference in sex role in dating relationships. It is the male who traditionally does most of the asking, hence, males may more often experience direct and unambiguous rejection.

Comparisons Between the Three Experimental Groups

Table 8 presents means, standard deviations and ranges for each

Problem	fmales (N=12)	<b>Emales</b>	ffemales (N=12)	%females	#total (N=24)	%total
Keeping a conversation going once it has been started.	10	83%	12	100%	22	92\$
Not being one's natural self.	6	50	9	75	15	63
Sexual aspects of dating (pushing too fast, being pushed, guilt, anxiety, etc.	8	67	6	50	14	<i>5</i> 8
Avoiding activities & places where can meet.	6	50	7	58	13	54
Getting discouraged or hurt too easily.	10	83	3	25	13	54
Starting conversations.	5	42	8	67	13	54
Showing the person they are liked.	7	<b>5</b> 8	5	42	12	50
Discerning whether the person is interested.	6	50	5	42	11	46
Determining who is a realistic choice for a dating partner.	6	50	4	33	10	42
Long term relationships (getting serious too fast fear long term relationships, etc.	6	50	3	25	9	38

Table 8

Means, Standard Deviations, and Ranges of Scores for all Three
Groups on Premeasures, Dating Frequency, and Change in Dating Frequency

			Dating	_		e Dating			Dating
Measure	(W)	nter (		(1	Fall Gr	oup)	(Spring Group)		
	Mean	s.d.	Range	Mean	s,d.	Range	Mean	s.d.	Range
Age	19.17	1.07	18-21	19.50	2,34	18-24	19.00	0.74	18-20
Year in school	1.83	0.90	1-3	1.88	1.36	1-5	1.36	0.48	1-2
S.A.D. Scale	13.50	6.55	6-26	15.75	7.55	3-25	11.91	8,24	3-18
State anxiety scale	49.67	9.59	36-62	53.00	11,66	35-74	50.36	7.27	39-61
Dating problems: b Starting conversations	0.50	0.50	0-1	0.50	0.50	0-1	0.73	0.45	0-1
Being one's natural self	0.67	0.47	0-1	0.75	0.43	0-1	0.46	0.50	0-1
Showing liking for the other	0.50	0.50	0-1	0.75	0.43	0-1	0.27	0.45	0-1
Discerning if liked by other	0.67	0.47	0-1	0.25	0.43	0-1	0.55	0.50	0-1
Avoid places where meet dates	0.17	0.37	0-1	0.88	0.33	0-1	0.46	0.50	0-1
ionths since last date prior to treatment	1.21	0.១	.50-2.0	2.63	2.16	.25-6.0	4.05	4,28	.25-12.
Dates per week, month prior to treatment	0.25	0.25	050	0.13	0,20	060	0.27	0,29	075

<sup>\*</sup> Fall Group values are a composite of pre and post scores (four subjects filled out the scale prior to treatment and four filled it out after treatment).

b score of 1 = subject reported having this problem, 0 = subject did not report having the problem

group on premeasures which were used with all three groups of participants. Tests of significance for differences between groups are given in Table 9. There was a weakly significant sex difference for age. In each group the males had a slightly higher mean for age than the females. There was a significant linear trend for months since last date prior to the beginning of treatment. For the linear and quadratic trends tests the groups were arranged in the following order: Winter (Low Practice Dating), Fall (Medium Practice Dating), and Spring (High Practice Dating), A significant positive linear trend indicates that the Fall Group was higher than the Winter Group and that the Spring Group was higher than either the Fall or Winter Group. Months since last date prior to the beginning of treatment is one index of the severity of the dating inhibition. If this index was used alone it would suggest that the Spring Group had the most severe problem. followed by the Fall Group with a medium level of severity, and last the Winter Group with the least severe problem. If one takes the position that those who are worse off stand to benefit the most from therapy, then outcome would be biased in favor of the Winter Group.

Significant quadratic trends were found for two of the dating problems—showing liking for the other person and avoiding places where one is likely to meet potential dating partners (parties, social gatherings, etc.). Both trends are negative indicating that the Fall Group scored higher on these measures than either the Winter or Spring Group.

It should be noted that there were no significant differences between groups on dates per week for the month prior to treatment. This score is the baseline that was used in computing change in dating frequency and was considered to be the main index of treatment effectiveness in the present investigation.

Table 9

Tests for Sex Differences and between Group Trends for all Three Groups on Premeasures, Dating Frequency, and Change in Dating Frequency

Measure		Sex		ear and	Quadratic Trend		Sex by Linear Trend		Sex by Quadratic Trend	
	r	P	r	P	r	ρ	-	β	r	ρ
Age	39	<.10	.07		.14		03		.24	
Year in school	30		22		17		.08		.27	
State anxiety scale	.18		.00		14		<b></b> 19		.01	
Dating problems: Starting conversa- tions	.13		.20		.14		04		.13	
Being one's natural self	.29		20		21		04		.29	
Showing liking for the other	12		24		37	<b>&lt;.</b> 10	.05		-,12	
Discerning if liked by the other	12		04		.32		.24		-,12	
Avoid places where meet dates	.12		.14		49	<b>&lt;.</b> 05	.05		.28	
Months since last date prior to treat.	10		.34	<b>&lt;.</b> 10	.06		22		32	
Dates per week, month prior to treatment	.09		.07		.24		.04		.28	

Note. -- Each r is the properly signed square root of  $N^2$  where the dummy variables are constructed by  $X_{\text{sex}}$ : Male = -1, Females= +1;  $X_{\text{linear gp.}}$ : Winter = -1, Fall = 0, Spring = +1;  $X_{\text{quad. grp.}}$ : Winter = Spring = +1, Fall = -1;  $X_{\text{sex}}$  by linear gp:  $X_{\text{sex}}$  linear gp.;  $X_{\text{sex}}$  sex by quad. gp.  $X_{\text{sex}}$  sex  $X_{\text{linear gp.}}$  sex by quad. gp. In this table the cells were not proportional and hence the F tests were approximate: If  $X_{\text{linear gp.}}$  then,  $X_{\text{linear gp.}}$  sex  $X_{\text{linear gp.}}$  sex by qd.gp.  $X_{\text{linear gp.}}$  then,  $X_{\text{linear gp.}}$  sex by qd.gp.  $X_{\text{linear gp.}}$  sex by qd.gp.  $X_{\text{linear gp.}}$  then,  $X_{\text{linear gp.}}$  sex by qd.gp.

## Additional Measures on the Winter and Spring Groups

Subsequent to its administration to the Fall Group, the History Questionnaire was enlarged. This amplified version was given to the Winter and Spring Groups. The following information was gathered with the amplified form of the questionnaire and covers only the Spring and Winter Groups (N = 9 males, 8 females).

Each respondent was asked to give the number and percentage of "real dates" they had had in their life. A "real date" was defined on the questionnaire as a date, "...with members of the opposite sex to whom you were or could have become attracted and where there was the distinct possibility of a further relationship developing between you." "Other dates" were described as, "...dates with relatives, close friends, etc., where there is no possibility of a romantic relationship developing." The participants were distributed as follows for reported number of "real dates:" 0 = 2 males, 1 to 5 = 2 males and 1 female, 6 to 20 = 2 males and 3 females, 21 to 50 = 1 male and 2 females, over 50 = 2 males and 2 females. On the average the males reported that about 60% of their dates had been of the "real date" category and females said that on the average about 50% of their dates were "real dates." In the case of each sex about half reported that most of their dates were of the "real" type and half said that the majority of their dates would be classified as "other dates."

Responses to the question of how often they would like to have dates were ambiguous in many cases, e.g., "as often as possible." Where numbers were reported, however, the modal response expressed a desire to have two dates per week.

Males were equally split as to whether asking for a date was

easiest in person or over the telephone. Three reported asking in person as easiest, three said over the phone was easiest, and three had no preference. The females, on the other hand, were seven to one saying that being asked over the phone was least stressful. This could be because if they decide to say "no," it is easier to do so on the phone than face to face.

Males reported an average of 60% (range 20% - 100%) acceptances of requests for first dates, 48% (range 10% - 100%) acceptances for second dates, and 56% (range 50% - 99%) for third dates. The low point for second dates was also found for females. They reported accepting an average of 75% (range 20% - 95%) of offers for first dates, 68% (range .5% - 90%) for second dates, and 81% (range 50% - 99%) for third dates. Both sexes reported an acceptance rate for 2nd dates that was lower than for first dates. It would appear that something happens on first dates which reduces the changes for at least some males to get second dates. But if a second date does take place, it is likely that there will also be a third.

When the females were asked to recall the last time they said "no" to an offer of a date, 50% said they gave a phony excuse. Frequently used phony excuses were, "I have a previous engagement," "I'm busy," "I have too much studying," and "I'm not feeling well." The males seemed to be aware that females may use a false reason for not accepting. In regard to the last date for which they had been turned down, 40% said they did not believe the girl's excuse. Of all the times they said "no" to requests for dates, females said the reason they refused was because they did not want to go out with the particular person averaged 57% (range .5% - 100%) for first dates, 44% (range 19% - 100%) for second dates, and 36% (range 10% - 100%) for third dates. These

figures are somehwat in conflict with the relative acceptance rate given previously for second dates. According to these values, males stand less of a risk of rejection for the reason that the girl doesn't like them with each succeeding date.

Taking the average of the acceptance rates for first dates reported by males and females, it would appear that a male student stands about a 2/3 chance that his offer will be accepted. If he is turned down for the first date, there is about a 50-50 chance that the female said no because she did not want to date him. With that kind of ambiguity it is not surprising that males are often anxious when asking girls for dates.

What about second requests for a first date? About one-third of the males said they did not ask the last female who said "no" to go out again. About a third of the females also reported not being asked out again by the last fellow they refused. Thus, about one-third of males appear to be discouraged by a single refusal. Since there is apparently a 50% chance that she didn't want to go out with the male, a 33% drop out rate does not seem unreasonable. On the other hand, there is a 50% chance that she wanted to accept but couldn't. Of the five males who reported asking the girl a second time, three said she again refused. Likewise, three of the five females who said they were asked out again by a male they had initially refused, also refused the second request. Thus, if she said "no" the first time, there is about a 60% chance she will also say "no" to a second request.

When the 17 individuals in the Spring and Winter Groups were divided by their relative standing on number of total "real dates" and acceptance rate for first dates into four groups (low number of dates,

high acceptance; high number of dates, low acceptance, etc.), there was at least one person of each sex in every cell. All four possible combinations were represented in this sample of 9 males and 8 females. The cell with the highest frequency of males (four) was low number of dates, high acceptance (two of them had never been on a date). These males' major problem would appear to be that they don't ask for dates often enough. The highest frequency cell for females was low number of dates, low acceptance with three girls. Their main problem would seem to be excessive choosiness. Two males and two females indicated that they had a problem getting dates beyond the first date.

Three major classes of dating problems tend to be represented among the individuals in the present study. (1) Not asking (males) or not being asked (females), (2) excessive choosiness in dating partners (both sexes), and (3) deficiencies in social or interpersonal skills, which inhibit active dating. These three classes don't appear to be mutually exclusive. That is, no one among the participants in this study has problems in only one of the three areas and not in another. A complex variety of fears, attitudes, values, and beliefs are no doubt related to each of the problems. Some of these possibilities were investigated in the history and other questionnaires and will be turned to next.

The last four questions on the History Questionnaire used a multiple choice format to inquire about the way the respondents behaved in
certain interpersonal situations with members of the opposite sex to
whom they were attracted. Sixty-three percent of the females and
22% of the males said that they look down or away when given a complimentary or flattering remark by such a person. Although they would

graciously accept the compliment externally, 50% of the females and 22% of the males said they would believe it was insincere. The sex difference for looking down or away may be due to sex role stereotypes which make it more permissible for females to appear shy and modest. The females may be less likely than males to believe the compliment is sincere because they suspect that the fellow may be using a "line" on them or has an "ulterior" motive.

Fifty percent of the females and 44% of the males said that when they are talking to a person of the opposite sex and another member of their own sex is present, they withdraw from the conversation. This suggests that some of these individuals with dating problems may feel incompetent compared with a same sexed peer when competing for the attention of a member of the opposite sex. This kind of withdrawal from "threatening" interpersonal situations and its concomitant low level of exposure to potential dating partners may be a factor promoting the low frequency of dating in these individuals.

When talking to a potential date who appears uncomfortable or afraid, 38% of the females but none of the males said they would feel more confident themselves and 50% of the females but only 22% of the males said they would talk more openly and honestly. When the potential date appears to be confident, comfortable and secure, the sex differences are reversed. In this case 38% of the females but 78% of the males said they would feel more confident, and 38% of the females but 67% of the males said they would talk more openly and honestly. Thus, there is a tendency for the males in this sample to feel more confident in the presence of confident females. Both reactions were present among the females, with an equal number saying they feel more

confident with fearful and with confident males. The males in the present sample may be at their best with, and hence be more attracted to, self-confident females. But since most of them report being shy and lacking in self-confidence, they may need to find confident females who like shy males in order to attain dating compatibility.

Sexual Attitude and Experience Questionnaire. The Sexual Attitude and Experience Questionnaire contained many open ended and multiple choice items. Responses to these items were tallied and percentages of affirmative responses were computed. These are presented in Table 10 for items which seemed likely to be related to dating frequency. The sample turned out to have had much more sexual experience than was expected from a group of people who described themselves mostly as shy and nervous in dating relationships. These individuals are atypical for young adults in that a higher portion of females than males had had sexual intercourse. The males also reported having more strict standards of sexual behavior than the females. These differences are only trends, however. Table 11 shows that there was only one statistically significant sex difference, that being on the fear of being "used" only for sex purposes by a dating partner. Only one male reported having this fear.

On the average the sample judged their own sexual standards to be slightly more strict than those of their peers. The group mean showed approval of sexual intercourse occurring in the context of a love relationship somewhere between going steady and being engaged. Both ends of the sexual intimacy - love commitment continuum were represented. The females, on the average, judged themselves to be slightly more attractive than their same sexed peers, and the males

Table 10

Responses to Sexual Attitude and Behavior Questionnaire Items
Including Fantasy Themes

Item		Males (N=9)		Females (N=8)		Total (N=17)	
	No.	96	No.	35	No.	35	
Kissed	5	56	7	88	12	71	
Engaged in petting	5	56	7	88	12	71	
Had sexual intercourse	3	33	5	63	8	47	
Own sexual behavior standards <sup>a</sup>	Mean =	2.33	Mean =	2.00	Mean =	2.18	
Level of relationship at which intercourse acceptable b	Mean =	4.78 1	Mean =	4.50	Mean =	4.65	
Fear partner want to go farther sexually than you do	3	33	5	63	8	47	
Fear being used for sex purposes only	1	11	6	75	7	41	
Desire increased sexual activity	5	56	3	38	8	47	
Been negatively affected by a sexual experience	4	44	5	63	9	53	
Experienced guilt over sexual behavior	5	55	5	63	10	59	
Rating of own physical attractiveness <sup>c</sup>	Mean =	2.67	Mean=	3.13	Mean	=2,88 	
Fantasy Themes: Partner gives companionship and understanding	5	56	3	38	8	47	
Being in love	4	44	4	50	8	47	
Negative social experiences	4	44	4	<i>5</i> 0	8	47	
Impressing others	4	44	4	50	8	47	
Adopting a passive role	5	56	3	<b>3</b> 8	8	47	

<sup>1 =</sup> own standards are less strict than peers', 2 = same, 3 = own are more strict.

b 1 = first date with no affection present, 2 = first date with some affection present, 3 = third date and getting serious, 4 = going steady and think are in love, 5 = engaged and deeply in love, 6 = married.

c 1 = much less attractive than others, 2=somewhat less attractive, 3=about same, 4=somewhat more attractive, 5= much more attractive.

Table 11

Comparison of Low and High Practice Dating Groups
on Responses to Sexual Attitude and Behavior Questionnaire Items
Including Fantasy Themes

Measure	Low Practice Dating (Winter Group)		Hi Practice Dating		ra,b		
	Males (N=3)	Females (N=3)	Males (N=6)	Female (N=5)	Sex	Group	group group
Kissed	100	100	33	80	.35	.48**	.35
Engaged in petting	100	100	33	80	.35	48**	.35
Had sexual intercourse	67	100	17	40	.29	54**	.06
Own sexual behavior standards	1.67	2.00	2.67	2.00	21	.22	36
Level of relationship at which intercourse accept.	3.67	4.00	5.33	4.80	13	.56‡*	24
Fear partner want to go far- ther sexually than you do	33	67	33	60	.29	04	.06
Fear being used for sex pur-	00	67	17	80	.65##	.12	.17
Desire increased sexual a activity	67	33	<i>5</i> 0	40	18	04	.06
Been neg, affected by a sex. experience	67	100	33	40	.18	45*	06
Experienced guilt over sexual behavior	100	100	33	40	.07	62‡‡	.07
Rating of own physical attractiveness	2.33	3.67	2.83	2,40	.12	20	-,42
Fantasy Themes: Partner gives companion— ship & understanding	33	100	67	60	.20	03	29
Being in love	67	33	33	60	.06	04	.29
Negative social experiences	67	67	33	40	.06	29	.06
Impressing others	00	67	67	40	.06	.20	42
Adopting a passive role	00	67	83	20	18	.20	6522

Note.—Standard deviations for Winter males and females and Spring males and females are as follows: for own sexual behavior standards—. 47, .82, .47, .89; for level of relationship at which intercourse acceptable—— 1.25, .82, .74, .75; for rating of own physical attractiveness—. .94, 1.25, .37, .49. All other items are dicotomous, hence the means are given as percents and the standard deviations may be obtained by the following formula:  $\sqrt{\frac{\Gamma(100-P)}{\Gamma(100-P)}}$ 

Degrees of Freedom = 1/13

b Each r is the properly signed square root of  $W^2$ . See note Table 13 for explanation.

<sup>\*</sup> p<.10, \*\* p<.05, \$\* p<.025, \$\$ p<.01

judged themselves to be slightly less attractive than their peers.

More than half of the participants reported having been affected negatively by a sexual experience with a dating partner. More than half also reported having experienced some guilt over their own sexual behavior.

Table 11 shows that there were several significant differences between the Winter and Spring Groups. The Winter Group had more sex behavior experience, said intercourse was acceptable at a lower level of commitment in a relationship, expressed a higher incidence of guilt over sex and a higher percentage reported having a sex experience which affected them negatively. The last two differences are most likely a function of the Spring Group's lower level of sexual activity, i.e., where there is little sexual behavior experience, there is little opportunity to feel guilty or to have unpleasant reactions.

Not shown in Tables 10 or 11 is the following information: Only one female and three males said they were completely satisfied with their current sex life. Forty-seven percent of those asked said they would like to have more sexual activity. Forty-seven percent also said that they were satisfied with their present level of sexual activity but would like to be engaging in that level of activity with someone to whom they were more attracted or in the context of a deeper interpersonal relationship. Thus two kinds of problems related to sexual activity in dating are represented—dissatisfaction with the amount of activity and dissatisfaction with the quality of the relationships in which sexual behavior occurs.

In a recent survey of high school students aged 17 and older in western Michigan, Vener, Steward, and Hager (1972) found that 88.9% of

the males and 92.6% of the females had kissed and 33.4% of the males and 25.8% of the females had experienced coitus. Using a 1968 sample of university students from a midwestern university Christensen and Gregg (1970) learned that 55% of the males and 38% of the females approved of premarital intercourse while 50% of the males and 34% of the females had had coitus. Mirande and Hammer (1974) reported that about 67% of students in recent college samples approved of coitus when engaged. In the present sample 67% of the males and 88% of the females approved of sexual intercourse at some point before marriage, and 33% of the males and 63% of the females had experienced intercourse. Comparisons with norms are tenuous because of the small sample size, but it seems that the present sample is no more restrictive than average for sex behavior or standards. The females, in fact, seem more permissive than average. This raises questions about the stereotype of the infrequently dating student as being sexually inexperienced and nonpermissive in attitude. Only a few students in this sample fit that pattern.

The last portion of the Sexual Attitude and Experience Questionnaire did not deal directly with sex but with fantasies involving
interaction with the opposite sex. Respondents were asked to briefly
describe fantasies or daydreams they had in each of five areas:
(1) meeting new potential dates, (2) social activities, (3) long-term
relationships, (4) terminating relationships, and (5) sexual activities.
Responses were categorised into major themes according to manifest content. Verbatim samples of responses categorised into each theme are
given below.

## Partner gives companionship and understanding

I fantasize about a relationship totally open and free spirited where we can travel a lot together and know each

other so well it is unclear where one stops and the other begins.

I like to think that I will find someone who can really fulfill my need for love and understanding.

Companionship in marriage; being close to someone who hopefully really knows you.

# Being in love

My fantasy consists of falling in love and being loved by a "Mr. Wonderful."

I have dreamt about meeting the right girl--love at first sight. She comes up to me and we simply fall in love and eventually get married.

Just meet some girl and love at first sight.

# Negative social experiences

Fantasized about being dull at social activities, really looking like a prize clutz.

I often think about being dropped--not so much cheated on.

Being shunned by everyone because of my personality, also doing something stupid, such as falling down or being slapped by some girl.

### Impressing others

Often I have dreamt of taking a good looking girl I had met up here and take her home to show her off. I just wanted to show everyone that I meet good looking girls who liked me.

Often times I see myself at a party-impressing other girls by the guy I'm with.

I like to impress people favorably and daydream about neat things to do and say.

# Adopting a passive role

An attractive girl that I have met during the day approaching me to go out is a fairly reoccurrent fantasy. If the phone rings, the first notion that enters my mind is that it is a call from a woman I don't know.

Being seduced by a woman--finding out that she desires me for my body, and doesn't care about my mind.

100's of attractive people wanting to go out with me.

The percentages of males and females who reported fantasies fitting each theme are shown in Table 10. Group comparisons are presented in Table 11. No statistically significant sex or group differences were found. There was one significant sex by group interaction on the theme of adopting a passive role. The females had a higher mean than the males in the Winter Group, but a lower mean than the males in the Spring Group.

Reactions to Hurt Questionnaire. The first question on the Reactions to Hurt Questionnaire was, "Have you ever been "hurt" emotionally by a person of the opposite sex to whom you were attracted?" If the respondent answered "yes" to this question he or she was then asked to briefly describe the experience and report emotional, cognitive and behavioral reactions.

Only four of the 17 individuals said that they had not ever been "hurt." Two of these four had never had a "real" date, and the other two had had only two dates in their lives. It would seem that doing even the small amount of dating represented in this sample carries a high risk of being "hurt." On the other hand, it could be that these individuals are particularly prone to being hurt in dating relationships. All of the reports of being hurt either directly or indirectly involved being dropped or rejected by a dating partner. Fifty-four percent of those reporting being hurt said that they reacted by withdrawing or distancing themselves from emotional involvement with members of the opposite sex. No significant sex or group differences were found for being hurt or reacting with withdrawal or avoidance nor were there any significant sex by group interactions on these two variables. A sample

of responses is given below.

[He] said he would keep in touch but didn't for a year-I had a really bad crush on him and felt that he liked me but his rejection made me think otherwise. My first real love, and the rejection made me feel that nobody would ever love me. [I decided] to try to play hard to get but also not to get hopeful because I felt for a long time there really wasn't any hope of my ever developing a lasting relationship.

I was about 15. It was the first girl I dated. We went outwice, which was a lot then. She was 17. One day I heard her talking to a friend about how she wished I wasn't around. For a long time [afterward] I didn't date. It wasn't consciously that I avoided dates, but when I realized this I said enough is enough and started going out.

I dated a guy over a period of a month after which he dropped me for no reason, and he didn't call and I never saw him again.

Date Value Ratings. Each male and female rated 50 different characteristics of dating partners in terms of how important each characteristic was to them — in people they date, and how important they thought the same characteristics are to members of the opposite sex in their dating partners.

Table 12 presents three kinds of information obtained from an analysis of the date value ratings. First, the means tell which traits were valued most highly by both the male and female groups of participants. The dating partner characteristics given the highest scores by the males were the same as those the females said were most important, namely—Pleasant, Demonstrative, and Intelligent and Straight Forward. The means for these "traits" showed that they were highly valued by each sex, i.e., between "quite" and "very important." Close behind these three were Ambitious and Physically Attractive, again high for both sexes. When predicting what the opposite sex desires most in their dating partners, both sexes gave Demonstrative and Pleasant the

Table 12

Mean Response and Self-Other Correlations for Date Value Clusters (N=9males, 8 females)

				M	eans				
	C <u>lus</u> ter		Female Other	Dif.	Female Self	Male Other	Dif.	s,o Female	Male
1.	Physically attractive	2.67	3.63	96	3.19	2.89	.30	.81	.50
2,	Fashionable	1.64	2.84	-1.19	2.03	2.44	41	.36	.55
3.	Pleasant	3 <b>.5</b> 0	3.78	28	4.16	3.25	.91	.34	.86
4.	Demonstrative	3. <i>5</i> 8	3.97	39	3.91	3.44	.47	.33	.87
5.	Ambitious	2.71	2,48	.23	2.90	3.00	10	.89	.28
6,	Status	1.53	1.59	06	1.53	2.56	-1.03	.90	.42
7.	Religious	2.59	1.38	1.21	1.33	2.56	-1.23	.49	.93
8,	Intelligent and	3.82	3.30	.52	3.85	3. SI	.34	.83	.84
9.	straight forward Sexually permissive	1.60	2,10	50	1.28	1.58	30	.45	.83
D.	Flattering	2.11	2.54	43	1.92	2.59	67	.37	.70

Note.--Scoring: 0 = is a negative characteristic, 1 = totally unimportant, 2 = mostly unimportant, 3 = quite important, 4 = very important but not absolutely necessary, 5 = absolutely necessary.

highest scores, with Physically Attractive and Intelligent and Straight Forward ranking either third or fourth.

A second kind of information is obtained by looking at the absolute level of value ratings instead of the relative rankings of each date characteristic. The difference scores indicate the average degree to which each sex erred in predicting the absolute level of values for the opposite sex. In predicting males' values, the females underrated Religious and overrated Fashionable and Physically Attractive. In predicting females' values, the males underrated Pleasant and overrated Religious and Status. These differences represent a real misunderstanding of the values of the opposite sex to the extent the males and females in the sample are representative. If it is true, for example, that males suppose females to be more concerned with the status and less concerned with the pleasantness of their dates than they really are. then males attempting to live up to those beliefs could behave counterproductively. They might attempt to impress the girls they date with whatever claims to status they may have rather than behaving in a manner she would call "pleasant." Also, a belief that girls desire high status partners may feed fears that the male can't measure up to their expectations, and hence reduce the probability that he will ask for a date. The same reasoning would hold for the females belief that males value fashion and physical attractiveness more than they actually do.

The third type of information presented in Table 12 looks within individuals to see whether they tended to believe that their own values were similar or different from those of their opposite sexed peers. The difference scores measure the similarity (or discrepancy) between what one sex actually said was true of themselves and what the other sex

thought they would say. The self-other correlations measure the similarity between what each individual said was true for himself and what he or she thought was true of the values held by the opposite sex. The females in this sample tended to say males have values most similar to their own for Status, Ambitious, Intelligent and Straight Forward, and Physical Attractiveness. The males judged females to have values most like their own for Religious, Demonstrative, Pleasant, Intelligent and Straight Forward and Sexually Permissive. The differences in the size of the correlations for each sex (e.g., for Ambitious, Demonstrative, Pleasant) suggest potential areas of misunderstanding and conflict. For example, dating partners who are demonstrative are highly valued for both sexes but the low self-other correlation for females suggests that some aren't sure if males value this "trait" in girls they date or not. With this ambiguity the females may tend to be less demonstrative than the males would like.

Most studies on dating values are not comparable because different sets of items are invariably used. Hewitt (1958) found that in a 1958 sample of college students the characteristics of most value to both sexes were being well groomed, having a sense of humor, considerateness, ambitiousness, and emotional maturity. The largest discrepancies in predicting the opposite sex's values were for "rates socially" and "attractive." Both sexes overestimated the importance of these two items to the opposite sex. Other researchers (e.g., Blood, 1956) have found similar errors for predictions made by each sex. Thus, the present sample does not appear to be exceptionally inept at judging the opposite sex. Misattribution of values for dating partner characteristics do not seem to be any more of a problem for the present sample

than for college students in general.

Daily Diaries. During the first week of the study all participants kept a daily record of their contacts with the opposite sex. All but two (one male in each group) lived on campus in student dormitories.

Means and standard deviations of their records are presented in Table 13.

On two measures there were significant sex differences. Females recorded higher numbers of old acquaintances talked to per day of both sexes. For number of old acquaintances talked to per day of the same sex, the males mean was 5.96 and the females mean was 11.82. The males mean for number of old acquaintances talked to per day of the opposite sex was 2.13 while that for females was 5.30.

The fact that there were no statistically significant group differences indicates that there were no significant changes over the course
of the year from winter to spring term. This suggests that social
interaction patterns were dominated by institutional arrangements in
living units rather than by learning and past acquaintance. In particular, the group studied winter term was not meeting any more new people
per day than was the group studied spring term.

Sex by group interactions were found for the number of new acquaintances talked to per day of the opposite sex (Winter males higher than females and Spring females higher than males) and for number of new acquaintances talked to per day of the opposite sex (same direction as above). The males reported spending an average of 3.97 hours per day talking with members of their own sex and 1.83 hours per day talking with females. The females averaged 4.96 hours per day talking with other females and 2.21 hours per day talking to males. The means for females are higher for all measures (but significantly so for only two

Table 13

Mumber of Persons Talked to and Time Spent Talking with Members of Each Sex Per Day for Low and High Practice Dating Groups ab

	Lo		cice Dat		Hig		e <b>tice</b> I			r	
Measure	Mean	s.d.	Fer Mean	s.d.		les s.d.		s.d.	Sex	Group	Sex by Group
Number of old acquain- tances talked to (same sex)	6.67	5.22	13.77	6.47	5.25	1.91	9.88	2,44	. 56**	27	.06
Number of old acquain- tances talked to (opposite sex)	1.73	0.61	6.40	2.38	2.53	1.05	4.20	1.40	.65**	17	13
Number of new acquain- tances talked to (same sex)	0.17	0.12	1.50	0.71	1.12	0.75	0.80	0.33	.19	.10	49*
Mumber of new acquain- tances talked to (opposite sex)	1.23	0.82	1.13	0,24	0,82	0.53	1.58	0.39	.38	02	.43*
Hours talked to mem- bers of same sex	5.07	1.87	4.73	2.41	2.87	1.65	5.18	2.58	.30	-,20	.35
Hours talked to mem- bers of opposite sex	1.70	1.49	1.80	0.67	1.95	0.80	2.62	1.16	.20	.22	.17

Note.—Each r is the properly signed square root of  $\eta^2$  for dummy variables defined by  $X_{sex}$ : Male = -1, Female = +1;  $X_{gp}$ : Winter = -1, Spring = +1;  $X_{sex}$  by gp:  $X_{sex} \cdot X_{gp}$ . In this table the cells were not proportional and hence the F tests were approximate:

If  $R^2 = r_{sex}^2 + r_{sex}^2$  by gp. then,  $F \approx \frac{N-4}{1} \cdot \frac{r^2}{1-R^2}$  with df = 1, N = 4.

<sup>&</sup>amp; Based on daily records kept during the first week of treatment

b # = 17

<sup>\*</sup> p<.10, \*\* p<.01

indices) indicating a tendency for the females in this sample to be more outgoing than the males.

Bolton and Kammeyer (1972) reported that the average amount of time students in their 1962 sample spent in the company of a particular person of the opposite sex was 1.2 hours per day. The students in the present sample averaged 2.08 hours per day talking to opposite sexed peers. While these two figures may not be directly comparable, the amount of time spent talking to persons of the opposite sex by the present sample suggests that their major problem is not an abnormally low level of heterosexual verbal interaction. At least the participants were not totally isolated from contact with the opposite sex.

Internal-External Orientation scales. The mean pre-treatment score for the Spring and Winter Groups on the General I-E scale was 1.65 (s.d. = 1.41). The mean Mate I-E Scale pre-treatment score was 3.82 (s.d. = 1.94). No norms are avilable for either scale as used in the present study. The scales were scored so that a high score indicates an external orientation. The mean for the General I-E scale indicates that on the average the group only responded with an external orientation to one or two of eight items. Thus they were measured as being quite internal in orientation. The participants responded more externally to the Mate I-E scale. Since the validity of this instrument has not been established, this difference is only suggestive.

The two scales were correlated .38 in the present sample (N = 17). The Mate I-E scale had a few significant correlations with other measures. External orientation on the Mate I-E scale was correlated -.48 (p<.05) with hours spent talking to the opposite sex per day, .48 (p<.05) with a dating problem determining if one is liked by the other

person, -.51 (p<.05) with fantasy theme of romantic partner being an understanding companion, and .45 (p<.10) with the fantasy theme of impressing others.

# Chapter 4

### Presentation and Discussion of Treatment Effects

### Dating Frequency

Pre, post and change scores for dating frequency are presented for all three groups in Table 14. Means for dating frequency are expressed in dates per week as reported by the participants. The pre-treatment score is the mean number of dates per week had by the members of each group during the month immediately preceding the first group meeting (which commenced treatment). The first post-treatment measure is the mean number of dates per week for each group during a month long period following the last group meeting (which defined the termination of treatment). All practice dating had been completed before the post month period began.

between fall and winter terms while the participants were away from campus. So this group's post-month is not strictly comparable to that of the Winter and Spring Groups' which took place while school was in session. The Winter Group's follow-up was for the first four weeks of spring term when study loads were light, and the Spring Group's follow-up was during the last four weeks of Spring Term when study requirements were heavy. This difference should favor a higher dating frequency for the Winter Group. The weather was overcast and rainy nearly constantly throughout spring term making the climate less of a deciding factor

Table 14

Means, Standard Deviations, Ranges and Within Group Change in Dating Frequency for all Three Groups

Time Period			e Dating Group)		Practice 11 Gro	Dating		ctice oring G	Dating roup)
	Mean	s,d.	range	Mean	s.d.	range	Mean	s,d,	range
Month prior treatment	.250	.250	0 to .50	.131	.201	0 to .50.	.273	.291	0 to .7
Month follow- ing treat.b	.542	.521	0 - 1.75	. 500	.800	0 - 2.50	•955	.782	0 - 2,7
Term follow- ing treatmt.	.417	.186	.2070	• <i>5</i> 95	.283	.13-1.00			
Change: Month fol lowing - month prior	.292	<b>.</b> 529	-,25-1,25	.369	.829	60-2.30	.682**	.622	25-2.
w/outlier removed	.100	•339	2550	.093	.446	6075	• 550**	.485	-,25-1.
Term follow. month prior	•	.298	3060	.464*	.271	.38-1.00			

Note.--Means for month prior and month following treatment for Low, Medium, and High Practice Dating Groups respectively are: .200, .300; .121, .214; .225, .775, after the single outlier was removed from each.

<sup>&</sup>lt;sup>a</sup> Frequency is expressed in dates per week.

b Month following was during Christmas break for Fall Group, during the first month of Spring Term for the Winter Group, and during the last month of Spring Term for the Spring Group.

<sup>\*\*</sup> p <.01 within group  $\underline{t}$  test on change

than it might have been during a year with warm sunny weather.

The Fall and Winter Groups also have a one term follow-up which is the mean number of dates per week during the ten week term following the termination of treatment. Both the Fall and Winter Groups completed treatment just before the end of their respective terms. For the Fall Group the one term follow-up was during winter term and for the Winter Group it was during spring term.

As presented in Table 14, within group <u>t</u> tests showed that only the High Practice Dating Group (Spring) had a significant increase in dating frequency during the month following treatment. This same level of significance was maintained after one participant with an extremely high score (i.e., an outlier) was withheld from the analysis. Of the two groups with one term follow-ups, only the Medium Practice Date Group (Fall) showed a significant dating frequency increase.

Figure 1 graphically presents dating frequency changes for each of the groups at the time each measurement was obtained during the year. The point shown for a given mean represents dating frequency for that group during the immediately preceding month or term. It will be noticed that the pre-treatment month means increase successively for each group from Fall to Spring. However, as will be shown in Table 15, this trend for pre-dates was not significant. Although there was a (nonsignificant) trend for initial dating level to increase across the year, the Winter and Spring Groups began at a level lower than that attained by the Fall Group after treatment at the same point in time. The Spring Group also begins at a level lower than that of the post-treatment Winter Group. Since it is reasonable to assume that all groups were selected randomly from the same population, this pattern

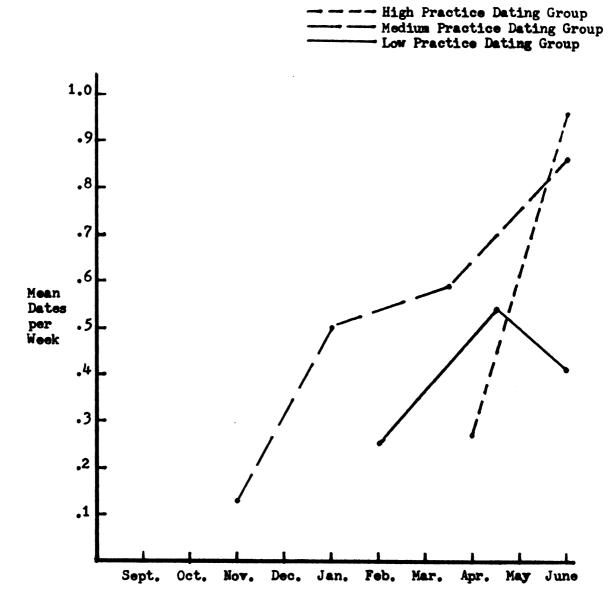
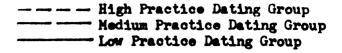


Figure 1. Comparison of treatment groups on dating frequency showing time in months of the school year.

indicates that the increase in dating shown by each group after treatment was not due solely to any general tendency for all students to do more dating as the school year progressed.

The information given in Figure 1 is again presented in Figure 2 with the measurement points placed on the same vertical axis for each measurement period. The post month follow-up distributions of dating frequency were found to be rather severely skewed, particularly for the Fall and Winter Groups. In each group one participant was found to have a score much higher than the others. Figure 3 shows the same information contained in Figure 2 but with the outlier removed from the computation of the month pre and month post treatment means. This flattens out the curves considerably and probably gives a more accurate representation of change in each group. There were no extreme scores in the term follow-ups, hence those points remain unchanged. A two term follow-up is shown for the Fall Group on Figures 1, 2, and 3. This is based on the number of dates per week six of the members of that group reported having during the full spring term. One male and one female from the Fall Group dropped out of school at the end of winter term.

Because the one term follow-up scores were considered to be more reliable estimates of dating frequency than the month follow-up, and since it was only on the one term follow-up that the Medium or Low Practice Dating Groups showed significant improvement, between group comparisons of change were made with a post-dating frequency averaged over the term following treatment for the Low (Winter Group) and Medium (Fall Group) Practice Dating Groups and the one month follow-up for the High Practice Dating Group (Spring Group). This comparison is somewhat biased against the High Practice Dating Group because of its shorter



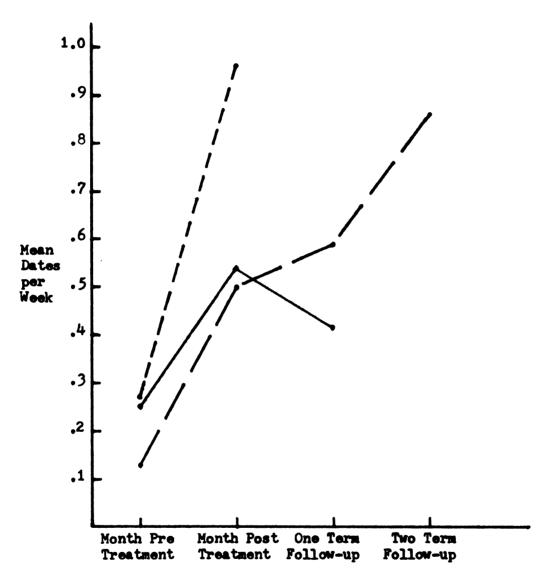


Figure 2. Comparison of dating frequencies for each treatment group with comparable measurements on the same vertical axes.

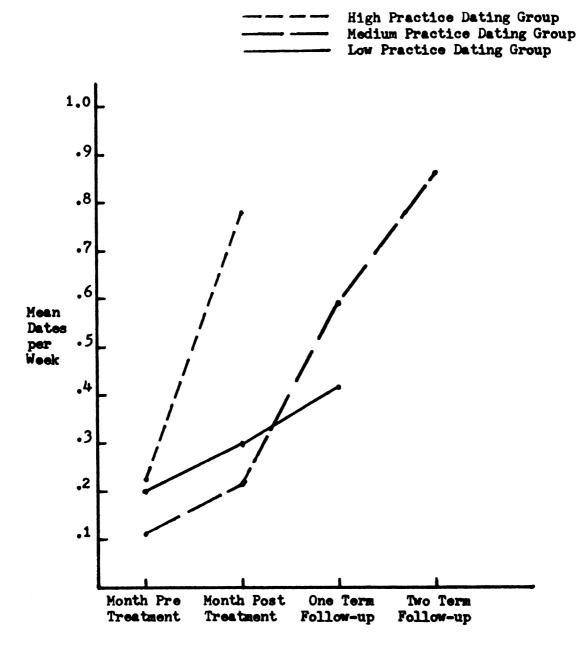


Figure 3. Comparison of dating frequencies for each treatment group with outliers removed from month pre and month post-treatment group means.

follow-up.

The results of an analysis of variance on this data using the three groups are presented in Table 15. While there were no significant differences between groups on the pre-treatment measure, a significant linear trend was found for follow-up dates per week (i.e., the post test). A similar significant linear trend was found for the post minus change in dating frequency. Thus the High Practice Dating Group improved more than the Medium Practice Dating Group and the Medium Practice Dating Group improved more than the Low Practice Dating Group. This is shown graphically in Figure 4.

Figure 5 presents group means for change in dating frequency and the various treatment (independent) variables used. It can be seen that number of practice dates is the only variable which follow the same monotonically increasing pattern across groups as change in dating frequency. This suggests that number of practice dates was the most important independent variable affecting outcome. Hours of group meetings follows a non-monotonic trend, hence can be ruled out. Hours of dyads and hours of S-V training are monotonic and opposite in direction to change in dating frequency. One might argue that these interaction sessions yielded negative effects, i.e., that they acted as suppressors of change in the Winter and Fall Groups, then subjects who experienced neither of those conditions would show more dating. If this were true. then the "increase" due to practice dating would be spurious. However, other studies, e.g., Christensen, Arkowitz, and Anderson (1973), have shown that no treatment controls do not spontan eously improve. Therefore, practice dating is left as the most viable cause of dating increase.

The average increase in dating frequency for the Medium and High

Table 15

Tests for Sex Differences and Between Group Trends for all Three Groups on Pre Dates, Post Dates, and Dating Frequency Change<sup>a</sup>

Time Period	Sex	Linear Trend	Quadratic Trend	Sex by Linear Trend	Sex by Quad- ratic Trend
Month prior to treat- ment	.19		.24	.04	.28
Following treatment <sup>b</sup>	.07	•37**	.13	•38**	.31*
Post - Pre Change	.04	.40**	.03	.42**	.21

Note.--r is the properly signed square root of  $\eta^2$ . See note Table 9 for explanation. N = 25.

a Dating frequency is expressed dates per week in Table 14.

b Follow-up is term following treatment for Low and Medium Practice Dating groups and month following treatment for High Practice Dating explanation.

<sup>\*</sup> p<.10, \*\*p<.05

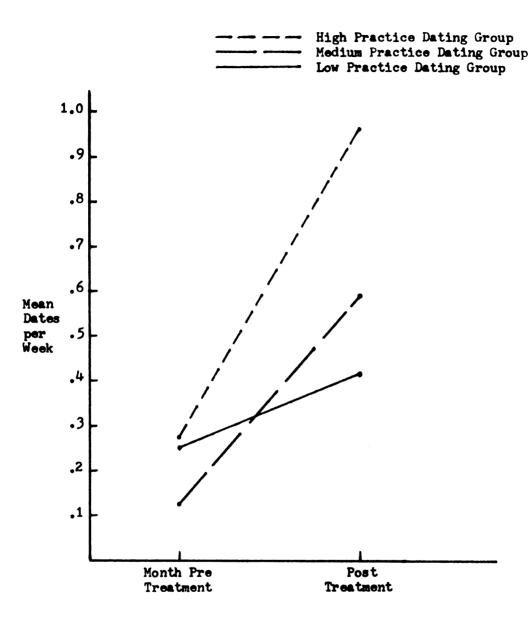
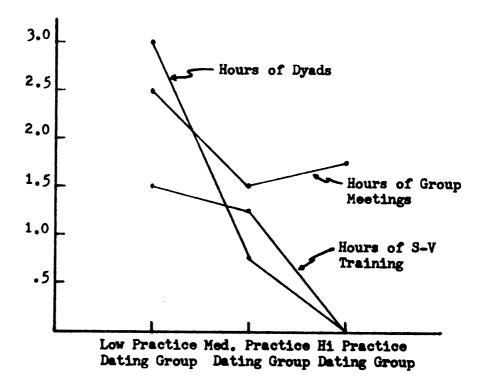


Figure 4. Comparison of treatment groups on dating frequency showing change from pre to post-treatment measures. Post-treatment scores are one term follow-ups for the Low and Medium Practice Dating Groups and month post-treatment for the High Practice Dating Group.



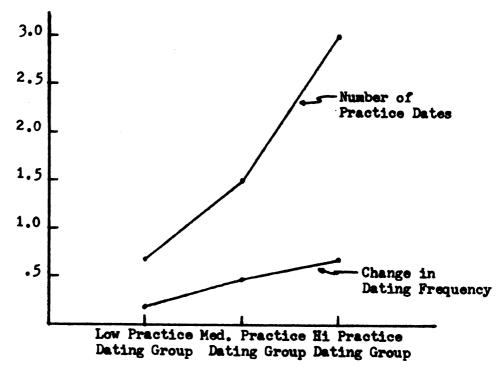


Figure 5. Comparison of group means on treatment variables and change in dating frequency.

Practice Dating Groups in the present investigation was .78 dates per week. Christensen, Arkowitz and Anderson (1973) found an average increase of .75 dates per week for their two practice dating groups which had six practice dates over a six week period. Thus we obtained a similar magnitude of change with no more than three practice dates. This suggests that either three practice dates are sufficient to elicit this size of effect or that the group meetings or other procedures used in the present study had a salutary influence on dating over and above the effects of practice dating. The major difference between the procedure used in the present investigation and that followed by Christensen, et. al. (1973) is that in the present study the participants met each other in at least one group meeting prior to having their practice dates. In the Christensen, et. al. (1973) procedure the students had the equivalent of blind dates. Possibly meeting and learning something about one another is more like real life dating where people usually know each other in some other context before they go on a date. If this analysis is correct, it would explain the equal level of generalization to the post-treatment dating period found in the present study with fewer practice dates.

Next it may be asked if practice dating had an equal effect on each sex. The results of the analysis of variance presented in Table 15 showed that there were no significant main effects for sex, but there were significant sex by linear trend effects for follow-up dates per week and for change in dating frequency. Significant sex by quadratic trend effects were also obtained for follow-up dates per week. These results mean that group differences in trends are nonsimilar for each sex.

Table 16 presents means for dating frequencies and change for the males and females in each group. Change in dating frequency for each sex and group are compared graphically in Figure 6. Illustrated in Figure 7 is the linear trend in change shown by the females and nonsignificant tendency toward a quadratic trend for the males. The difference in change between the males in each group was not significant (F = .37) but differences in change between the females in each group were significant (F = 4.25, p<05). Tests for significance of change in dating frequency within each sex showed that both males ( $\underline{t} = 4.93$ , p<001) and females ( $\underline{t} = 2.68$ , p<05) experienced significant change when taken as a group across all treatments.

Figure 7 shows that it was change in the females, not the males, which caused most of the linear trend effects between groups for increase in dating. The males changed the same amount in all three conditions. This is contrary to our a priori expectations. Since the trend in females for dating change followed the level of practice dating in each group, it appears that the practice dating treatment had a more consistent effect on the females than on the males. Christensen, Arkowitz and Anderson (1973) also reported that the females in their practice dating groups showed significantly greater improvement than the males.

There are two possible conditions under which the coeds could increase their dating frequency: 1) get asked out more often, or 2) become less choosy and accept a higher percentage of requests for dates. Several hypotheses may be suggested to account for an increase in requests for dates. It may be that just having a date, even a practice date, is better than no dates. After all, the males in the groups could have refused to go out with a female after getting to know her in a group

Table 16
Dating Frequencies and Change for Males and Females in Each Group

Time Period	Low Pr (Wir	actic	Low Practice Dating (Winter Group)		Med.	Pract	Med. Practice Dating Hi Practice Dating (Fall Group) (Spring Group)	ting	H	ract	ice D	ati	Poo
	Mean	s.d.	range	$\overline{}$	Mean s.d.	s.d.		range	Mean s.d.	s,d		range	1
Month prior to treatment													
Males	.17	,24	0 \$	8	.21	.25	0	09.	.21	.30	0	\$	
Females	.33	,24	0 to .50	8	•05	60.	.05 .09 0 to .20	20 .20	.35 .26	,26	0	\$	.7
Post-treatment													
Males	.57	.13	.40 to .70	.70	8	.21	. 50	20 100	.63	8	0	2	1.5
Females	.27	60.	,20 to	9	38	.15	.15 .13 to .50 1,35 .86 .25 to 2.75	. 50	1,35	.86	.2	\$	2.7
Change (post - pre)				_									
Males	04.	91.	.30 to	9.	9	.24	94.	201,00	.42	\$45	2	\$	1,0
Females	07	.21	.2130 to .20	\$20	.33	.24	.33 .2407 to .50 1.00 .65 .25 to 2.00	05. 03	1.00	.65	.25	\$	2.00

a N = 3 males, 3 females b N =  $\psi$  males,  $\psi$  females c N = 6 males, 5 females

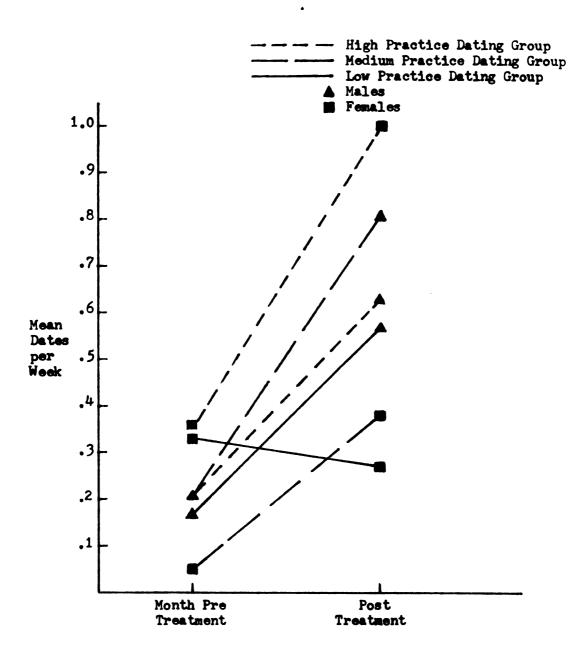


Figure 6. Comparison of each sex and treatment group on dating frequency showing change from pre to post-treatment measures. Post-treatment scores are one term follow-ups for the Low and Medium Practice Dating Groups and month post-treatment for the High Practice Dating Group.

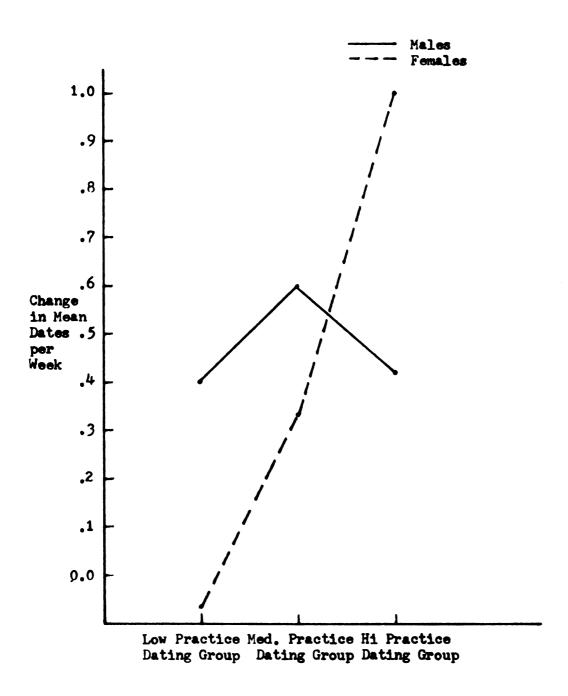


Figure 7. Comparison of males and females in each group on change of dating frequency. Change was measured from month pre-treatment to month post-treatment for the High Practice Dating Group and to one term follow-up for the Low and Medium Practice Dating Groups.

meeting. The fact that she did go out and that her date seemed to enjoy himself may give her a mental lift and serve to convince her that she is a desirable dating partner. This, in turn, may lead her to be more attractive or be more friendly to males who then are more likely to ask her out. But this explanation holds for males as well; they, too, could have enjoyed the dates and come to think of themselves as desirable or capable dating partners. In their case this cognitive change could have led to more friendly behavior and given them the confidence to ask for more dates. Thus, this hypothesis would not predict differential change for each sex.

Another possibility is that on the dates the participants did a good deal of self-disclosing about their dating problems. This is likely since both persons volunteered to be in the study because of their problems and conversation would naturally turn to this area of common concern. Having learned that self-disclosing can be a positive experience, the girls may have been more open in discussing their fears about dating with other males. This would tend to give shy males they talked with more courage to ask them for dates, hence, they would be asked out often. But again, this hypothesis also has the characteristic of applying to males. Since mutual self-disclosing generally produces reciprocal liking (Jourard, 1971), the males would feel more liked after having the practice dates. If this self-disclosing behavior generalized to discussions with other girls not in the treatment group, reciprocal liking would tend to follow and the males' chances of acceptance of dating requests would increase. Thus, self-disclosure hypotheses do not predict differential change. Furthermore, since there was considerable self-disclosure in the Low Practice Dating Group's dyadic interaction

sessions, the females in that group should have changed but did not.

Two hypotheses seem like reasonable explanations for females becoming less choosy as a result of the practice dating experience. First, they may have learned that they could have fun on a date with a fellow they wouldn't normally have considered dating. In this case the girl would begin accepting dates from a wider range of males. She may also be friendly to a larger group of males, thus increasing the number who might ask her for dates. Second, she may learn through the practice dating how insecure and easily hurt the males are. Thus, she might be more compassionate and turn them down less often. The females did report that the males seemed anxious and insecure on the practice dates. They also reported having less fun on the dates than did the males. For the females the average was 4.9 on a ten point scale from "least enjoyable date I ever had" to "most enjoyable date I ever had:" the mean for males was 5.9. Thus there is some evidence which suggests that the females were aware of difficulties being experienced by the malés while on the practice dates.

Since the males improved approximately equally in each group regardless of number of practice dates, they may have increased their dating for reasons different from those of the females. Possibly it was information gained in the group meetings which had the major influence on the males. It was expected that the main treatment effect would be for actually asking the girls for dates. It was assumed that asking and having the date accepted would help decondition the fear of asking. Apparently this was not the case since those who did more asking did not improve any more than those who did less asking for practice dates. Possibly the main effect was simply finding out that

girls have fears about dating too, that they are eager to have dates, and that they will be understanding if the male is somewhat inept in his dating behavior. If this was the major influence of change, then the prime determinant of change for males would be the total number of hours that they spent talking to girls who were disposed to self-disclose as to their feelings and reactions to dating. And indeed the total number of hours of interaction with the opposite sex was approximately constant across all groups.

# Social Avoidance and Distress and I-E Scales

Table 17 presents pre, post, and change scores for the Low Practice Dating and High Practice Dating Groups. Within group t tests found significant change only in the High Practice Dating Group. This decrease in social amxiety is similar in magnitude to that reported by Christensen and Arkowitz (1974) in students after six practice dates. Between groups tests, however, found that the change in the two groups was not significantly different. Nor was the change significantly different for each sex.

The Low Practice Dating Group had a significant increase in General I-E scale score from pre to post-treatment and the High Practice Dating Group showed zero mean change. This difference between groups was statistically significant. Possibly this reflects the fact that the Winter Group had such a heavy emphasis on sharing problems. Once they saw that everyone has problems, they could have ceased to continually berate themselves and begin seeing dating problems as socially endemic. Thus, they may have shifted in attributing the cause of the problem from themselves to "something out there."

Table 17

Means, Standard Deviations, and Ranges of Scores for Low and High Practice Dating Groups on S.A.D. and I-E Scales

	Low Pr	actice	Dating	Low Practice Dating High Practice Dating	se Dating			9
	¥ .	(Winter Group)	dno.	(Spring Group)	roup)		~1	1 I.
	Mean	S.d.	Kange	Mean 8.d.	Kange	SER	drong	Sex oy up.
Social Avoidance and Distress	13.50	6.55	13.50 6.55 6 to 26	11.91 8.24 3 to 18	3 to 18	.19	.10	07
Social Avoidance and Distress	12.00	4.93	4.93 1 to 25	8,73 6.09 1 to 19		₹	26	16
Scale (post-treatment) S.A.D. post - pre change	-1.50	5.71		-3.18 4.78		8	-,15	07
General I-E Scale (pre-treatmt.)	1.17	%**	0 to 3	1.911.56 0 to 5	0 to 5	27	.25	٠.0
General I-E Scale (post-treat.)	2.83	2.83 2.03	0 to 6	1.911.56 0 to 5	0 to 5	25	25	•20
Gen. I-E post - pre change	1.67* 1.80	1.80		0.00 0.95		05	0552d	.25
Mate I-E Scale (pretreatment)	3.33	1.60	3.33 1.60 2 to 6	4.09 2.07	1 to 7	ಕ್ಕ.	.19	60°
Mate I-E Scale (post-treatment)	2.83	1,68	0 to 5	3.46 1.73 1 to 6	1 to 6	.28	.17	.21
Mate I-E post - pre change	-0.50 2.63	2.63		0.63 1.43		.29	03	.10

Note,—Each r is the properly signed square root of  $\mathbf{M}^2$ . See note Table 13 for explanation. A high score - high social anxiety by high score = external

d degrees of freedom = 1, 13 d p < .05 \* p < .10 for t test on within group change

# Weekly Self-Ratings

The Spring and Winter Groups filled out a self-rating form each week at the group meeting on which they indicated how they felt while talking to members of the opposite sex during the recent few days and how much they had been worrying during the same period about dating, getting along with others, school work, job, and relationship with their parents. The means, standard deviations, and change scores are shown for each group in Table 18. The Composite score is based on the sum of the eight items which make up the subscales—Calm, Confident, Assertive, Friendly, and Genuine. Total worry is the average of all eight worry items. The means are also presented in Figures 8 and 9.

The general trend as depicted in the Composite graph (Figure 9) was for the Spring Group to start out with higher self-ratings and remain higher at all measuring points with the two groups following similar patterns of increase over the three group meetings (measurement was begun with the second group meeting). The two week follow-up measure, however, shows a decrease in self-rating and an increase in worry for the Spring Group. The deterioration evident in the Winter Group may have been encouraged by their failure to complete the practice dates they had been assigned to have between the third and fifth week. Only two of the nine assigned dates took place. This could have made the males feel they lacked courage and the females feel unwanted.

The difference in change between groups was significant for Composite and Total worry but not for any of the subscales, the Spring Group showing the greater change. The Spring Group was significantly higher in their self-ratings for the first and fifth weeks on the Assertive subscale, and for the fifth week on the Friendly subscale.

Table 18 Weekly Self-Ratings: Means, Standard Deviations, Change, and Between Group Differences for Low and High Practice Dating Groups

Heasure b	Low Practi	ce Dating Group)		tice Dating ing Group)		r	4
nessure	Kean	s.d.	Mean .	s,d.	Sex	Gp.	Sex by Gp
Calm	1						
1st veek	3.67	0.80	3.59	1.10	17	04	05
5th week	4.08	1.10	4.55	0.45	01	.28	.07
5th - 1st week change	• • • • • • • • • • • • • • • • • • • •	1.21	0.96**	1.22	.13	.21	.08
Confident	••••		1		•		
1st veek	3.33	0.75	3.18	0.83	57•	09	28
5th week	3.83	1.34	4.36	0.48	46°	.27	18
5th - 1st week change		1.50	1.18***	1.03	70	.26	.04
Assertive	1			V = <b>J</b>	l •''		1
1st week	2.33	0.47	3.36	0.88	.390	.940	39°
5th week	2.83	0.37	3.91	0.51	04	745	l21
5th - 1st week change	0.50*	0.50	0.55	0.99	.38	.03	.25
Friendly		1				-	1
1st week	3 <b>.5</b> 8	0.98	4.00	0.74	18	.23	39
5th week	3.92	0.73	4.59	0.47	.12	.490	15
5th - 1st week change	0.34	1.28	0.59**	0.82	.23	.12	.23
Germine	1	1	1		_	ł	1
1st week	3.83	0.47	3.82	0.53	36	01	<b>36</b>
5th week	4.00	1.19	4.46	0.45	.38	.26	<b>⊦.</b> 34
5th - 1st week change	0.17	1.34	0.64**	0.71	.500	.22	09
Composite	1	· ·		•		l	į
ist week	3.46	0.23	3.66	0.61	.28	27	08
5th week	3.82	0.88	4.43	0.30	.25	.38	37
5th - 1st week change	0.36	0.82	0.77***	0.67	.02	.479	24
Worry not enough dates	1	1	1			1	1 .
1st week	1.17	1.07	0.73	0.75	01	37	.52d
5th week	0.83	0.90	0.55	0.20	03	18	.440
5th - 1st week change	-0.34	0.45	-0.18	0.83	02	.27	<b>18</b>
Total worry		1				1	I
1st week	1.08	0.53	0.92	0.29	30	20	.20
5th week	1.13	0.51	0.50	0.34	.05	59°	.33
5th - 1st week	0.05	0.41	-0.42***	0.37	.32	504	.19

Note.—Each r is the properly signed square root of  $\eta^2$ . See note Table 13 for explanation.

Degrees of freedom = 1/13

b All measures except the two worry measures used a 5 point bi-polar scale numbered from 1 to 5. The worry measures used 4 pointswhere 0 = no worry, 1 = once in a while, 2 = most of the time, 3 = constantly.

c p<.10 p<.05

p<.025
p<.005

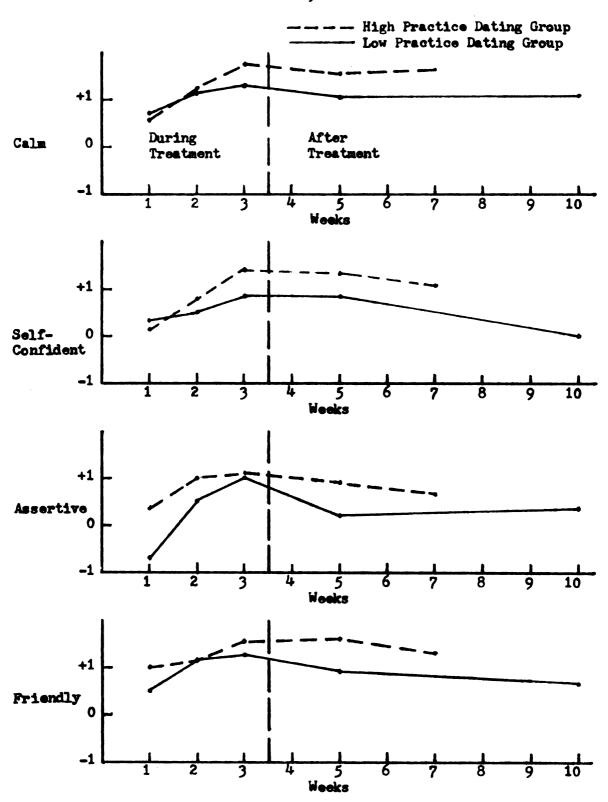


Figure 8. Comparison of High and Lew Practice Dating Group means on the Calm, Self-confident, Assertive, and Friendly subscales of the weekly self-ratings.

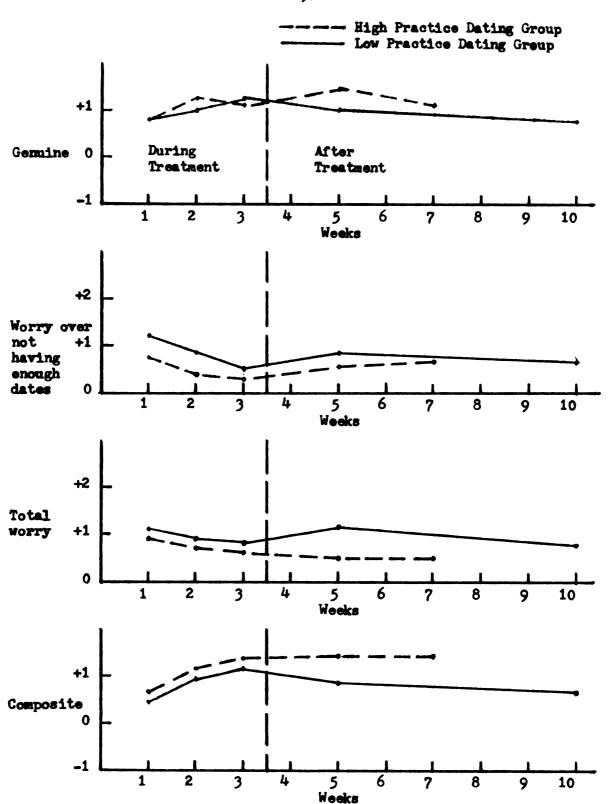


Figure 9. Comparison of High and Low Practice Dating Group means on the Genuine subscale, worry over not having enough dates, total worry, and composite scores on the weekly self-ratings.

The Spring Group was significantly lower on total worry at the fifth week.

There were several significant sex differences. The males did not change in their Confident ratings from the first to the fifth week, while the females increased. The males rated themselves significantly higher than the females on the Assertive subscale for the first week only. The sex by group interaction on change for the Assertive subscale is due to the females in the Spring Group increasing more than the males to a greater extent than the females in the Winter Group increased over the males in the Winter Group. A similar explanation can be given for the interaction on the Gemuine subscale score. Only here the females in the Winter Group improved while the Winter Group males went down and the Spring Group females improved more than the Spring Group males. The last set of interactions are for worry over not having enough dates. At both the first and fifth weeks the Winter Group males were higher than the females and the Spring Group females were higher than the males in their group.

#### Self-Concept

Two different self-concept scales were used in pre and post-treatment administrations. The self scale of the Miskimins Self-Goal-Other Discrepancy Scale was given to the Fall and Spring Groups and a self-concept scale (SCS) prepared by the author was filled out by the Winter and Spring Groups. Change data for the Miskimins scale will be discussed first. The pre administration took place during the first group meeting and the post administration was given at the end of treatment after practice dating had been completed.

Means, standard deviations, and change scores for the total Miskimins scale score and for individual clusters are given in Table 19. Signifi-

Table 19 Miskimins Self-Concept Scale\*: Means, Standard Deviations, Change and Between Group Differences for Medium and High Practice Dating Groups

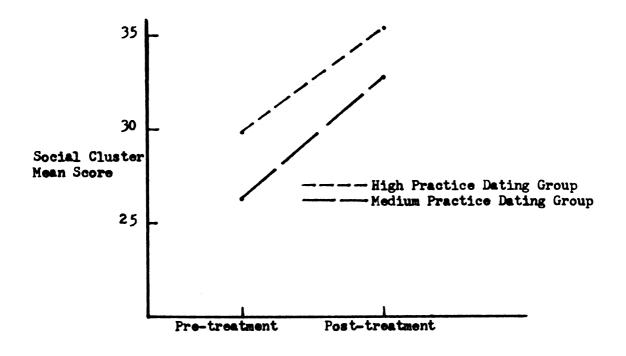
Measure		tice Dating Group)	High Pract: (Spring		t value for test of between groups
	Mean	s.d.	Mean	s.d.	difference on change
Total Score					
Pre-treatment	75.87	6.45	85.82	9.82	
Post-treatment	88.75	10.49	97.28	9.14	
Post - Pre change	12.88**	10.85	11.45***	8.45	.31
Social Cluster			_	-	
Pre -treatment	26.25	7.22	29.82	7.83	
Post-treatment	32.75	4.25	35.36	4.60	
Post-Pre change	5.50**	4.53	5.54 **	5.60	.03
Global Cluster					
Pre-treatment	15.88	2.52	16.55	2.74	
Post-treatment	18.00	3.54	20.64	3.02	
Post - Pre change	2.12	4.96	4.09***	2.88	1.03
Emotional Cluster			·		
Pre-treatment	16.75	3.73	20.18	2.52	
Post-treatment	20.50	4.44	20.46	3.47	
Post - Pre change	3.75**	3.07	0.28	2.30	2,66°
Intellectual Cluster					
Pro-treatment	17.00	2.69	19.27	2.49	
Post-treatment	18.50	2.34	20.82	1.70	
Post - Pre change	1.50	2.69	1.55*	1.92	.04

Scores have been reflected so that high score = high self-concept b Based on cluster sums, i.e., residual items are not included

<sup>•</sup> p4.01 for between groups t-test

cant improvement was found for total score within both the Medium (Fall) and High (Spring) Practice Dating Groups. Looking at individual clusters, the Medium Practice Dating Group showed significant increases on Social and Emotional Well Being, while the High Practice Dating Group showed significant improvement on Social, Global, and Intellectual. Between group <u>t</u> tests, however, revealed that only the difference in change on Emotional Well Being was significant. It may be that this is a "Christmas effect." The post measure for the Fall Group was taken just before the Christmas break. It seems quite plausible that the Emotional cluster would be perculiarly susceptible to the anticipation of the holiday season. A comparison of changes on the clusters for each group is presented in Figures 10 and 11.

Means, standard deviations, and change scores for the total SCS scale score and for each SCS cluster are shown in Table 20. Pre-treatment administrations of the scale were during the first group meeting and the post administration used for computing change scores was two weeks after the termination of treatment. This is because no post-treatment administration of the scale was given to the Winter Group immediately after the end of the three week treatment period. Only the High Practice Dating (Spring) Group registered statistically significant improvement in SCS total score. Because of a big change for a single subject, mean change for the Low Practice Dating (Winter) Group was actually larger than that of the High Practice Dating Group, but the large standard deviation obviated the possibility of obtaining a significant t. The Low Practice Dating Group improved significantly on the Sensitive to Others cluster score. The High Practice Dating Group increased significantly on the Extraverted and Social Comfort Cluster



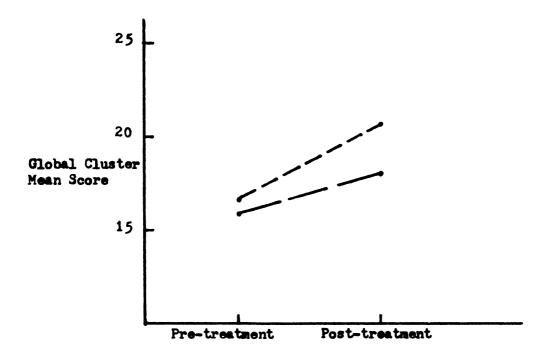


Figure 10. Comparison of the High and Medium Practice Dating Groups on change in mean scores on the Social and Global clusters of the Miskimins self-concept scale.

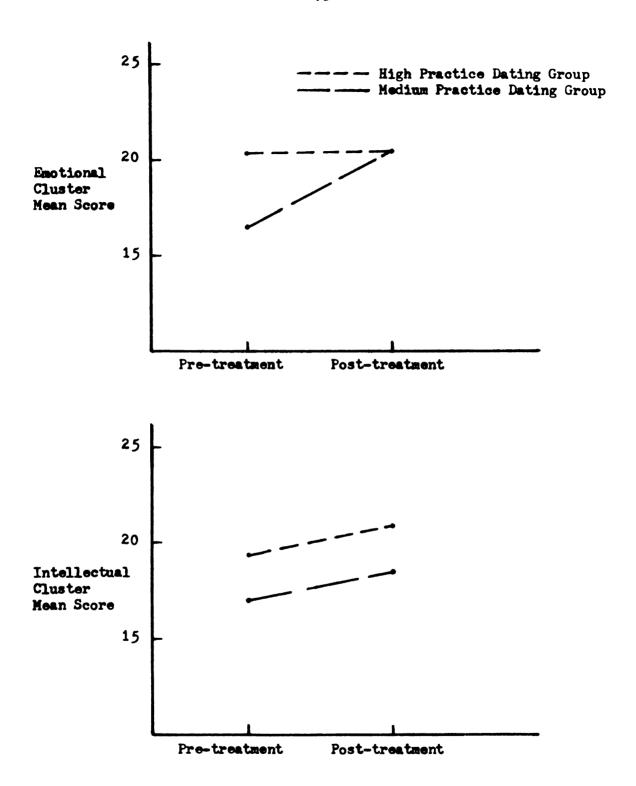


Figure 11. Comparison of the High and Medium Practice Dating Groups on change in mean scores on the Emotional and Intellectual clusters of the Miskimins self-concept scale.

Table 20 SCS Self-Concept Scale: Means, Standard Deviations, Change and Between Group Differences for Low and High Practice Dating Groups

Moasure		ice Dating r Group)	High Practic (Spring (		t value for test of between groups	
	Mean	s.d.	Mean	s.d.	difference on change	
Total Score						
Pre-treatment	2.67	7.18	58.82	5.42		
2wk post-treatment	61.83	13.47	66.55	7.77		
2wk - Pre change	9.16	14.63	7.73 **	6.05	.27	
Extraverted Cluster	1		,		<b>,</b>	
Pre-treatment	10.67	3.68	12.73	2.99		
2wk post-treatment	13.50	4.89	14.55	1.96		
2wk - Pre change	2.83	5.31	1.82 *	2.04	•53	
Social Comfort Cluster						
Pro-treatment	11.17	2.27	12.18	2.29		
2wk Post-treatment	13.00	2.71	15.64	2.64		
2wk - Pre change	1.83	3.24	3.46 ***	1.78	1.26	
Friendly Cluster		1			•	
Pre-treatment	6.17	3.02	7.82	0.83		
2wk Post-treatment	7.33	2.75	8.46	1.23		
2wk - Pre change	1.16	4.30	0.64	1.37	•35	
Sensitive to others Cl.						
Pre-treatment	10.00	2.52	10.36	1.61		
2wk Post-treatment	11.83	3.09	11.09	2,11		
2wk - Pre change	1.83**	0.69	0.73	1.71	1.42	
Genuine Cluster						
Pre-treatment	14.67	2.49	15.73	1.76		
2wk Post-treatment	16.17	3.93	16.82	1.70		
2wk - Pre change	1.50	2.22	1.09	2.54	.31	

<sup>&</sup>lt;sup>a</sup> Based on cluster sums, i.e., residual items are not included

<sup>\*</sup> p<.02 \*\* p<.01 \*\*\* p<.001

Scores. No significant differences were found with tests of between group differences on change scores. Changes on the SCS cluster scores are shown in Figures 12, 13, and 14.

Comparisons of total scale self-concept change for all three groups and both scales are depicted graphically in Figure 15. It can be seen that all three groups showed essentially the same pattern of improvement. It is unfortunate that the same scale was not used for all three groups, but Figure 15 suggests that the results would have been the same for total score regardless of which of the two scales was used. The correlations between total scale score for the Miskimins and SCS within the Spring Group were .60 for pre-treatment, .61 for post-treatment and .81 for end of the year. Thus, the two scales are highly enough correlated that it is unlikely that widely differing results would have been obtained were either scale used alone with all three groups.

# Comparison of Sexes on Self-Concept Change

The reader will recall that no main effect was found for sex differences in change of dating frequency but that there were sex by group interactions for dating frequency change as a result of treatment (Table 15). An examination of change in self-concept for the Winter and Spring Groups revealed similar results. No significant differences were found between sexes or groups on change in SCS total scale score from pre-treatment to follow-up, but a significant sex by group interaction was obtained (F = 3.66, p < .10). The means were in the same direction as for dating—the Winter Group males changed more than the Winter Group females and the Spring Group females showed more change than the Spring Group males.

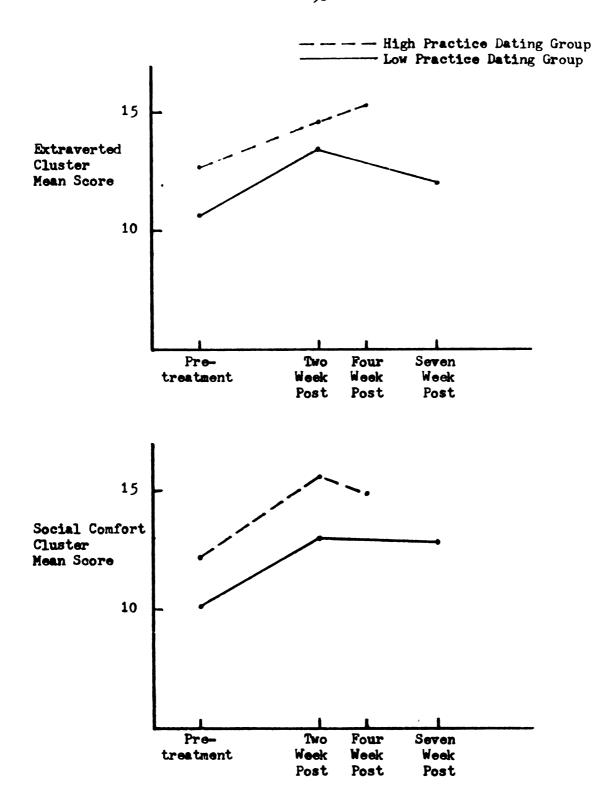
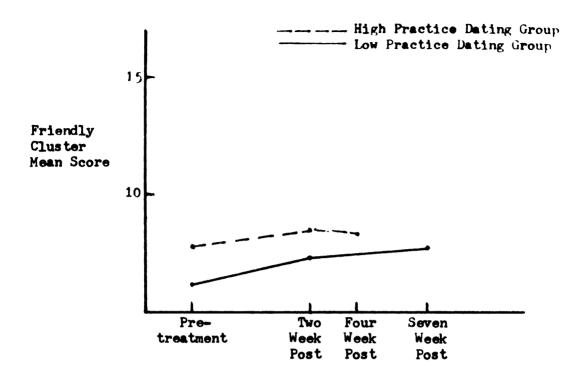


Figure 12. Comparison of the High and Low Practice Dating Groups on change in mean scores on the Extraverted and Social Comfort clusters of the SCS,



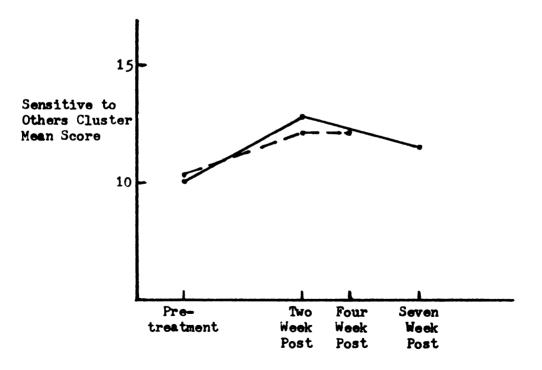


Figure 13. Comparison of the High and Low Practice Dating Groups on change in mean scores on the Friendly and Sensitive to Others clusters of the SCS.

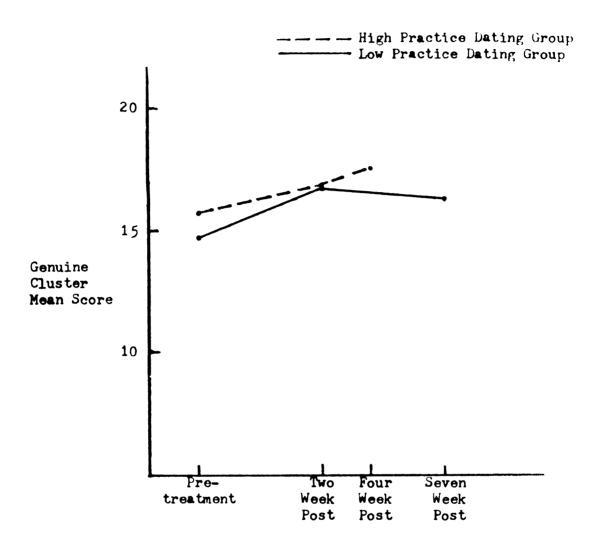


Figure 14. Comparison of the High and Low Practice Dating Groups on change in mean score on the Genuine cluster of the SCS.

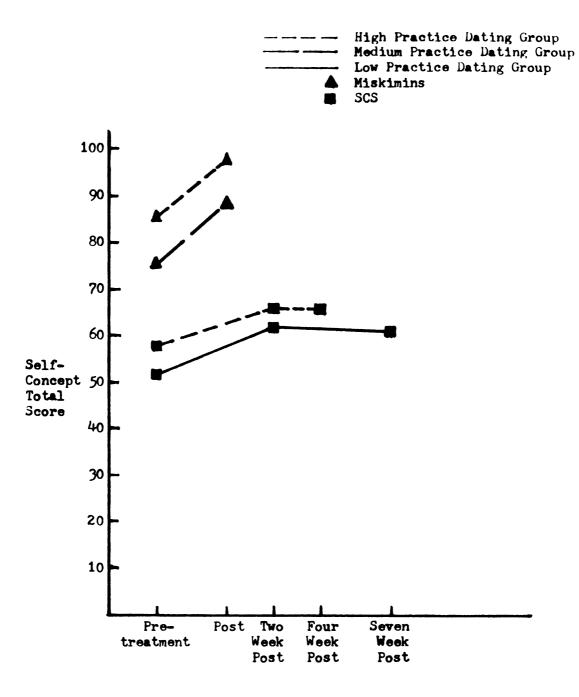


Figure 15. Comparison of treatment groups on change in mean self-concept score based on total scores on the SCS and Miskimins self-concept scales.

In order to test for a sex by group interaction using all three groups it was necessary to form a self-concept score for each participant based on a reduced number of items. When the SCS was prepared, five items were borrowed from the Miskimins scale. Hence the two scales had five items in common. Correlations were computed for the scores on the Miskimins and SCS items for an end-of-the-year measure involving 23 participants. Those for the five items common to both scales are presented in Table 21. The average correlation of the same items on the two scales is .72 indicating that the rank order of respondents was very similar on each set of items. The part-whole correlations are also respectably large. Thus, it is not unreasonable to assume that these five items give a fair approximation of self-concept or general self-esteem as measured by total scale scores.

The Miskimins used a nine point bipolar scale and the SCS used a five point bipolar scale. Under these conditions the only way to equate change for the five common items on the two scales was to assign a +1 to each item score which increased from one measurement to the next and a -1 to each item score which decreased from one measurement to the next. This was done for change from pre-treatment to post-treatment measurements and for change from pre-treatment to end-of-the-year measurements. The pre to post-treatment periods were similar for each group but the pre to end-of-the-year measures differed. For the Spring Group this was a one-month follow-up; for the Winter Group it was a one term follow-up; and for the Fall Group it was a two term follow-up. A one term follow-up on self-concept was not available for the Fall Group. Except for this extended period for the Fall Group, these follow-ups correspond to the follow-up periods used in computing

Table 21

Correlations Between Five Items Common to the Miskimins and SCS Self-Concept Scales (N = 23)

Friendly & warm  SCS Socially skillful & items Happy  Relaxed & Self-confident	1 2 2 5 6 6 6 7	1 <b>skin</b> 2 63 84 50 65 74	3 13 33 71	tte 40 65 51 69 5	5 71 64 66	tot. 70 74	Misk. tot. 77 73 76 79 84
SCS total Miskimins's total			47 50	73 67	87 87	100 90	90 100

change scores for dating frequency (Table 14).

The mean changes for males and females in each group for the five item self-concept score are presented in Table 22. The males taken as a group did not change significantly in self-concept during treatment, but the females did. Both males and females show significant increases when change is measured from pre-treatment to end-of-the-year follow-up. The females, on the average, changed more than the males in self-concept score during treatment. The males caught up with the females after treatment.

Self-concept changes from pre to post-treatment for each sex and group are graphed in Figure 16. Except for the Low Practice Dating Group males, the amount of change was similar for both sexes during treatment. The Low Practice Dating males score was pulled down by one male whose score decreased during the period in which treatment took place. A two-way analysis of variance was performed on this data. As shown in Table 23a, the difference between the sexes was statistically significant but the group differences were not. No statistically significant sex by group interaction was found for change during treatment.

Figure 17 compares sex and group differences in self-concept change from pre to end-of-the-year follow-up. Note the tendency toward a quadratic trend for the males. This is very similar to the trend for change in dating for males shown in Figure 7. The females show a non-linear tendency to increase in self-concept change with increased practice dating. The point of mean change for the Medium Practice Dating Group (Fall) females is based on only two of the four females in that group. This is because two of them did not return end-of-the-year self-concept measures. Both of those females had substantial self-

Table 22

Mean Change Based on Five Items Common to the Miskimins and SCS Self-Concept Scales

Time Period	(Winter Group)			ig ideo	Hed. Fractice Dating (Fall Group)			Spring Group)			Total		
	N	∴ean	s.d.	N	Mear	s,d,	N			N	liean	s.c	
Males	J						-						
Pre - Post treatment	3	-1.33	1.70	4	2.00	1.00	6	1.34	2,22	13	0.92	2.2	
Pre - end of school year	3	2.33	2.05	3	3.67	1,25	6	1.59	2.06	12	2.30**	2.0	
emales													
Pre - Post treatment	3	2.33	1.05	4	2.25	2.95	5	2.30	1.89	12	2,29**	2.1	
Pre - end of school year	3	1.00	0.82	2	0.00	2.00	5	2.90	1.15	10	1.75*	1.7	

<sup>\*</sup> p < .02 within group (sex)  $\underline{t}$  test on change p < .01 " " " " " " "

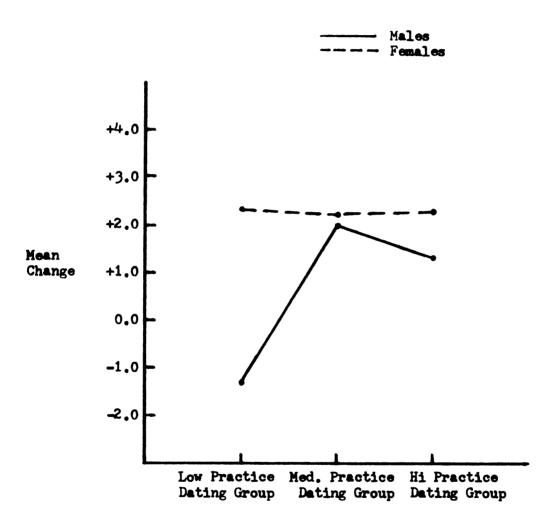


Figure 16. Mean change in five item self-concept score for males and females in each treatment group from pre to post-treatment measurements.



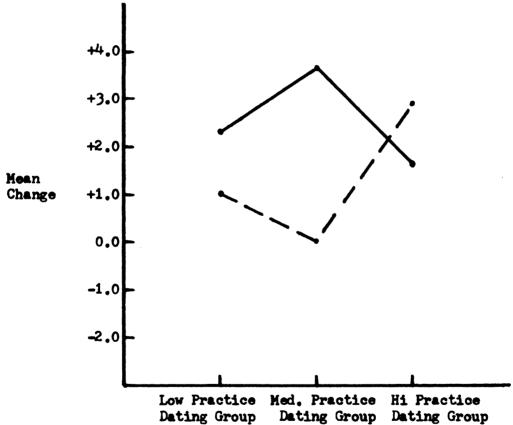


Figure 17. Mean change in five item self-concept score for males and females in each treatment group from pre-treatment to end of the school year measurements.

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Source	SS	df	ms	F	p	n <sup>2</sup>
Sex	16.400	1	16,400	3.31	<.10	.12
Group	12.375	2	6,188	1.25	NS	.09
Sex by Group	13.500	2	6 <b>.</b> 7 <i>5</i> 0	1.36	NS	.10
Error	94.400	19	4.968			.69
Total	136.675	24			•••	

Table 23b

Analysis of Variance for Change in Self-Concept Based on Five Items
Common to the Miskimins and SCS Self-Concept Scales: Pre to End of
the School Year

Source	SS	df	ms	F	р	η²
Sex	9.450	1	9.45	2.69	NS	.09
Group	1.475	2	0.74	0.21	NS	.01
Sex by Group	25.875	2	12.94	3.69	<b>&lt;.</b> 10	.25
Error	66,675	16	3.51			.64
Total	103.475	21				

concept change during treatment. Since changes which occurred during treatment were generally maintained in follow-up measures, it is likely that if the scores of those two females had been included in the mean follow-up change scores for their group, the mean change would have been boosted up considerably. This would have resulted in a linear trend for females like that shown for change in dating frequency in Figure 7.

Except for this discrepancy with one group of females, the pattern for self-concept change is much like that found for dating change following treatment. Table 23b presents the results of a two-way analysis of variance on pre-treatment to end-of-year follow-up change scores for the five item self-concept measure. There were no main effects for sex or group, but there was a significant sex by group interaction. No significant difference was obtained for change between the males in different groups (F=.91). The difference in change between the different groups of females resulted in an F just under the level needed for the .10 level of significance (F=3.04). For such small N's, these differences for females are considerable even though they fall slightly short of statistical significance.

As shown in Figure 15, when males and females are combined, self-concept change follows similar patterns for all groups. But when the participants are separated by sex, differences between the groups emerge. These differences follow essentially the same patterns as found for changes in dating frequency, i.e. greater post-treatment change with higher levels of practice dating during treatment for females and near constant change across treatment levels for males. This finding suggests that self-concept change and dating frequency change are closely linked. A correlation of .58 was obtained between change

on the SCS and change in dating frequency for the combined Low and High Practice Dating Groups (N = 17). The correlates of change in dating frequency will be considered in the next chapter.

## Chapter 5

## Correlates of Change in Dating Frequency

It is often useful to identify the dependent variables which correlate with change in the major dependent variable or criterion of improvement in a treatment program. These correlations can be used to isolate the characteristics of persons who improve with a given treatment versus those who do not improve. When there are practical limitations on the number of persons who can be treated, this information can be used to screen out those least likely to benefit from the treatment in question. Information on correlates of change can also be used to identify inadequacies in the treatment by pointing out the characteristics of persons who are not being helped. Thus developers of treatment programs will be given some clues regarding the aspects of the treatment which need improvement. Correlations between measures taken at different points in time can suggest cause and effect relationships and hence can be an aid to understanding change processes.

In attempting to identify which factors were related to change in dating frequency it was decided that only the male scores would be used. Since mean change in dating frequency differed significantly among the females from group to group, correlates of change would have a different meaning for each group. On the other hand, change in dating frequency was essentially the same among the males in different groups. This made it possible to pool scores for all males in looking

at correlates of change.

Pre-month dating frequency was partialled out of the matrix of correlations. This procedure is equivalent to using residualized gain scores (DuBois, 1957) as change indices, i.e., all males were equated for initial level of dating. When the data available for all 13 males was examined, four significant correlations were found with pre-treatment to follow-up change in dating frequency. All were dating problems: starting conversations (r = -..., p < .10), discerning if one is liked by the girl (r = -..., p < .10), being one's natural self (r = ..., p < .10), males who had no trouble starting conversations or discerning whether the girl liked them but did have problems being genuine and showing affection tended to show the most benefit from the present treatment for dating inhibition. No relationship was found between self-reported anxiety on dates as measured by the STAI and change in dating (r=.07).

A larger number of variables was available for the males in the Winter and Spring Groups. Significant correlations with change in dating frequency are presented for this reduced number of males in Table 24. Males who rated themselves as being relatively nervous while talking to girls during the first week of treatment but who rated themselves as relatively calm five weeks later tended to increase their dating frequency. Those who talked to more new acquaintances per day of their own sex tended not to increase in amount of dating. Males who expressed the fear that their dating partner may want to go farther sexually than they and who valued religiousness and flattery in their dating partners tended to increase in their dating frequency with the treatment. The finding with all 13 males

Table 24 Correlates of Change in Dating Frequency for Winter and Spring Group Males (N=9)

Variable	r Xy.pre				
Sec and of year total govern	77 ± ±				
SCS end of year total score	.72**				
Miskimins end of year total score	.82***				
" " " Social cluster	.62*				
" " " Intellectual "	.67**				
Weekly self-rating 1st week Calm scale	77**				
Weekly self-rating 5th-1st wk. Calm scale	.83***				
# new acquaint, talk to per day own sex	71**				
Fear partner wants to go farther in sex	.70**				
Dating problems - not being yourself	.67**				
Partner Value Rating - Religious	.65*				
" " " Flattering	. 58*				

<sup>\*</sup> p<.10 \*\* p<.05 \*\*\* p<.01

mentioned above that those who had trouble being their natural selves in dating situations tended to improve with the present treatment was also significant with this smaller group.

An increase in dating frequency was found to be related to high end-of-the-year self-concept score when either the Miskimins or SCS total scale score was used. When males and females in the Winter and Spring Groups were pooled, a correlation of .58 was obtained between dating change and SCS total scale self-concept change over the same period. For the total Spring Group dating change was correlated .69 with pre-treatment to end-of-the-year SCS change and .64 with pre-treatment to end-of-the-year change on the Miskimins total scale. Although direction is not determined here, this strongly suggests that there may be a causal relationship between dating frequency and self-concept or general self-esteem.

One means of investigating cause and effect relationships with longitudinal data is through the use of cross-lagged panel correlations (Crano, Kenny, & Campbell, 1972; Rozelle & Campbell, 1969).

Figure 18 shows the static, test-retest, and cross-lagged correlations between pre and follow-up dating frequency and pre and follow-up SCS total score for the Winter and Spring Group males. The follow-up period used here was the most comparable available for these two groups--four weeks post-treatment for the Spring Group and seven weeks post-treatment for the Winter Group. Dating frequency was the dates per week each participant had during that period, and the SCS was administered at the end of that follow-up period. The cross-lagged correlations are so low that no causal inferences can be made.

Another set of relevant correlations may be called "impact

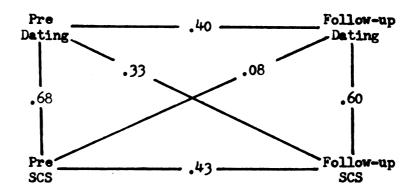


Figure 18. Correlations between pre and follow-up dating frequency and SCS total score for High and Low Practice Dating Group males (N = 9).

correlations." These are the relationships between a premeasure and change on a criterion variable. The correlation between pre-treatment dating frequency and change in self-concept from pre to follow-up was -.29. The correlation between pre-treatment self-concept and change in dating frequency was -.33. For these males, there was a tendency for those with higher self-concept scores prior to treatment to increase less in dating frequency after treatment and for those with high dating frequency prior to treatment to increase less in self-concept score after treatment. This is consistent with the high static correlations found between self-concept and dating frequency both prior to and after treatment. The treatment seems to have been most beneficial to those males who began with low self-concept and low dating frequency. The pattern found here of high static correlations, low cross-lagged correlations, and negative impact correlations has been identified as being indicative of change on a general factor (Tarter, 1972). The N here is very small but the pattern of correlations found supports the notion that there is a strong relationship between self-concept or general self-esteem and dating frequency for the participants in the present study.

## Chapter 6

### Summary and Conclusions

The present study was undertaken to explore the nature of dating problems experienced by infrequently dating college undergraduates and to test the effectiveness of certain action oriented intervention techniques in alleviating dating inhibition. Three small groups, each containing an equal number of male and female volunteers, were given differing amounts of group and dyadic discussion, conversational skills training, and practice dating. Information was obtained from the participants regarding their dating history, sexual attitudes and experience, reactions to hurt, social fantasies, dating partner values, social anxiety, internal-external control orientation, daily contacts with the same and opposite sex, self-concept, and dating frequency. The treatment period lasted approximately three weeks for all groups. Follow-up measures ranged from one month to two school terms after the termination of treatment.

During the month prior to the beginning of the treatment period, the participants had an average of less than one date apiece. This is far below the student average of two dates per week reported by Bolton and Kammeyer (1967). The participants were, on the average, higher in social anxiety than the college norm and reported having a high level of anxiety while on dates. Based on self-reports of the participants, it appears that their social and dating anxiety was often accompanied by

uncertainty regarding appropriate dating behavior patterns, feelings of inadequacy in dating situations, and a fear of rejection by dating partners. Most of the participants were able to recall a specific incidence in which they had been "hurt" by a dating partner while others who were less experienced could not remember being "hurt." Whether or not there is any basis in fact for the fear and anxiety experienced by these infrequently dating students, the effect seems to be debilitating. Three major reasons for not dating more often were noted: not asking (males) or not being asked (females), excessive choosiness in both sexes, and deficiencies in social skills which interfere with the development of dating relationships. The most frequently mentioned areas of skills inadequacy were: making conversation, being one's natural self, showing liking for the other person, and discerning whether or not one is liked by the other.

An unexpected finding was that only a small percentage of the participants fit the stereotyped pattern of nondaters as being sexually inexperienced and restrictive in attitude toward sexual behavior. The males tended to be less permissive and below average in sexual experience, but the females tended to have more permissive values and be more sexually experienced than the average coed. Most of the participants were dissatisified with some aspect of their sexual life. The most frequently expressed dissatisfactions were too low a level of sexual activity and the poor quality of interpersonal relationships in which sexual behavior occurred.

Many of the participants reported having fantasies which could work against their success as dating partners if they were actualized in the person's overt behavior. If a person spent a good deal of time

imagining being rejected, making a fool of himself, taking a passive role, etc., he may to some degree, expect these fantasies to happen in real life. If a self-fulfilling prophecy phenomenon did occur it would probably not be helpful in the establishment of solid dating relationships. Even if these negative fantasies were not actualized in overt behavior, the expectation that they might be could lead the person to avoid situations in which there was the potential for such a self-fulfilling prophecy to be experienced. There was some suggestive evidence of this in the present study. Reporting fantasizing negative social experiences was correlated .46 (p<.10) with pre score on the Social Avoidance and Distress scale and fantasizing adopting a passive role in romantic relationships was correlated -.56 (p 4.02) with dating frequency in the follow-up period. The role of fantasies and expectations related to social situations should be a fruitful area of future research directed at understanding dating inhibition. Having nondators practice fantasizing being socially successful (Maltz, 1961), or being at ease and relaxed in dating situations as with Albert Ellis' "rational emotive imagery" should be tested as treatment techniques for inhibitions in dating.

Both the males and the females in the present investigation were found to value most highly dating partners who were pleasant, demonstrative, and intelligent and straight forward. This suggests that their primary motive for dating was to find companionship in an opposite sexed partner. Status considerations and entertainment functions of dating appeared to be secondary. Possibly the working out of identity problems and the relief of loneliness are primary concerns for the present sample. Motives for dating were not investigated directly in

the present study, but should be in future investigations. The values expressed by males and females here were congruent, but if low frequency daters were consistently trying to date persons whose motives were different from their own, they might be inviting rejection and "hurt."

The information obtained from the daily diaries suggests that the present sample of infrequently dating students spent about the same amount of time talking with members of the opposite sex each day as the average college student. However, no perfectly comparable data was available to test this finding. More information needs to be obtained on the way nondaters interact with the opposite sex on a daily basis that may be decreasing their chances of having dates.

The present study investigated a very small, though probably not unrepresentative, sample of infrequently dating students. This means that most of the conclusions arrived at are only tentative and must wait for confirmation on larger samples. It would be particularly valuable to have information on dating history, sexual attitudes and behavior, daily heterosexual interactions, values, and motives for dating from a survey of a large number of high and low frequency daters. This would allow comparisons to be made between successful and unsuccessful daters to further delineate the factors causing dating inhibition.

In the evaluation of the treatment phase of the study, it was found that when all the males or all the females were taken as a group, both experienced significant increases in dating frequency from the month prior to treatment to post-treatment follow-up period. It was unexpected, however, that change for the males would be approximately equal across all treatment conditions and that change for the females would follow a linear trend corresponding to number of practice dates

in the treatment conditions. After the data had been gathered, it was learned that in the only other reported evaluation of a treatment for dating problems in which a test for sex differences was made, the females improved more than the males as a result of practice dating (Christensen, et. al., 1973).

It was anticipated that the males would improve more with more experience at practice dating because they would be getting overt rehearsal with the social skills used in asking for and going on dates. The results suggest that it was some constant aspect of all treatment conditions, namely time spent interacting with female participants, which caused them to increase uniformly. Possibly it was the reassurance gained from learning that girls are fearful and anxious in dating situations too, that they would like to have more dates, and that they will be understanding and accepting even when they know the male is fearful and somewhat inept socially. According to this hypotheses the primary changes for males were cognitive, i.e., they altered some of their erroneous beliefs or assumptions about females and possibly about themselves. These cognitive changes then led to behavioral changes reflected by increased dating frequency following treatment.

The most likely hypotheses accounting for female change which corresponded to number of practice dates is that they became less choosy, i.e., they were friendly toward and accepted more offers of dates from a wider range of males following treatment. Apparently for females, the information gained in the discussions was not enough to bring about this change. They needed to go on the actual dates in order for the change to take place. Again, this suggests that the primary change was cognitive rather than behavioral. But those cognitive changes were

brought about by having the participants behave in a way that they had not before, i.e., discuss their dating problems openly with members of the opposite sex and go on practice dates. Even if the initial changes were cognitive, the action orientation of the treatments may have been a necessary condition for bringing about those changes.

These hypotheses regarding change processes are only speculative since they are based on the small amount of information gathered in the present study. Future investigations should focus on the differing change processes which may occur in males and females as a result of group discussions and practice dating. It would be valuable to have data from a well controlled, large sample study in which treatment conditions consist exclusively of either discussion or practice dating.

Like the findings for dating frequency, both males and females when taken as a group showed significant increases in self-concept or general self-esteem from pre-treatment to the end of the post-treatment follow-up period. Again there were no differences between treatment groups for the males, but there were for the females. Males followed the same trend in self-concept change as they did in dating change, and for the females there was a similar tendency. For a subgroup of males and females on which SCS total score was available, self-concept change correlated .58 with dating change. An attempt was made in the present study to identify the direction of causal relationships between dating and self-concept. Because only the males showed consistent change, and comparable data being available on only a portion of them, an adequate test of causal hypotheses was not possible. The results obtained give no clear evidence of whether self-concept change tends to precede or follow dating change.

The fact that a correlation was found between the two suggests the importance of adequate relationships with the opposite sex among college undergraduates. Apparently the attitude of those who volunteered for the study toward themselves was closely related to how they were getting along datewise. It is possible that the self-concept measure was tapping a mood variable. If this was so, then the participants' mood tended to be closely related to their current dating situation. In any case, dating clearly is an important aspect of the lives of college students and deserves further study.



#### LIST OF REFERENCES

- Adonolfi, A. A. Characteristics of highly accepted, highly rejected, and relatively unknown university freshmen. <u>Journal of Counseling</u>
  <u>Psychology</u>, 1970, 17, 456-464.
- Arkowitz, H. College dating inhibitions: Assessment and treatment.

  Paper presented at the annual meeting of the American Psychological
  Association, Montreal, August, 1973.
- Arkowitz, H., Lichenstein, E., McGovern, K., & Hines, P. The behavioral assessment of social competence in males. Behavior Therapy, in press.
- Balswick, J. O. & Anderson, J. A. Role definition in the unarranged date. Journal of Marriage and the Family, 1969, 31, 776-778.
- Bandura, A., Blanchard, E. B., & Ritter, B. Relative efficacy of desensitization and modeling approaches for inducing behavioral, affective, and attitudinal changes. <u>Journal of Personality and Social Psychology</u>, 1969, 13, 173-199.
- Bergin, A. E. & Garfield, S. L. <u>Handbook of psychotherapy and behavior</u> change. New York: John Wiley & Sons, 1971.
- Blood, R. O., Jr. Uniformities and diversities in campus dating preferences. Marriage and Family Living, 1956, 18, 37-47.
- Bolton, C. D. & Kammeyer, K. C. W. The university student. New Haven, Conn.: College and University Press, 1967.
- Calhoun, J. The remediation of interpersonal performance anxiety in the dating situation by behavior modification techniques. In preparation, Purdue University, 1973.
- Carkhuff, R. R. & Berenson, B. G. Beyond counseling and therapy. New York: Holt, Rinehart & Winston, 1967.
- Christensen, A. & Arkowitz, H. Preliminary report on practice dating and feedback as treatment for college dating problems. <u>Journal of</u> Counseling Psychology, 1974, 21, 92-95.
- Christensen, A., Arkowitz, H., & Anderson, J. Beaus for cupid's errors: Practice dating as treatment for college dating inhibitions. Unpublished manuscript, University of Oregon, 1973.

- Christensen, H. T. & Gregg, C. F. Changing sex norms in America and Scandinavia. <u>Journal of Marriage and the Family</u>, 1970, 32, 616-627.
- Christensen, H. T. & Johnsen, K. P. <u>Marriage and the family</u> (3rd ed.) New York: Ronald Press, 1971.
- Coons, F. W. The resolution of adolescence in college. <u>Personnel and</u> Guidance Journal, 1970, 48, 533-541.
- Crano, W. D., Kenny, D. A., & Campbell, D. T. Does intelligence cause achievement?: A cross-lagged panel analysis. <u>Journal of Educational</u> Psychology, 1972, 63, 258-275.
- Curran, J. P. Cross-validation of factors influencing interpersonal attraction in the dating situation. In preparation, Purdue University, 1973a.
- Curran, J. P. An evaluation of a skills training program and a systematic desensitization program in reducing dating anxiety. Unpublished manuscript. Purdue University, 1973b.
- DuBois, P. H. <u>Multivariate correlational analysis</u>. New York: Harper, 1957.
- Ehrenwald, J. The telepathy hypothesis and doctrinal compliance in psychotherapy. American Journal of Psychotherapy, 1957, 11, 359-379.
- Erikson, E. H. Childhood and society. New York: Norton, 1950. p. 228.
- Frank, J. D. <u>Persuasion and healing: A comparative study of psychotherapy</u>. Baltimore: Johns Hopkins Press, 1961.
- Franks, C. M. (Ed.) Behavior therapy: Appraisal and status. New York: McGraw Hill, 1969.
- Goldstein, A. P., Heller, K., & Sechrest, L. Psychotherapy and the psychology of behavior change. New York: Wiley, 1966.
- Gurin, P., Gurin, G., Lao, R. C., & Beattie, M. Internal-external control in the motivational dynamics of negro youth. <u>Journal of Social Issues</u>, 1969, 25, 29-53.
- Hay, N. M. Action and verbal-relationship interventions with college men fearful of dating. Unpublished doctoral dissertation, Michigan State University, 1972.
- Heine, R. W. A comparison of patients' reports on psychotherapeutic experience with psychoanalytic, nondirective, and Adlerian therapists. American Journal of Psychotherapy, 1953, 7, 16-23.
- Hewitt, L. E. Student perceptions of traits desired in themselves as dating and marriage partners. Marriage and Family Living, 1958, 20, 344-349.

- Hunter, J. E. & Cohen, S. H. Package: A system of computer routines for the analysis of correlational data. Educational and Psychological Measurement, 1969, 29, 697-700.
- Jourard, S. M. Self-disclosure: An experimental analysis of the transparent self, New York: Wiley, 1971.
- Kent, M. Individual identity: The correlates of perceiving oneself as unique or anonymous. Unpublished doctoral dissertation, Michigan State University, 1973.
- Kiesler, S. B. & Baral, R. L. The search for a romantic partner: The effects of self-esteem and physical attractiveness on romantic behavior. In J. Gergin and D. Marlowe (Eds.) Personality and social behavior. Reading, Mass.: Addison-Wesley, 1970.
- Krasner, L. The therapist as a social reinforcement machine. In H. H. Strupp and L. Luborsky (Eds.) Research in psychotherapy, Vol. II. Washington, D. C.: American Psychological Association, 1962.
- Lazarus, A. A. Behavior rehearsal vs. non-directive therapy vs. advice in effecting behavior change. Behavior Research and Therapy, 1966, 4, 209-212.
- Luborsky, L., Auerbach, A. H., Chandler, M., Cohen, J., & Bachrach, H. M. Factors influencing the outcome of psychotherapy: A review of quantitative research. <u>Psychological Bulletin</u>, 1971, 75, 145-185.
- Maltz, M. Psycho-cybernetics. Englewood Cliffs, N. J.: Prentice-Hall, 1961.
- Mann, J. The outcome of evaluative research. In C. M. Weiss (Ed.)

  <u>Evaluating action programs: Readings in social action and education.</u>

  Boston: Allyn & Bacon, 1972.
- Martinson, W. D. & Zerface, J. P. Comparison of individual counseling and a social program with nondaters. <u>Journal of Counseling Psychology</u>, 1970, 17, 36-40.
- Melnick, J. A comparison of replication techniques in the modification of minimal dating behavior. <u>Journal of Abnormal Psychology</u>, 1973, 81, 51-59.
- Meltzoff, J. & Kornreich, M. Research in psychotherapy. New York, Atherton Press, 1970.
- Mirande, A. M. & Hammer, E. L. Premarital sexual permissiveness: A research note, Journal of Marriage and the Family, 1974, 36, 356-358.
- Miskimins, R. W. & Braucht, G. N. <u>Description of the self</u>. Fort Collins, Colorado: Rocky Mountain Behavioral Science Institute, 1971.

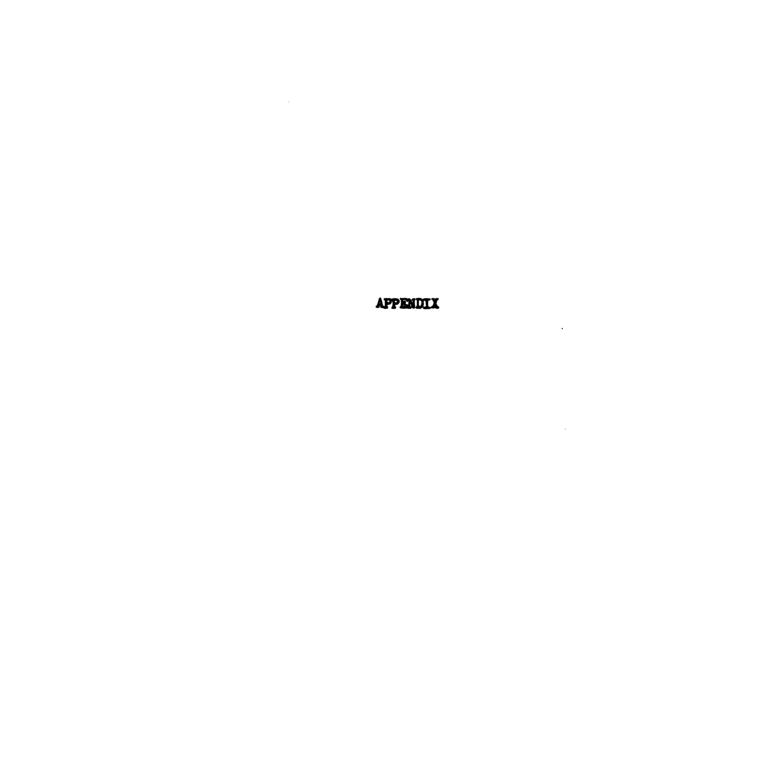
- Morgan, J. M. The effect of model exposure and behavior rehearsal on the initiation of dating experiences by seldom dating college men. Unpublished doctoral dissertation, Indiana University, 1970.
- Murray, E. J. & Jacobson, L. I. The nature of learning in traditional and behavioral psychotherapy. In A. E. Bergin and S. E. Garfield (Eds.) Handbook of psychotherapy and behavior change. New York: John Wiley and Sons. 1971.
- Newman, D. Using assertive training. In J. D. Krumboltz and C. Thoresen (Eds.) Behavioral counseling: Cases and techniques. New York: Holt. Rinehart. and Winston. 1969. Pp. 433-441.
- Rehm, L. P. & Marston, A. R. Reduction of social anxiety through modification of self-reinforcement: An instigation therapy technique.

  <u>Journal of Consulting Psychology</u>, 1968, 32, 565-574.
- Rosenthal, D. Changes in some moral values following psychotherapy.

  Journal of Consulting Psychology, 1955, 19, 431-436.
- Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. <u>Psychological Monographs</u>, 1966, 80, 1-28.
- Rozelle, R. M. & Campbell, D. T. More plausible rival hypotheses in the cross-lagged panel correlation technique. <u>Psychological Bulletin</u>, 1969. 71. 74-80.
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. <u>Manual for the State-Trait Anxiety Inventory</u>. Palo Alto, California: Consulting Psychologists Press, 1970.
- Strupp, H. H. & Bergin, A. E. Some empirical and conceptual bases for co-ordinated research in psychotherapy: A critical review of issues, trends, and evidence. <u>International Journal of Psychiatry</u>, 1969, 7, 18-90.
- Tarter, J. L. <u>Mathematical models of attitude change in a longitudinal study of large organizations</u>. East Lansing, Michigan: Michigan State University, Computer Institute for Social Science Research, 1972.
- Truax, C. B. Reinforcement and non-reinforcement in Rogerian psychotherapy. Journal of Abnormal Psychology, 1966, 71, 1-9.
- Valentine, J. & Arkowitz, H. Social anxiety and the self-evaluation of interpersonal performance. Unpublished manuscript, University of Oregon, 1973.
- Vener, A. M., Steward, C. S., & Hager, D. L. The sexual behavior of adolescents in middle America: Generational and American-British comparisons. Journal of Marriage and the Family, 1972, 34, 696-705.
- Vreeland, R. S. Dating patterns of Harvard men. Sexual Behavior, 1972a, 2, 4-10.

- Vreeland, R. S. Is it true what they say about Harvard boys? Psychology Today, 1972b, 5 (Jan.), 65-68.
- Watson, D. & Friend, R. Measurement of social-evaluative anxiety.

  Journal of Counseling and Clinical Psychology, 1969, 33, 448-457.
- Winch, R. F. The functions of dating in middle-class America. In R. F. Winch and W. L. Goodman (Eds) Selected studies in marriage and the family. Chicago: Holt, 1968.



## Dating History

Most dating experiences may be classified into two categories—(1) "real dates" and (2) "other dates." Under "other dates" are such experiences as dates with relatives, close friends, etc., where there is no possibility of a romantic relationship developing. On this questionnaire we are interested in "real dates," i.e., dates with members of the opposite sex to whom you were or could have become attracted and where there was the distinct possibility of a further relationship developing between you. (See # 10 for the definition of a date)

	veloping between you. (See # 10 for the definition of a date)	
1.	What percentage of your dating experiences have been of each type?	
	"Real Dates" Other Dates"	
2.	How many "Feal dates "have you had?	
3.	How long ago was your most recent "real date" which was also a 1st date?	
4	Did it lead to a 2nd date?	
	A. If there was no 2nd date, why not?	
	B. Has this been the reason for not having a 2nd date before? How many times?	
	C. What have other reasons been for not having 2nd dates in the past?	
5•	If you were satisfied with the date, did you let it show or not?  How did you show it if you did let it show?	
<b>5.</b>	If you were not satisfied with the date, did you let it show or not?How did you show it if you did let it show?	
7•	In the past what other ways have you let your date know whether or not you were satisfied or wanted to go out again?	

8.	If there was a 2nd date, was there also a 3rd date?
	A. If there was no 3rd date, why not?
	B. Has this been the reason for not having a 3rd date before?  How many times?
	C. What have other reasons been for not having 3rd dates in the past? (If same as for not having 2rd dates, answer "same as 2rd dates")
9•	If there was a 3rd date, what was the general trend of the relationship after that?
	A. How long did it last?
	B. Why did it break up?
	For the purposes of this questionnaire a date is defined as some prearranged activity which one person has specifically asked the other to participate in as his or her partner. Dropping by to talk, and group activities in which one individual has not specifically asked another to either go or come home with him or her are not considered dates.  A. Males only
	1. What \$ of 1st, 2nd, and 3rd dates do you ask for in person and over
	the telephone?
	in person telephone
	1st date \$\frac{\beta}{\beta}\$
	2nd date % %
	3rd date %
	2. Which is easiest for you? In person, over the phone
	3. For what % of the times you ask girls for dates do they accept?  %of girls who accept
	1st date %
	2nd date
	3rd date %

4.	the cou	those times you have asked for a date and been turned down, what % of time do you think the girl would like to have gone out with you but ldn't, and what % of the time do you think the girl really did not it to go out with you.
		Wanted to go out Did not want but couldn't to go out
		1st date
		2nd date % %
		3rd date
5.	Thi	nk back to the last time you asked for a date and was turned down.
	A.	Was it a 1st, 2nd, 3rd, or laterdate?
	в.	What reason did she give for not saying "yes"?
	c.	Did you believe her? If not, what do you think her real reason was?
	D.	How did you react to the turn down? (check all which apply)  1. was hurt and said so  2. was hurt but did not say so  3. was angry and said so  4. was angry but did not say so  5. was surprised and said so  6. was surprised but did not say so  7. lost sleep over it  8. felt embarrassed  9. other (fill in answer)—
	E.	Did you ask the same girl again? Then? Later? If so, what was her response?
		How did her response make you feel?
	F.	What are the most frequent excuses girls use with you when they say "no" to your asking them out? (check those you tend not to believe, if any)

6. How can you tell when a girl would like to go out with you, i.e., what

		do she do to let you know?		
	7.	How can you tell when a girl	. does not wan	t you to ask her out?
	8.	What difficulties do you hav interested in you?	re in telling	whether a girl is or is not
В.	Fem	ales only		
	1.	What % of 1st. 2nd, and 3rd	dates are you	asked for in person and over
		the telephone?	in person	telephone
		1st date	<u> </u>	<u> </u>
		2nd date	<u></u>	;
		3rd date	فز	<u> </u>
	2.	Which is the least stressful	7 In person_	, over the phone
	3.	For what $\%$ of the times you a	are asked for	dates do you accept?
			% of times a	ccept
		1st date	***************************************	<u>%</u>
		2nd date	****************	<u>''</u>
		3rd date	Control - Children Long and	<u>%</u>

Of those times you have been asked for a date and said "no," what % of
the time would you have liked to go with the boy but could not, and
what % of the time did you really not want to go with that guy?

			Wanted to go or but couldn't	nt Did not to go on	
		1st date	e/		<u>\$</u>
		2nd date	مُخ	-	<u>%</u>
		3rd date	<u>%</u>	<del>*************************************</del>	øj.
5.	Th	ink back to the last t	time you were as	sked for a date	and said "no."
	A.	Was it a 1st	, 2nd,	3rd, or	later date?
	В.	What reason did you	give for not sa	ying "yes"?	
	С.	Was that your real r	*eason?	If not, what w	as your real
	D.	How did the boy react 1. was hurt and said 2. was hurt but did 3. was angry and said 4. was angry but did 5. was surprised and 6. was surprised but 7. lost sleep over it 8. felt embarrassed 9. other (fill in ans	so not say so d so not say so said so did not say so t	own? (check all	which apply)
	E,	Did he ask you out as If so, what was your	gain?Then	1?Later?_	<del></del>
		How do you think your	response made	him feel?	

F. What are the most frequent excuses you use when you say "no" to a guy who is asking you out? (check those you think tend not to be believed, if any)

	6.	How do you let a fellow know you would like to go out with him, i.e. what do you do to communicate this to him?
	7.	How do you let a guy know that you do not want him to ask you out?
	8.	What difficulties do you have in telling whether or not a guy is interested in you?
11.		e space provided in the outline below to describe the kinds of problems give you the most trouble in regard to dating.
	A. Fin	ding someone to go out with:
	1.	Going to place where you can meet potential dates
	2.	Making a realistic choice of people to pursue as a dating partner
	3.	other
	B. Get	tting to know the person:
	1.	Introducing yourself
	2.	Starting a conversation
	3.	Continuing a conversation once it is started
	4.	Talking too much or too little
	5.	Showing that you like the person

# C. Getting the date:

- 1. hales
  - a. actually asking for a date
    - 1. on the phone
    - 2. in person
  - b. getting discouraged too easily
  - c. other
- 2. Females
  - a. making yourself available for the asking
  - b. showing you want to go out
  - c. putting the guy at ease
  - d. other
- D. On the first date:
  - 1. Conversation
  - 2. Not being yourself, acting unnatural
  - 3. Too sober or too carefree
  - 4. Not personal enough or too personal
  - 5. Sex-go too far or not far enough
  - 6. other
  - E. Getting the 2nd date
  - F. Further dates and long term relationships,

	G. Other concerns about dating not covered above
12.	What do you think is the main reason why you don't date more often?
13.	How often would you like to have dates?
14.	Have you ever talked about sex while on a date? If so, what was the nature of the discussion?
15.	How do you usually react to a complement or flattering remark by a member of the opposite sex to whom you are attracted? (mark all that apply)  a. graciously accept the complement and believe it is sincere b. " " " but believe it is insincere c. openly deny the complement but secretely believe it d. " " " and secretely deny it too e. become embarrassed f. look the person in the eye g. look down or away h. other (fill in)

- 16. If I am talking to someone of the opposite sex who is a potential dating partner and I can see that they feel uncomfortable or afraid, I...(check all that apply)
  - a. feel afraid
  - b. try to help them feel more comfortable
  - c. loose respect for them
  - d. feel more confident myself
  - e. feel more insecure myself
  - f. am more likely to talk openly and honestly with them
  - g. am less " " " " " " "
  - h. other (fill in)--
- 17. If I am talking to someone of the opposite sex who is a potential dating partner and I can see that they feel confident, comfortable, and secure, I... (check all that apply)
  - a. feel afraid
  - b. try to help them feel even more comfortable
  - c. try to make them feel insecure
  - d. feel more confident myself
  - e. feel less confident myself
  - f. am more likely to talk openly and honestly with them
  - g. am less " " " " " " " "
  - h. other (fill in)--
- 18. When taking to a girl and another guy is present (or, if you are female--when talking to a guy and another girl is present) I tend to...(check all that apply)
  - a. compete with the 3rd party for the persons attention
  - b. withdraw from the conversation
  - c. do or say something clumsy or awkward
  - d. start to clown around, show off
  - e. feel less threatened than if there is just the 2 of us

  - g. feel resentful toward the 3rd party
  - h. feel hurt if the person I'm talking to ends up talking more to the other person
  - i. feel more relaxed if the person I'm talking to ends up talking more to the other person
  - j. other (fill in)--

# Sexual Attitude and Experience Questionnaire

1. In the spaces provided, write the total number of persons and the maximum number of times with any one person that you have engaged in each activity. If none, write 0. Put a check mark in the parenthesis by those activities you have engaged in with someone you knew a few days or less beforehand.

Number of persons	naximum with one person	
-	(	) Held hands while on a date
	(	) Kissed a dating partner
	(	) Hugged & kissed continuously for 1 hour or more
	(	) Had your breasts fondled (females) Fondled your partner's breasts (males)
	(	) Had your genitals fondled
	(	) Fondled your partner's genitals
-	(	) Had sexual intercourse
-	(	) Engaged in sexual activity with someone of your own sex

2. If you have had unpleasant experiences while engaging in any of these activities, give a brief description of what happened.

How has this experience affected your attitude, feelings, and behavior toward the opposite sex?

If you have ever felt guilty after engaging in any of the above sexual activities, what have you usually done to reduce those guilt feelings? Have these steps been effective in reducing guilt?

3. How have any feelings of guilt you may have that are associated with sexual activities affected your attitudes or behavior toward the opposite sex?

4.	
	that apply) Completely satisfied
	Would like to engage in activities short of intercourse less often
	Would like to engage in activities short of intercourse more often
	Would like to engage in activities short of intercourse less often Would like to engage in activities short of intercourse more often Would like to engage in intercourse less often Would like to engage in intercourse more often Amount of activity is presently satisfactory, but would like to be doing it with people to whom you are more attracted
	Amount of activity is presently satisfactory, but would like to be
	doing it with people to whom you are more attracted
	Amount of activity is presently satisfactory, but would like to be
	doing it in the context of a deeper interpersonal relationship Other (write in)
	Other (write in)
	Feel stress from social pressure to engage in more sexual activity Worry about your own attractiveness as a sexual partner Fear being used for sex purposes only Can't tell if your partner will accept your sexual advances or not Have conflicts regarding how far you should go sexually Fear that you may be oversexed Fear that you may be undersexed Worry about how important sex is in a relationship compared to other aspects of that relationship Fear that you may have homosexual tendencies Worry because you think about sex too much Worry that you might not be able to control yourself when sexually arroused Fear that your partner will want to do more than you want to do Fear that your partner will lose respect for you if you go too far Fear that your partner will lose respect for you if you don't go far enough
	Other (write in)

5. In the table below the rows represent the level of commitment and love in a relationship and the columns represent the level of sexual activity. Put an X in the appropriate squares to indicate the level of sexual activity that is acceptable to you according to your own personal standards of sexual conduct.

Sexual Conduct.	•					
	Holding hands	Kissing	Kissing for 1 hour	Fondling breasts	Fondling genitals	Sexual Intercourse
1st dateno affection						
1st datesome affection						
3rd dategetting serious						
Going steady think are in love						
Engageddeeply in love						
Married						

7.	How do you think your standards of sexual conduct compare with most other people your age and sex?
	The same Yours are more strict Yours are less strict
8.	How closely do you adhere to your personal standards of sexual conduct?  Have never gone beyond them Have gone beyond them once or twice Have gone beyond them on several occasions
9•	What is your attitude toward homosexuality (check all that apply)  There is nothing wrong with it, ok for consenting persons Homosexuals need therapy, there is something wrong with them It is a perversion that should be suppressed in our society Feel comfortable in the company of homosexuals Feel uneasy in the company of homosexuals

10.	Compared with other people your same age and sex, how physically attractive do you think you are?
	much more attractive somewhat more attractive about the same somewhat less attractive much less attractive
11.	Nost people have a few fantasies which recur fairly often when they are daydreaming. Some of those fantasies will have to do with the opposite sex. Use the space below to briefly describe fantasies you have which involve relationships with the opposite sex. These may be either pleasant or unpleasant fantasies. The examples that follow may help you to recall your own fantasies. Describe your fantasies for as many of the categories listed below as possible, i.e., A through E.
A.	Examples:  Neeting new potential dateslove at first sight, saving a damsel in distress, being saved by a knight in shining armor, 100's of attractive people wanting
В.	to go out with you, being rejected by everyone you ask out  Social activities—impressing everyone with your date, being admired by one and all, being the life of the party, being shunned by everyone, doing something stupid and embarrassing, not being able to think of anything to say
С.	Long-term relationships marry your one-and-only and live happily ever after, having a big wedding, having your every wish catered to, caring for someone,
	sharing your innermost thoughts, never finding happiness, being an old maid Terminating relationships—being dropped and hurt, dropping someone else, being cheated on, losing interest in your partner, getting even Sexual activities

	Name					
	Date					
1.	Have you ever been "hurt" emotionally by a person of the opposite sex to whom you were attracted?					
2.	If so, who was it and what did they do that hurt you? What were the circumstances under which it happened? (if more than one, pick out the one that has had the greatest effect on your present attitudes and behavior toward the opposite sex.					
3.	What was your immediate reaction? How did you feel? How did you behave?					
	How did you feel?					
	What did you think?					
	How did you behave?					
4.	What was your later reaction?					
	Did you make any decisions about how to avoid such hurt in the future? If so, what were those decisions?					
	How did you feel and act when you met the person on later occasions?					
5.	Add any other information along these lines that you feel is important.					

#### Dating Partner Rating

#### Instructions:

Rate the following characteristics of dating partners in terms of how important each attribute is for the development of a deep or long term relationship. First rate the importance of each characteristic to you in people you might go out with, then rate how important you think they are to most people your age of the opposite sex in people they might go out with. Thus, males will rate the importance of each characteristic for themselves and for what they think is true of most females. Females, on the other hand, will rate the importance of each characteristic for themselves and for what they think is true of most males. Use the following rating scheme:

4 = Absolutely necessary

3 = Very important but not absolutely necessary

2 = Quite important

1 = Mostly unimportant
0 = Totally unimportant

-1 = Is a negative characteristic

		Importance to you	Importance to opposite sex
1.	Is an interesting conversationalist		
	Observes the social graces		
	Says flattering things to you	-	
	Says withy unings	********	
	Is knowledgeable in many different areas		-
	Flirts with you		
	Shows you an unusually exciting time		
	hakes it easy for you to relax and be yourself		
	Has high self-confidence		
	Is considerate of your feelings		
	Clearly shows he/she likes you Is a good listener, attentive		-
	Is warm and friendly with you		
	Freely shows affection		
	Believes in the equality of the sexes		
	Is natural aniauthentic		
•	Is fun loving an adventurous.		
	Plays games—hard to get, etc.		
	Is honest and forthright in expressing + and - feeling	<i>y</i>	
	Is open to your point of view		
	Is ambitious in chosen field		
	Engages in friendly teasing		
	Is talkative		
	Is a leader		
25.	Asserts his or her own rights in the relationship		
	Has a physically attractive face		
	Has a physically attractive body		
	Has high intelligence		
29.	Dresses in up-to-date fashions		
	Has lots of friends		
	Is outstanding in some field of endeavor or activity		
32.	Is sought after as a date by many		

# Dating Partner Rating continued

49. Attends church regularly 50. Prays regularly	portance to oposite sex
No. 11sto referrerta	

## SCS-I

### Instructions:

Use the following scale to describe your self-image, i.e., the way you generally think of yourself or what you consider to be your basic nature. People do not always behave in ways that are consistent with their self-image. Therefore, in filling out this scale put an X in the appropriate space on the line between each pair of descriptive statements to indicate how you think of yourself, regardless of how you actually behave. Use only one X per line. See the example below.

	Energetic	, X			•	Lazy
	-	extremely most	one a		ly extremely	·
	SELF-DIAGE		the c	uner		SELF-IMAGE
1.	Spontaneous					Reserved
2.	Follower			8	1	Leader
3.	Sad	1			<u> </u>	Карру
4.	Friendly and	1	1	<u> </u>		Unfriendly and cold
5.	warm Authentic			1		Phony
6.	Tense, nervous					At ease, relaxed
7.	Self-confident	1				Unsure of self
8.	Boring					Interèsting
9.	Talkative					Quiet
10.	Shy					Assertive
11.	Selfish					Considerate
12.	Affectionate					Rejecting
13.	Gemine					Artificial
14.	Dishonest	1			,	Honest
15.	Socially				1	Socially
16.	awkward Perceptive of			1		skillful Can't tell what
17.	other's feelings Self-conscious					others feel Unsware of self
18.	Critical					Tolerant
19.	Natural		1		1	Play a part
20.	Say & do all the wrong things				:	Say & do all the right things
	<u> </u>					

Name	
Age:_	
Sex:	

# I-E Scale

Instructions	Clons
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In the space provided by each statement below, write a "T" if the statement is generally true of you and write an "F" if the statement is generally false for you.

	for yo	u.	
•		1.	Trusting to fate does not work well for me. I have to make a decision and take a definite course of action.
٠		2.	I don't have enough control over the direction my life is taking.
_		3.	When I make plans, I also make them work.
1tems		4.	I don't plan ahead because thing turn out to be a matter of good or bad fortune anyhow.
of a		5.	For me, getting what I want has little to do with luck.
•		6.	I decide what to do by "flipping a coin."
ere.		7.	I have little influence over the things that happen to me.
("General		.8.	Chance or luck don't play important roles in my life.
1tems)		9.	For me, finding the right marriage partner is largely a matter of luck.
10.1		10.	I believe that there is one ideal mate for me.
e" scale	<del></del>	11.	There is no use in me trying to find someone to fall in love with. When it happens, it happens. There is very little I can do about it.
("Hate"		12.	I believe that I can get a person of the opposite sex to find me attractive if I do and say the right things.
•		13.	If I make a concerted effort, I can find and marry the right person.
_		14.	I believe that there are hundreds of people in the world I could marry and obtain equal happiness.
		15.	I actively look for someone to fall in love with.
-		16.	If a person of the opposite sex likes me, they like me, and if they don't, then they don't. There is really little I can do to change that.

			Name			
			Date			
Dur I h	ring the past days, a wave felt:	as I have tal	ked wi	th member	s of	the opposite sex
	1. Nervous					Calm
	2. Relaxed					Tense
	3. Sure of self					No confidence
	4. Shy					Assertive
	5. Warm					Cold
	6. Rejecting					Friendly
	7. Artificial					Natural
	8. Genuine					Phony
111	ing the past few day e in the following a	mounts:	ried at Non-	• Once	erent in ile	areas of my Most of Constantly the time
1.	Not having enough d	ates.	-			
2.	Needing to get ot k people of the oppos		-			
3.	Not being happy.					
4.	Getting along with	my roommates.	.			
5.	Getting along with the same sex.	others of				
6.	School work.					
7.	Job situation.					
8.	Relationship with p	arents.				
9.	Other					

