

OPERANT CONDITIONING OF VERBAL SKILLS
TO AFFECT SHYNESS

By

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1974

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
MASTER OF SCIENCE
July, 1978



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ACKNOWLEDGEMENTS

I would like to extend my appreciation to my thesis adviser, Don Fromme, and to the other members of my committee, Julia McHale and Bob Helm, for their time, support, and patience throughout the course of this endeavor. Don, Julia, and Bob, you each are special in your own unique way!

Thanks are extended to John Fajen, my colleague in a project that turned out to be just about all we could handle!

I am extremely grateful to Tom Smith for his assistance in the computer programming aspect of this project. Tom and his wife, Cathey, have also been invaluable friends who have seen me through many trying times. Love and thanks to you both.

Sincere thanks are extended to my parents who have quietly but solidly been behind me throughout my graduate career. Mahalo and aloha, Mom and Dad.

Finally, I would like to express my love and appreciation to someone whom I met at the onset of this project and eventually married during the course of it. Thank you, Henry, for your patience, support, and unconditional positive regard. Honey, I did it!

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CHAPTER I

LITERATURE REVIEW

Introduction to the Problem

The present study utilizes operant conditioning techniques in an attempt to develop verbal skills in self-reported shy people. The efficacy of using operant techniques to modify verbal behavior has been demonstrated by a number of researchers, as indicated in the literature review on verbal conditioning. Shyness was chosen as the target behavior for several reasons. First, shyness can be seen as a behavioral deficit with the potential for far-reaching negative consequences (Twentyman & McFall, 1975). Second, shyness has been reported as a common problem (Zimbardo, Pilkonis, & Norwood, 1975) and third, it has received very little treatment attention. The Social Avoidance and Distress scale (SAD) was used in the present study as a means of determining the reported magnitude of shyness and the efficacy of the operant technique.

The three treatment conditions in the study were empathy, expressive and historical information, which corresponded with the three different sets of instructions. These three conditions were chosen on the basis of their importance as characteristics in groups. The review of the literature will discuss some of the research that deals with the different aspects of this study.

Self-disclosure

One of the most notable investigators in the area of self-disclosure is Sidney Jourard. He defines self-disclosure as talking about oneself to another person (Jourard, 1964) or as the process of making the self known to other persons (Jourard & Lasakow, 1958). Self-disclosure is seen as the most important mode of interpersonal interaction and thus is a sign of mental health. Self-disclosure is a therapeutic factor in the treatment of psychology. The lack of disclosure is the prime etiological mechanism; psychopathology is said to be due to the lack of self-disclosure since the person who fails to disclose to some optimal degree fails to truly know him/herself (Jourard, 1964). Despite its importance, Jourard finds self-disclosing behavior to be rare. His explanation for this is that people play social roles in so many of their transactions that they have virtually no person to person transactions.

The rarity of self-disclosure has been agreed upon by other writers. Laing (1967) purports that people present an edited version of themselves in most transactions. Pearce and Sharp (1973) found very little self-disclosure occurring in most communication.

Some studies were done to investigate what variables can affect self-disclosing behavior. One investigator and his colleagues (Adesso et al., 1974) studied disclosure in growth groups and discussion groups composed of college students. Results indicated that growth groups affect self-disclosing behavior. Cravens (1975) studied the disclosure of females with a high need for social approval and females with a low need for social approval. Two types of situations were created: one in which the subjects believed their statements were open to the public and another in which subjects believed that their statements were private

and there was complete confidentiality. The results indicated that low social approval subjects exhibited more instances of self-disclosing behavior in the private as opposed to the public condition. The opposite was found for the high social approval subjects. Social approval and the level of confidentiality were found to be important determining factors in self-disclosing behavior. The implication of this is that if self-disclosure is therapeutic, low social approval subjects will be helped by the confidentiality rule. The high social approval subjects should not be hindered by lack of confidentiality.

Sex differences in self-disclosure were found by some investigators (Jourard & Lasakow, 1958; Jourard, 1971; Kraft & Vraa, 1975; Chelune, 1975), while others have failed to find sex differences (Zief, 1962; Rickers-Ovsiankina & Kusmin, 1958). Thus findings on sex differences in self-disclosing behavior are unclear.

One of the best documented findings concerning self-disclosure is the property of reciprocity (Jourard & Landsman, 1960; Jourard & Resnick, 1970; Jourard & Jaffe, 1970; Ehrlick & Graeven, 1971; Levinger & Senn, 1967; Cozby, 1972; Derlega, Walmer & Furman, 1973). It has been suggested that once self-disclosure is started it may have a "snow-balling" effect such that its frequency increases rapidly after the first disclosure. Higbee (1973) applied the risky shift concept to self-disclosure in an effort to explain the snow-balling effect. He found that self-disclosure was a valued thing. His subjects rated themselves as more disclosing than their peers. He also found that his subjects increased their willingness to disclose when they received information that others were of equal or greater willingness to disclose. Thus, it is possible that reciprocity effects seen in self-disclosure may be due to the fact

that the first instance of disclosure shows others that the discloser is high on this valued trait. If others want to be seen as high on this trait they must disclose themselves. In this way, the snow-balling effect is started and perpetuated.

An extensive literature review yielded four generalities about self-disclosure (Pearce & Sharp, 1973): self-disclosure occurs incrementally as a relationship stabilizes; self-disclosure occurs in the context of positive social relationships; self-disclosure in a dyad is usually symmetrical; few communications involve self-disclosure.

Simonson (1976) used a psychotherapy analogue with female college students to study the effect of therapist disclosure on subsequent client disclosure. The three levels in his experiment were: (1) therapist disclosed demographic information; (2) therapist disclosed personal information; (3) no therapist disclosure. It was found that demographic disclosure was superior in producing subsequent subject disclosure. This result was explained in light of subjects perceiving personal disclosure as inappropriately intimate. Another set of studies (Banikiotes & Daher, 1974; Daher & Banikiotes, 1974) concluded that the amount of interpersonal attraction to another was positively related to the level of self-disclosure to that other. A second finding in those studies was that individuals are more attracted to persons who are similar to them in both the content and level of self-disclosure than those who are dissimilar. This implies that disclosures must be of appropriate content and frequency for snow-balling to occur. In light of these findings and those in the Simonson study, it seems that personal disclosure was not similar enough to subjects' intended disclosure but demographic disclosure was.

Interpersonal Feedback

In an encounter group study, subjects ranked feedback, the process of receiving information about oneself from others, as the most important factor in promoting change in the group (Lieberman, Yalom, & Miles, 1973). Yalom (1970) investigated the possible effects of feedback in group psychotherapy. The results indicated that feedback facilitates interpersonal learning and therapeutic change, enables people to restructure their self-image and see the universality of their problems. Yalom also found that feedback in the context of here and now interactions was the most effective.

A review of the literature yielded seven positive effects of feedback (Watson, 1969): (1) Feedback was related to increased awareness of the self in interaction with others; (2) feedback increases the accuracy of perception of the feelings and overt behavior of others; (3) feedback increases openness in interpersonal relations; (4) feedback increases acceptance of differences in others; (5) feedback decreases extreme interpersonal need in the areas of control, inclusion, and affection; (6) feedback increases the understanding of group behavior; (7) feedback increases self-confidence in interpersonal interaction.

Dyer (1972) took an extensive look at interpersonal feedback. He defines it as the process of information sharing in which a person receives information from others about his/her behavioral performance. The information sharing process divided into two components: (1) description of what behavior a person sees in another; (2) communication of how a person feels about the behavior he sees in another. Dyer also delineates eight specific types of feedback: (1) Objective descriptive feedback which consists entirely of description of the behavior of

another with no feeling component. This gives the receiver a mirror image of him/herself; (2) Assumed or guessed impact, i.e., person A tells person B what impact he thinks B's behavior had on person C; (3) Second party report of impact, i.e., person A tells person B that person C told A what impact B's behavior had on C; (4) Direct, descriptive impact, i.e., person A telling person B what B's behavior is like and what feelings A has about it. Dyer indicated that direct, descriptive impact was the most important and most effective form of feedback; (5) Direct evaluation occurs when person B's behavior has impact on person A and A tells B only what his/her feelings are but not which of B's behaviors he/she is reacting to; (6) Direct expressive which is composed entirely of the feeling component. A expresses a feeling he/she has toward person B but he/she does not react to a particular behavior in B but rather to B's total being; (7) Interpretation, where person A tells person B what his/her actions mean; (8) Nonverbal feedback, where person B receives information about his/her behavior by watching person A's nonverbal reactions to his/her behavior. Dyer indicated that these forms of feedback can be used by people to make appropriate behavioral and perceptual changes and to improve relationships. This is not to say that all feedback is positive, however. Feedback can be used to hurt or punish people.

Empathic Expression

Empathy involves the sensitivity to current feelings of others and the verbal facility to communicate this sensitivity (Truax & Carkhuff, 1967). More simply stated, empathy is the understanding of the feelings of another. Greif and Hogar (1973) did a study using a factor analytic method to derive three definitional components of empathy: tolerance or

even-temperedness, sociable interpersonal style, and humanistic socio-political attitudes.

Empathy is deemed important for everyday living (Greif & Hogan, 1973; Aspy, 1970; Goodman & Ofshe, 1968). It has even been suggested that empathy presents an important plateau of interpersonal development, accomplished by children as young as three years old (Borke, 1971). Empathic ability is an important influence in interpersonal functioning throughout most of our life. The following paragraphs will discuss how empathy is important.

Many studies have dealt with attributes of high versus low empathic subjects. Mehrabian and Epstein (1972) found high empathy subjects less likely to engage in aggressive behavior than were low empathy subjects. In the same study they also found that high empathy subjects were more likely to engage in helping behaviors than the less empathic subjects. Pierce and Zark (1972) found that high empathy subjects had better interpersonal skills than did subjects with low empathic ability. Also, high empathy subjects attended to feelings of others more. Schoen's (1970) conclusion was that high empathy subjects were better in predicting the behavior of others. All of these studies show that empathy is related to a constellation of adaptive interpersonal skills.

Carl Rogers (1957) considered empathy a necessary condition for therapeutic improvement. He also affirmed that when empathy was coupled with warmth and genuineness in therapy, sufficient conditions for change were present. From Rogers' point of view, empathy, warmth, and genuineness is all that is needed to insure therapeutic change. Truax and Carkhuff (1967) have also gathered a great deal of support for the contention that interactions characterized by empathy, nonpossessive warmth

and genuineness are the most significant factors related to client improvement in either individual or group psychotherapy. Other investigators have affirmed the relationship between high empathy and positive therapeutic outcome (Truax, Wittner, & Wargo, 1971; Truax, 1970; Mullen & Abeles, 1971; Shapiro, 1969). The relationship between empathy and therapeutic outcome is not entirely clear, however, as some investigators failed to find a relationship (Garfield & Bergin, 1970).

Verbal Conditioning

The earliest studies concerning conditioning, extinction, and generalization of verbal behavior were done by Humphreys (1939) and Razran (1949). One of the studies that seemed to generate a great deal of interest was Greenspoon's (1951) conditioning of verbal behavior. He was able to modify the probability of occurrence of a response class of verbal nouns by using verbal approval in the form of "mmm-hmmm," verbal disapproval in the form of "huh-uh," a light, and a tone as reinforcers.

Approval responses such as "mmm-hmmm" (Ball, 1952; Greenspoon, 1951, 1955; Sarason, 1957; Mock, 1957; Krasner, 1955; Salzinger & Pisoni, 1957(a), 1957(b); Wilson & Verplank, 1956), "good" (Binder, McConnell, & Sjöholm, 1957; Cohen, Kalish, Thurston, & Cohen, 1954; Ekman, 1957; Hartman, 1955; Hildum & Brown, 1956; Nuthemann, 1957; Taffel, 1955; Tatz, 1956; Spivak & Papajohn, 1957; Fahmy, 1953), "that's accurate" (Kanfer, 1954), and paraphrasing the subject's response and agreeing with it with a smile (Verplank, 1955) have all been used to increase the frequency of a particular verbal response class. Other reinforcers such as light (Greenspoon, 1951, 1955; Sidowski, 1954), a buzzer (Greenspoon, 1957), and a bell tone (McNain, 1957) have similarly been reported to yield

increases in the frequency of usage of particular verbal response classes. Nonverbal social reinforcers such as head nods, smiles, and leaning forward (Wickes, 1956; Ekman, 1957) have also been used with positive results. In an excellent review of verbal conditioning, Krasner (1958) reported that the majority of studies using general reinforcers such as "mmm-hmmm" or "good" reported positive results.

Some verbal conditioning studies with negative results have been reported. Reinforcers such as "mmm-hmmm" (Daily, 1953; Hildum & Brown, 1956), "good" (Marion, 1956; Daily, 1953), "give another one, please" (Fahmy, 1953), and repetition of the subjects' responses (Fahmy, 1953) have been used with negative results. Ball (1952), Nuthemann, 1957), and Taffel (1955) all used lights as reinforcers with negative results. Ball (1952) found no increase in target response classes when he used a buzzer as a reinforcement. Hartman (1955) used a head nod with a population of schizophrenics with negative results.

The majority of research showed the efficacy of simple reinforcement techniques in altering the frequency of a verbal response class but some negative results were also reported.

Some explanations for the negative results have been put forth. Spielberger and DeNike (1962) thought their negative results were due to the subjects' unawareness of the reinforcement contingency. Subjects lacking in awareness of the contingency were similar to the controls in frequency of usage of plural nouns. Mandler and Kaplan (1956) replicated the Greenspoon 1951 study and obtained negative results. They concluded that subjects who increased the frequency of the response class interpreted the reinforcer as a positive sanction and subjects who decreased the frequency of the response class interpreted the reinforcer

as a negative sanction. These studies suggest that awareness of the reinforcement contingency and awareness of the meaning of the reinforcer is essential to effective verbal conditioning.

Verbal conditioning has been attempted in interpersonal settings. Oakes, Droge and August (1960) presented a light each time one of the discussion group subjects responded with verbal content related to the topic of discussion which was a psychological case study. Half of the subjects were told that the light signified that their statement showed "psychological insight" while the other half was told that the light signified that their statement lacked psychological insight. Results showed that the "psychological insight" condition produced a high rate of verbal responsivity while the lacking insight condition produced hesitancy to speak. This finding indicated that a light may be used as a reinforcer in the group setting to alter verbal behavior. The finding of this study also corroborated the assertion of Mandler and Kaplan (1956) that the meaning of the reinforcer is of extreme importance.

Another study by Oakes, Droge, and August (1961) used a discussion setting similar to the one used in their earlier study. This time they had subjects discuss a problem to which there were three possible solutions. Reinforcement consisted of a light, contingent upon making a statement that the investigators felt was likely to arrive at one pre-selected solution of the three possible. This conditioning technique produced an increase in the rate of emission of reinforcable responses over the thirty minute session. Also, the subjects tended to chose the predetermined solution to the problem. It is clear that reinforcement contingent on a verbal response class greatly affects verbal behavior in the group setting.

Oakes (1962) again used a light as a reinforcer in a discussion group to attempt to increase the frequency of occurrence of verbalizations falling into Bales' (1950) categories. The light signified that a subject's verbalizations evidenced "psychological insight." Results were negative except for a significant increase in emission of the "gives opinions" category. Oakes explained these results in terms of the extremely low operant rate of some of the categories prior to institution of the reinforcement contingency and in terms of the many categories being obviously unrelated to the meaning of the reinforcer.

McNair (1957) used a bell tone as a reinforcer, contingent on any verbalization of the subjects in his discussion group. A significant increase in the rate of verbalization was found, showing that verbal behavior can be modified in discussion groups by simple conditioning techniques. Cieutat (1959), in a seminar-type situation, used attention in the form of looking at his subjects with an occasional head nod to socially reinforce verbal behavior. Results indicated that total time spent speaking varied directly with attention and inversely with inattention. Cieutat's study suggested that social reinforcers are useful in a discussion setting.

Verbal behavior has been modified by verbal conditioning in therapy groups as well as discussion settings. Hauserman, Zweback and Plotkin (1972) used tokens to reward typically nonverbal hospitalized adolescents for verbalizations in a therapy group. They found that group members rewarded with tokens emitted a substantially higher rate of verbal interactions. When the token reinforcement was discontinued, the rate of verbal interaction decreased. Another study demonstrating the effectiveness of verbal conditioning using token reinforcement was done by

Kruger (1971) using three groups of male adolescent delinquents. Every flash of a light indicated a reinforcement, which was tallied and could be used as a token in exchange for back up reinforcers such as candy. There were two experimental groups in this study. In one, reinforcement was controlled by the experimenter, and in the other, reinforcement was controlled by one of the subjects. In both groups, reinforcement was contingent on verbalization, while a control group received random reinforcement. The "peer" reinforcement condition showed the highest rate of response total. The results provide further evidence that a token system can have a great effect on verbalization in group therapy.

Studies using social reinforcers have indicated that they can work in group therapy. Wagner (1966) studied one therapy group of hospitalized psychiatric patients. Half of the group members were reinforced by "good," "uh-huh," or a head nod. The other patients were not reinforced. A significant difference in the rate of verbalization was found up until the sixth session. Another study suggesting that an increase in verbalization can be achieved using social reinforcers in the therapy group was done by Dinoff, Horner, Kurpiewski, Richard, and Timmons (1960). These investigators reinforced two groups of hospitalized male schizophrenics for either group responses or for personal responses by attending to, reflecting, or approving of the subject's statements. Significant increases in the target responses were observed.

An interesting study used negative reinforcement in group psychotherapy (Heckel, Wiggins, & Salzberg, 1962). After any group silence of 10 seconds or longer, these experimenters presented a noxious noise. The noxious noise was terminated with the first verbalization, thus constituting negative reinforcement of verbal behavior. Verbalization in-

creased and silences were almost eliminated, indicating the effectiveness of negative reinforcement.

Two other relevant studies have used the verbal conditioning paradigm with deliberate therapeutic intentions. Williams and Blanton (1958) told their subjects that they were referred for "psychotherapy." Eighteen psychotic patients were assigned to three treatment groups. One group was reinforced verbally for feeling statements, another for statements without feeling content, and one group was given traditional psychotherapy. After nine sessions the percentage of feeling statements had increased for the group receiving selective reinforcement and the group given psychotherapy. The group reinforced for nonfeeling words showed a slight decrease in feeling statements. In this study, verbal conditioning was at least as effective as traditional psychotherapy in the elicitation of feeling statements. Ullman, Krasner, and Collins (1961) used a verbal conditioning situation to investigate psychotherapeutic processes. Psychiatric patients already in group therapy participated in four story-telling sessions in which affect-laden words were: (1) reinforced in a positive-personal manner; (2) reinforced in an impersonal-unstructured manner; or (3) not reinforced. Ratings by group therapists before and after the experimental sessions indicated that persons on the positive-personal reinforcements group made significant gains in the adequacy of their interaction with other group members. No significant changes were made with the other two conditions.

Many of the verbal conditioning studies have relied on the therapist or group leader to provide reinforcement of the responses of group members. However, a paper by Wolf (1961) has suggested that therapists may become the focus of attention in the group, encouraging an anti-

therapeutic dependency by group members. Salzberg (1961) found that verbal interaction by group members was inversely related to the frequency of therapists' interventions, thus supporting Wolf's contention. Therapist-led groups present difficulties in the controlling of therapist differences which results in biasing effects in group therapy research.

There have been attempts to replace the therapist with a mechanical feedback apparatus as the reinforcer. Hastorf (in Krasner & Ullman, 1965) used sets of lights to manipulate the leadership hierarchy of four-person groups that were given the task of "solving problems in human relations." Each subject had a red light and a green light in front of him. The subjects were told that their green light would go on when they made a facilitating statement, and that their red light would go on when their statement hindered group process. Actually the experimenters were controlling the lights in such a way that a target person was manipulated in leading the group.

A final technique of verbal conditioning in groups has been used by Fromme, Whisenant, Susky, and Tedesco (1974), Fromme and Close (1976), and Fromme and Marcy (1976). These investigators seated four subjects around a small table in a semicircular arrangement. Each subject faced a digital counter used to record the subject's verbalizations which fit one of five reinforceable categories. When reinforcement in the form of advancement of the digital counter was issued, an audible click was heard. In addition to the digital counters, red lights were used as negative reinforcers in a manner similar to the use of noxious noise by Heckel, Wiggins, and Salzberg (1962). Whenever a subject fell ten or more counts behind the subject with the highest count, his/her red light turned on. When he/she emitted enough reinforceable responses such that

he was less than 10 counts behind, his red light was turned off. The lights were also used as an informational cue to alert the subjects whenever 3 minutes had elapsed with no member of the group emitting a reinforceable response. This was accomplished by a brief flash of all four lights.

By utilizing this technique, Fromme et al. (1974) were able to increase the level of emission of feeling statements, giving feedback, seeking feedback, clarifying the nature of another's affective state, and seeking information about another's current affective state in twelve groups of undergraduates. These investigators found that reinforcement techniques produced a level of response equal to that produced by therapists. The reinforcement technique, however, was viewed less positively by the subjects than was the therapist condition.

Fromme and Close (1976) studied the effect of Fundamental Interpersonal Relations Orientation-Behavior (Schutz, 1958) compatibility on the levels of occurrence of the same five verbal categories in the Fromme et al. (1974) study. In general, results indicated that compatible groups express more affective verbalizations than do incompatible groups. This study also corroborated the finding that these reinforcement procedures enhances the number of affective verbalizations significantly. Fromme and Marcy (1976), which utilized Fromme's method of verbal conditioning, was important in that it indicated that the method could be used to investigate the effects of different modes of interpersonal interaction. The study indicated that cohesiveness and self-disclosure were related to the typical mode of interaction in groups.

Cohesiveness

Group cohesiveness has long been considered an important aspect of group psychotherapy. Cohesiveness has been defined in a variety of ways. Festinger (1950) defined cohesiveness as the resultant of all forces acting on the members to remain in the group. The emphasis of Festinger's definition is on the degree to which the group tend to cohere or stick together. This emphasis is also apparent in the definitions put forth by Berne (1963) and by Gross and Martin (1952). These writers see cohesiveness as existing in opposition to a disruptive force and thus define cohesiveness as the resistance of a group to disruptive forces.

A second emphasis in cohesiveness definitions is the idea of group attractiveness or social satisfaction properties. For example, Frank (1957) defined cohesiveness as the attractiveness of a group for its members. Lieberman, Yalom and Miles (1973) suggested that group cohesiveness could be defined as the sum of individual attraction measures across all the group members.

The cohesiveness definition presented by Shaw (1971) combines both of the definitional components suggested above. His definition is "the degree to which members of the group are attracted to each other, or the degree to which the group coheres or 'hangs together'" (Shaw, 1971, p. 192). Shaw has also summarized the definitions that have been commonly used in the social psychology literature. These are resistance to leaving the group, morale or level of motivation of group members, and coordination of the efforts of group members. These definitions are related to the major ideas of social attractiveness and tendency to cohere but are not identical. Landecker (1955) defined cohesiveness as the

degree to which members conform to the group norms.

Festinger, Schacter and Back (1950) assumed that cohesiveness was a unitary concept and treated it as such. A study by Smith (1970) indicated that cohesiveness was merely interpersonal attraction and thus gave support to the unitary concept of cohesiveness.

Gross and Martin (1952) questioned this unitary conception. They found that the 3 indicators they used to measure cohesiveness in thirteen women's living groups at a midwestern university had very low or negative intercorrelations. Evidence was forwarded for a multi-faceted concept of cohesiveness in a study by Eisman (1959) who found that five indicators of cohesiveness also had very low or negative intercorrelations. The evidence forwarded by Eisman and Gross and Martin may be due to inadequate cohesiveness measures rather than the concept's multi-faceted quality, thus this evidence is suggestive rather than conclusive.

Hagstrom and Selvin (1965) applied the factor analytic method in an attempt to resolve the controversy between cohesiveness as a unitary concept and as a multifaceted one. They gathered data from women's living groups at the University of California, each subject responding to a 19 item questionnaire developed by the authors. Two orthogonal factors, called social satisfaction and sociometric cohesion, emerged. Social satisfaction was related to social attraction to the group and satisfaction derived from social interaction in the group. Sociometric cohesion was related to length of time in the group and a high number of group members as best friends. Hagstrom and Selvin's results tend to support definitions of cohesiveness that include both the social attractiveness and the tendency to cohere dimensions. The cohesiveness measure in the present study taps both dimensions.

Cohesiveness, although not always identically defined, has been considered a very important group parameter. For example, Shaw (1971) indicated that it is clear that cohesiveness is related to the quality and quantity of group interaction. Cohesiveness brings cooperation and friendship into the group interaction. Cohesiveness is also related to high group influence on the individual and to the individual's satisfaction derived from the group. Low cohesiveness, according to Shaw, is related to independent functioning among group members and to a mutual lack of empathic concern.

Other investigators have concluded that cohesiveness plays other important roles in group interaction. Schacter (1951) found that high cohesiveness is related to members striving to influence each other. Cartwright and Zander (1962) reported that members of highly cohesive groups tend to be more influenced by the group than members of groups with low cohesiveness. Back (1951) learned that cohesive groups produce members who were more willing to listen to each other. Rasmussen and Zander (1954) reported that group members were more accepting of other group members in cohesive groups than members of non-cohesive groups. Members of highly cohesive groups were also found to experience more security and tension relief in their groups than members of groups without cohesiveness (Seashore, 1954). The studies mentioned above assert that cohesiveness is a pertinent factor in developing many positive qualities in group settings.

Cohesiveness is especially important for group psychotherapy. Yalom (1970) indicated that cohesiveness is particularly important for attendance, participation, mutual helping, and maintenance of group therapy norms. He maintained that cohesiveness is a necessary pre-condition

for effective group therapy, indicating the tremendous importance he attaches to cohesiveness. Bednar and Lawlis (1971) concurred with Yalom's estimate of the significance of cohesiveness for group therapy. They indicated that cohesiveness represents a parameter of the group atmosphere that is essential to effective treatment.

Dickoff and Lakin (1963) found that patients view cohesiveness as a highly important part of group therapy experience. They used tapes of members of their therapy groups explaining the curative factors they (the patients) had experienced while in their therapy groups. The authors classified each statement and found that their patients believed that cohesiveness was of major therapeutic importance. In the same study, results indicated that patients who experienced the group as cohesive attended more sessions, had more social contact with other members, and judged the group as having offered a therapeutic experience. The authors concluded that cohesiveness is in itself of therapeutic value and is essential for the perpetuation of the group. Miles (1965) measured the relationship between cohesiveness and outcome in group therapy. His subjects were 18 encounter groups composed of undergraduates. Cohesiveness was measured by a questionnaire and outcome was measured by a group yield score determined by summing the subject's change on a number of outcome measures. Miles' data indicated a strong association between high cohesiveness and high group yield.

The studies presented dealing with cohesiveness point to the importance of cohesiveness in groups in general and therapy groups in particular. Without cohesiveness, a therapy group is certain to be less efficient in achieving its therapeutic goals.

Shyness

Zimbardo, Pilkonis, and Norwood (1975) did an extensive survey of more than 800 students at two major universities and one high school. Over 40 percent of the respondents currently considered themselves shy people. From a checklist of overt behavior, a portrait of the shy person emerged: silence (80%), lack of eye contact (51%), avoidance of others (44%), avoidance of taking action (42%), and low speaking voice (40%). The percentages represent the proportion of shy respondents who indicated that a given item was personally applicable as a correlate of shyness. The investigators distinguish these overt behaviors from the "inner world" of shyness which is filled with: self consciousness (85%), concern for impression management (67%), concern for social evaluation (63%), negative self-evaluation (59%), thoughts about shyness in general (46%), and forms of cognitive distraction aimed at averting all of the above (27%).

Interviews with respondents indicated what the consequences of shyness were: 1) Social problems in meeting new people, making new friends, or enjoying potentially good experiences; 2) Negative emotional correlates such as depression, isolation and loneliness; 3) Difficulty in being appropriately assertive or expressing opinions and values; 4) Confusing others; 5) Poor self-projection which allows others to make totally incorrect evaluations; 6) Deficiency in thinking clearly and communicating effectively in the presence of others; 7) Self-consciousness and an excessive preoccupation with one's own reactions (Zimbardo, Pilkonis, & Norwood, p. 69). These consequences are painful, and in one of the early surveys, more than half of the shy respondents told the investigators that they could use therapeutic help for their problem and

would go to a "Shyness Clinic" if one existed. One of the conclusions drawn was that "Findings like these suggest that most psychologists haven't taken shyness seriously enough" (Zimbardo, Pilkonis, & Norwood, p. 69).

There have been a number of investigators, notably personality theorists such as Cattell, that have attempted to define and describe the presumed trait of shyness. Beyond the theoretical delineation of the trait, there has not been a great deal of effort aimed at exploring the subjective and behavioral aspects.

There has been some effort to deal with shyness, specifically with the dating behavior in college males (Twentymen & McFall, 1975; Rehm & Marston, 1968; Melnick, 1973; Arkowitz, Lichtenstein, McGovern & Hines, 1975). Other work has centered primarily in self-assertion to overcome shyness (MacDonald, 1975; Goldsmith & McFall, 1975). This work uses a behavioral approach which seems to be relatively effective for specific behaviors that are focused upon.

The Social Avoidance and Distress scale (SAD) was developed and validated by Watson and Friend (1969) (Appendix D). People high in SAD tended to avoid social interactions, preferred to work alone, reported that they talked less, and were more worried and less confident about social relationships. The investigators defined social-evaluative anxiety as "the experience of distress, discomfort, fear, anxiety, etc., in social situations, as the deliberate avoidance of social situations" (Watson & Friend, p. 448). Thus the SAD scale was developed into two subscales, social avoidance and social distress. Because the purpose of the investigators was to create a general scale, the respondent was not asked why he experienced distress or avoided social encounters. Social

avoidance, both actual and desired, was defined as avoiding being with, talking to, or escaping from others for any reason. Social distress was defined as the reported experience of a negative emotion, such as being upset, tense, distressed, or anxious in social interactions.

In constructing the SAD, items about physiological signs or impaired performance were excluded. This was to make clear that subjective distress and avoidance was the behavior required for membership in the class "anxious." Items were worded so that the opposite instance of a trait indicated the absence of that trait and not the presence of some other trait. An item selection procedure was used to eliminate as much social desirability variance as possible.

Norms for the SAD were obtained from 60 males and 145 females at the University of Toronto. The distribution of the SAD was skewed. The mode was zero, the mean was 9.11, the median was 7, and the standard deviation was 8.01. The lack of normality in the distribution of SAD scores implies that high levels of SAD may be more pathological and that variables determining extreme social withdrawal or distress are probably not normally distributed in the general population. Extreme withdrawal or distress might be termed "schizoid" and because of the skewed distribution of SAD scores, it would be easier to identify those with schizoid reactions.

There were differences between the sexes on scores on SAD. Males reported more social avoidance and distress than females, the means being 11.20 and 8.24, respectively.

In concluding their work on the construction and validation of the SAD, Watson and Friend posit that people high on the SAD did avoid social situations and were anxious in social interactions, and that the SAD was

a valid scale. SAD could be useful in studying social interaction, with social avoidance and distress being a general reaction for some people or specific to certain conditions for others. Finally, Watson and Friend imply that the SAD scale may make it possible to study not only the schizoid versus the normal, but intermediate types as well.

In recent research, Twentyman and McFall (1975) investigated behavioral training of social skills in shy males. Their subjects were college males who had reported themselves unable to interact with women. After pre-testing, shy subjects were randomly assigned to either an assessment control group or an analogue treatment group. The treatment consisted of 3 sessions of behavioral rehearsal, modeling, and coaching. One of the investigators' major findings was that although not all of the experimental measures they used significantly differentiated between shy and confident subjects, virtually every measure yielded differences in the expected direction. Another major finding was that heterosexual performance of shy subjects on experimental measures was significantly improved by three brief sessions of behavioral training. The investigators concluded that behavioral training may be a potentially effective treatment approach for use with shyness and a shy population.

Problem and Predictions

The present study is designed to answer the general question "Can we affect shyness through operant conditioning procedures?" Two additional questions dealt with the nature of the reinforced responses. It was hypothesized that the group given the "Empathy" instructions and reinforcements would score higher on the Elm's Empathy Scale. It was also predicted that the group reinforced for making "Expressive" re-

sponses would score significantly higher on the Modified Jourard's Self-Disclosure Questionnaire. Due to the nature of the response categories, it was also thought that the member of the "Historical Information" groups would make the greater number of responses.

CHAPTER II

METHOD

Subjects

A total of twenty-four males and twenty-four females were used in the study. The first six males and six females answered an ad for a Shy Clinic that was available as a research project sponsored by the department of Psychology at Oklahoma State University. As individuals volunteered they were interviewed by the experimenter and her colleague. Selection for participation in the study was determined by the following criteria: (1) Subjects had to be between 18 and 25 years old; (2) Subjects had to be of primarily Caucasian ancestry; (3) Subjects had to receive a minimum score of 7 on the Social Avoidance and Distress (SAD) scale; (4) Subjects had to be apparently functioning effectively in their environment except for their expressed shyness. The individuals chosen were then randomly assigned to groups of four persons each with the constraint that males and females were evenly divided within the groups. From those persons who responded to the Shy Clinic advertisement, three groups were formed for a total of 12 volunteer subjects. These three groups were then randomly assigned to either an Empathy (Em), Expressive (Ex), or Historical Information (HI) condition. All remaining individuals were informed that they had been placed on a waiting list and would be contacted when space was available for more groups. Upon completion of the study, all respondents were given an opportunity

to participate in an operant group.

Due to the inadequate number of respondents to the Shy Clinic advertisement, 36 additional subjects were then recruited from Introductory Psychology classes. The SAD was administered to four classes of Introductory Psychology, and subjects who received a score of 7 or above on the SAD were contacted by phone and asked to participate. The individuals who volunteered were randomly assigned to treatment groups, the only stipulation being two males and two females in each group. The groups were then randomly assigned to one of the three conditions. Subjects from the Introductory Psychology classes received extra credit for their participation in the study.

All subjects attended three one-hour group sessions over a three-week period plus a one hour follow-up testing session. After the post-testing session all subjects were shown the apparatus and were informed that they would be sent a brief summary of the findings of the study.

Apparatus

The experimental room was a reasonably comfortable eleven by twelve foot room with a one-way mirror situated on one of the twelve-foot walls. Subjects were seated around a rectangular table, two subjects on opposite sides of the table. Each session was monitored by the experimenter via the one-way mirror and a microphone on the table. A four-channel relay control panel was used to record those instances where the experimenter judged that a reinforcing statement was made. A digital counter was located on the table in front of each subject. When a reinforcement was given, the digital counter in front of the appropriate subject was advanced, producing an audible click. A red light located on top of each

subject's counter was also used to provide two types of informational cues. First, all four lights were automatically flashed by an interval times whenever no subject received a reinforcement for a period of three minutes. This feedback was used to help direct the group's attention toward the emission of the appropriate response category. Second, an individual's red light was turned on manually by the experimenter whenever the subject was more than ten counts behind the leader. The red light remained lit until that subject brought the difference between his count and the highest count to less than ten.

Response Categories

There were three different response categories, each one corresponding with an experimental condition. The definition, as provided to the subjects were:

Empathy groups: "Any verbal attempt to clarify the nature or source of another group member's feelings by attempting to place oneself in another's perspective. It may be a statement trying to clarify or reflect the nature or source of another's feelings."

Expressive groups: "Any verbal expression of your current feelings resulting from interaction with the group. It may be pleasant or unpleasant feelings you may be experiencing as a result of interaction with the other group members. You may express pleasant or unpleasant feelings about another group member's current behavior or the group's behavior in general."

Historical Information groups: "Any verbal expression of information about yourself to other group members. It may be a statement conveying information about yourself in a noncommittal, nonjudgemental

fashion."

Instruction cards (Appendix A) summarizing the appropriate instructions, were taped in front of each subject.

Procedures

Subjects were given detailed instructions (Appendix B) prior to the first session and shorter instructions (Appendix C) prior to the second and third sessions. Prior to the first session, a warm-up exercise was conducted (Appendix B) and illustrative examples of the appropriate response categories were elicited and discussed with the groups. Subjects were told that the general task was to learn to interact with people more easily by using the instructions. A detailed explanation of the apparatus was given. The Encounter-type warm-up exercise prior to the first session assured an approximately similar level of distance or intimacy in all the groups. At this time, subjects were asked to emit responses according to their instructions. The experimenter shaped and corrected the responses as necessary to assure that all groups understood their instructions. Groups were told that in order to get reinforcement, it would be necessary to either add new information or to demonstrate an additional understanding of previously reinforced information. All subjects were informed of being monitored and observed prior to each session. Prior to each session, the experimenter asked if there were any questions and those that arose were answered briefly.

CHAPTER III

RESULTS AND DISCUSSION

All of the groups in the study met for three sessions of sixty minutes each and then returned for a post-testing session. After each of the three sessions, the number of reinforced statements was noted for each group. The Social Avoidance and Distress (SAD) scale was administered prior to the start of the first session (during the screening) and again during the post-testing session. The Group Perceptions Test (GPT) and the "Four-Item" Questionnaire were administered after the first and third sessions. The Elm's Empathy Scale, the Modified Jourard Self-Disclosure Questionnaire, and Shostrum's Personal Orientation Inventory (POI) were administered during the post-test session.

Empathy Data

Prior to the study, it was hypothesized that subjects in the "Empathy" treatment condition would score significantly higher on the Elm's Empathy Scale than the subjects in the other two treatment conditions. Inspection of the means in Table I show that subjects in the Empathy condition did score higher on the scale. The planned comparison, comparing the mean of the Empathy groups with the means of the Expressive and Historical Information groups, was computed. The ratio resulting from this comparison was nonsignificant, ($F(2,36) = 0.09, p > .05$).

An overall analysis of variance was performed on the Empathy data.

TABLE I
COMPARISON OF ELM'S EMPATHY SCORES FOR GROUPS

	Empathy	Expression	Information	Means
Replication #1	34.5	30.0	32.5	32.5
Replication #2	35.0	31.75	27.5	31.41
Replication #3	34.5	33.0	38.75	35.42
Replication #4	37.7	33.0	33.25	34.67
Means	35.44	31.94	32.94	33.44

The results shown in Table II indicate that there was no significant treatment effect. The experimental conditions in the present study did not differentially affect the subject's responses to the Elm's Empathy measure.

TABLE II
ANALYSIS OF VARIANCE OF THE ELM'S EMPATHY DATA

Source	df	MS	F	P
Treatments	2	52.00	2.17	0.13
Groups (Replications)	3	43.69	1.82	0.16
Interaction	6	29.67	1.24	0.31
Residual	36	23.97		

Several reasons could be proposed for the lack of significance in the Empathy data. Perhaps the Elm's Empathy scale was not sensitive enough to pick up the empathy being conditioned in the groups. An increase in the number of sessions or a delayed post-testing session could have enhanced the differences between the Empathy groups and the Expressive and Historical Information groups.

Self-Disclosure Data

An analysis of the Modified Jourard Self-Disclosure questionnaire data is found in Table III. The treatment effect was nearly significant,

($F(2,36) = 3.12, p > 0.06$).

Looking at the means for the self-disclosure data in Table IV, it can be seen that the means of the Empathy and Expressive groups are higher than that for the Historical Information groups. The planned comparison, comparing the means of the Empathy and Expressive groups with the mean of the Historical Information group, resulted in a non-significant F, ($F(2,36) = 2.44, p > .05$).

The presence of a nearly significant treatment effect as indicated in Table III and the means in Table IV suggest perhaps a more sensitive self-disclosure measure would have resulted in significance. A larger number of group sessions may have enhanced differences, or a longer time period between the group sessions and post-testing session may have been appropriate.

Four-Item Questionnaire Data

In this short questionnaire, four aspects of the subjects' experience were assessed: The attractiveness of their group, group cohesiveness, meaningfulness, and enjoyment. Preliminary analysis performed on the subjects' responses to the four item questionnaire revealed that the items were so highly correlated that it was meaningless to look at each item separately. Thus they were collapsed into one score and then analyzed. Table V summarizes the results of the analysis of variance performed on the collapsed scores.

The mean group ratings can be found in Table VI. The range on the items was from 1 to 5, with 3 being neutral. None of the groups were enthusiastic about their experience, most of the ratings fell on the negative side of neutral. Table VI reveals that the Expressive groups

TABLE III
ANALYSIS OF VARIANCE OF THE SELF-DISCLOSURE DATA

Source	df	MS	F	P
Treatments	2	247.52	3.12	0.06
Groups (Replications)	3	89.70	1.13	0.35
Interaction	6	23.38	0.29	0.93
Residual	36	79.26		

TABLE IV
COMPARISON OF SELF-DISCLOSURE FOR GROUPS

	Empathy	Expression	Information	Means
Replication #1	68.0	60.5	55.75	61.42
Replication #2	63.75	65.5	57.5	62.25
Replication #3	61.75	63.25	58.5	61.17
Replication #4	70.25	68.5	62.25	67.00
Means	65.94	64.44	58.5	62.96

TABLE V
ANALYSIS OF VARIANCE OF THE FOUR-ITEM DATA

Source	df	MS	F	P
Treatments	2	1.74	2.70	0.08
Groups (Replications)	3	0.32	0.50	0.69
Interaction	6	0.97	1.51	0.23
Residual	36	0.65		

TABLE VI
COMPARISON OF MEAN GROUPS RATINGS FOR TREATMENTS

	Empathy	Expression	Information	Means
Replication #1	3.00	2.06	2.38	2.48
Replication #2	1.81	1.75	2.81	2.12
Replication #3	2.81	2.19	2.12	2.37
Replication #4	2.94	1.94	1.69	2.19
Means	2.64	1.99	2.25	2.29

found the experience more unattractive, unenjoyable, and generally negative than the other groups. Relatively speaking, the Empathy groups seemed to find their experiences more positive.

Shyness Data

The question that needed to be answered in the present study was "Can we effect a change in shyness through the operant conditioning procedures?" This question was first looked at by running an analysis of variance on the SAD scale responses that were obtained after the treatments were administered. The results are summarized in Table VII.

TABLE VII
ANALYSIS OF VARIANCE FOR SAD SCALE RESPONSES-POST

Source	df	MS	F	P
Treatments	2	3.52	0.13	0.88
Groups (Replications)	3	53.33	1.98	0.13
Interaction	6	53.35	1.98	0.09
Residual	36	26.93		

None of the F values found through this analysis were significant, indicating that the conditioning procedures did not significantly affect the shy behaviors of the subjects. An analysis of covariance revealed that the best predictor of the subjects' post scores on the SAD scale

was their pre-treatment scores on the SAD scale. This further supported the conclusion that the treatments were ineffectual in producing significant changes in the subjects' reported shy behavior.

The pre-treatment SAD means and the post-treatment SAD means are presented in Tables VIII and IX, respectively. The subjects appear to have become less shy and an analysis of variance on the gain scores was performed to see if any significant differences existed between the groups. The results are summarized in Table X. There was a significant group or replication effect ($F(3,36) = 2.85, p > 0.05$). Inspection of the means in Table XI reveal that Group 1, the Shy Clinic volunteers, had a mean gain score which was different from the mean gain scores of the recruited groups.

The significant group effect in the analysis of SAD gain scores can be partially explained by looking at Table XII which summarizes the analysis of variance performed on the pre-treatment SAD scores. Inspection of the pre-treatment means in Table VIII indicate that the Shy Clinic volunteers, Replication 1, were initially more shy than the recruited groups. Thus, Replication 1 was different from the other groups even before the treatments were administered. This could partially account for the significant group effect obtained on the analysis of the mean gain scores on the SAD (Table X). Since the Shy Clinic groups seemed different from the recruited groups, it seemed reasonable to perform an analysis on the post-treatment SAD scores for just those groups. This result was nonsignificant ($F(2,9) = 1.36, p > .31$). Thus the Shy Clinic groups differed from the recruited groups but were not significantly different from each other. This implies that the Shy Clinic volunteers reported being less shy no matter what treatment was administered to them.

TABLE VIII
COMPARISON OF PRE-TREATMENT SAD SCORES

	Empathy	Expression	Information	Means
Replication #1	19.25	22.75	17.75	19.17
Replication #2	10.25	13.00	10.25	11.17
Replication #3	16.5	14.5	15.00	15.33
Replication #4	16.00	15.5	15.00	15.5
Means	15.5	16.44	14.5	15.48

TABLE IX
COMPARISON OF POST-TREATMENT SAD SCORES

	Empathy	Expression	Information	Means
Replication #1	11.5	11.5	13.75	14.16
Replication #2	9.75	14.00	6.5	10.17
Replication #3	18.5	11.25	14.75	14.83
Replication #4	10.5	11.0	15.0	12.13
Means	12.53	13.38	12.57	12.83

TABLE X
ANALYSIS OF VARIANCE FOR MEAN GAIN SCORES

Source	df	MS	F	P
Treatments	2	6.08	0.25	0.78
Groups (Replications)	3	69.69	2.85	0.05*
Interaction	6	30.42	1.25	0.31
Residual	36	24.42		

*p < .05 significant

TABLE XI
MEAN GAIN SCORES FOR GROUPS

Group	Mean
1	5.75
2	1.00
3	0.50
4	3.33

TABLE XII
ANALYSIS OF VARIANCE FOR PRE-TREATMENT SAD SCORES

Source	df	MS	F	P
Treatments	2	15.02	1.18	0.32
Groups (Replications)	3	153.24	12.08	0.0001*
Interactions	6	8.91	0.70	0.65
Residual	36	12.69		

*p < .05 significant

There is also a possibility that the reduction in self-reported shyness is a regression toward the mean phenomenon.

The lack of significant results could be due to the methodological considerations. The first replication of subjects were obtained in a manner quite different from the second, third, and fourth replications. The Shy Clinic volunteers were reporting that they wanted help in dealing with their shyness. The recruited subjects, on the other hand, while they were aware that they were asked to participate on the basis of their SAD scores, were not as task-oriented and ego involved. As far as they were concerned, they were in an interpersonal communications experiment and were receiving extra credit for their participation. It may have been more appropriate to explain to the recruited subjects that they were participating in Shy Clinic research.

Another deficiency could have been in the selection process. The SAD is a measure of both social avoidance and distress. If there were some method of separating the two aspects of shyness, perhaps we would have discovered that some people are socially avoidant but not distressed. We may have recruited some subjects who reported themselves as being shy and who felt no distress about it. Perhaps socially distressed subjects would have been more task-oriented which could have generated different results. Further research into this area should keep these considerations in mind. What is clear in this study is that the volunteer subjects were significantly different from recruited subjects.

CHAPTER IV

SUMMARY

Shyness is reported to be a common problem of large magnitude (Zimbardo, Pilkonis, & Norwood, 1975). While a number of investigators, including personality theorists such as Cattell, have attempted to define and describe the presumed trait of shyness, there has not been a great deal of effort to deal with the subjective and behavioral aspects of shyness. Thus, an attempt was made to affect shyness using a technique of verbal conditioning developed by Fromme et al. (1974). A Shy Clinic was offered in hopes to obtain an adequate number of volunteers. The response being inadequate, subjects were also recruited from Introductory Psychology classes on the basis of their scores on the Social Avoidance and Distress Scale developed by Watson and Friend (1969).

Groups of subjects were randomly assigned to one of three treatment conditions. Empathy, Expressive, and Historical Information groups were given different sets of instructions. Elm's Empathy Scale and the Modified Jourard Self-Disclosure Questionnaire were used to assess the efficacy of the three different treatments. The self-reported shyness of the subjects was reassessed after the treatment sessions as were four aspects of the subjects' group experiences.

Results indicate that no treatment effects were present in the study. None of the three treatment groups scored significantly higher on either the Elm's Empathy Scale or the Modified Jourard Self-Disclosure

Questionnaire. Either the treatments were ineffectual in producing changes or the measures were not sensitive enough to what was being conditioned in the groups.

Both the volunteer and recruited subjects found their group experience rather unpleasant. Overall, their subjective experiences of the groups were that they were rather unenjoyable, not very meaningful, not very attractive, and they were rather unsure they would like to continue contact with other group members.

Analysis of the post-treatment SAD scores revealed no significant reduction in shyness overall. Since an inspection of the means indicated a trend toward reduction of shyness, an analysis of variance was performed on the gain scores. This revealed a significant group effect, with the volunteer groups having a substantially greater gain score than the recruited groups. Part of this was explained by an analysis of variance on the pre-treatment SAD scores, which indicated that the volunteer groups started off with significantly higher levels of shyness than the recruited groups. This difference between volunteers and recruits in self-reported shyness diminished as a result of the treatments, indicating that the Shy Clinic volunteers did benefit from their participations.

It seems that the volunteer and recruited subjects used in the study had different "sets." The volunteers were reporting distress about their shyness and were more task-oriented and ego involved. The recruited subjects, on the other hand, were only vaguely aware of the reason for their participation thus they did not have a therapeutic set. In addition, they were receiving extra credit for their participation. Therefore, methodological considerations could partially explain the lack of significance in results.

Results of this study do not appear to support the use of verbal conditioning procedures to affect shyness. However, it seems that given an adequate number of motivated, shy volunteers trends indicated in Replication #1 might have proved significant in supporting the main thesis.

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APPENDIXES

APPENDIX A

INSTRUCTION CARDS

EMPATHY CONDITION

Any verbal attempt to clarify the nature or source of another group member's feelings by attempting to place oneself in another's perspective. It may be a statement trying to clarify or reflect the nature or source of another's current feelings.

Some examples are:

"It must have been hard for you to say that."

"You really seem upset over what happened."

EXPRESSIVE CONDITION

Any verbal expression of your current feelings resulting from interaction with the group. It may be pleasant or unpleasant feelings you may be experiencing as a result of interaction with the other group members. You may express pleasant or unpleasant feelings about another group member's current behavior or the group's behavior in general.

Some examples are:

"Wow, that's really neat!"

"I feel good that you said that about me."

"I feel angry because of what you said."

HISTORICAL INFORMATION CONDITION

Any verbal expression of information about yourself to other group members. It may be statements conveying information about yourself in a noncommittal, non-judgemental fashion.

Some examples are:

"I went skiing over the Christmas break."

"I am from Enid."

"My favorite pasttime is listening to music."

APPENDIX B

VERBAL INSTRUCTIONS TO SUBJECTS AND

WARM-UP EXERCISE

Verbal Instructions--Empathy Condition

As you all know, this is an interpersonal communications research project. We are comparing several good approaches to find the best one to use to help people interact more easily. One of the best ways to learn to interact with others more freely is to be able to be fully aware of another's feelings. While this understanding may seem relatively easy, it is sometimes difficult to express it to someone else. It is, however, extremely valuable to be able to communicate to someone else that you are aware of and do understand how they feel. When a person feels understood, he feels appreciated and closer to the one who understands. And when you know that someone understands you, you can feel safe and comfortable with that person. If you take the time and effort to understand someone, you are showing that you care and that that person is safe with you. It is also likely that if you show empathy toward others, they will understand and accept you as well. To the extent that one can practice this active understanding of another's feelings in his or her everyday life, one can truly know and relate to other people.

In this situation you will have the opportunity to learn and develop empathy. By trying to place yourself in another's perspective and become aware of another's point of view, you can show that you are trying to understand the nature and source of another's feelings, and thus begin to interact more freely with others.

These statements (point to instruction cards) summarize briefly what I am talking about. This should help you learn to interact with each other in a free and easy way.

"Any verbal attempt to clarify the nature or source of another group member's feelings by attempting to place oneself in another's per-

spective. It may be a statement trying to clarify or reflect the nature or source of another's current feelings."

Some examples are: "It must have been hard for you to say that" or "You really seem upset over what happened."

You can see that these examples have to do with being empathetic; being able to place yourself in another's perspective. So, what I'm asking you to do is to interact with each other for fifty minutes while keeping in mind and using these instructions.

I will monitor the group through the one-way mirror and the microphone. What you say may be recorded, but will be kept completely confidential. It will be used only in this project, then erased.

You have undoubtedly noticed these boxes and have probably wondered why they're here. Well, whenever any of you makes a statement that follows these instructions, I will activate the counter in front of that person. It makes an audible click, and this will let you know how well you are using these instructions in your interaction. This counter will register your total, and if anyone falls ten points behind the person with the most points, the red light above his counter will come on. This will be a sign that this person may need assistance, or that another person is tending to dominate the conversation. The red light will go off when the point difference becomes less than ten again. Another important sign for you is this: if no one gets a click for three minutes, all of your lights will flash on and they will do so every three minutes until a click is registered. This will indicate to you that the group as a whole is not following the instructions, and that you should all change how you are interacting with each other.

Are there any questions?

WARM-UP EXERCISE

I know that using these instructions in your interaction may be difficult for you but your efforts in following the instructions can have beneficial results. You will be helping yourself and the other group members to learn to interact with others more freely. To make sure that each of you understands how I want you to use the instructions, I want to go through a short exercise. First, I want you to gaze into the eyes of the person next to you. I know that this is not the normal way of getting acquainted but we've found it is a very good way to start these groups. The two people on the right side of the table should turn your eyes toward one another and gaze into one another's eyes. (Experimenter waited until subjects complied). The two people on the left side of the table should also turn your chairs toward each other and gaze into one another's eyes. (Experimenter waited until subjects complied.) (Count 10 seconds).

After a brief time period, the Empathy group members were told:

This exercise usually makes people feel uncomfortable or uneasy. Can you look at the person next to you and show him or her that you can understand why he or she might be feeling this way?

After the warm-up exercise, the group members were told: I think you all have a better idea of what you'll be doing in here. Let me remind you that you should keep these instructions in mind while you are interacting. To get reinforcement, you need to either add new information, that is, express something that hasn't been said previously, OR demonstrate an additional understanding of information that has been previously reinforced.

Are there any questions?

Verbal Instructions--Expressive Condition

As you all know, this is an interpersonal communications research project. We are comparing several good approaches to find the best one to use to help people interact more easily. One of the best ways to learn to interact with others more freely is to share your feelings with others. There are several reasons for this: (1) when you clearly express how you feel, it makes it easier for others to understand you. The more that others clearly understand you, the safer you are from others who might unintentionally hurt you. (2) When you express your feelings, you are giving information to others about how they are affecting you. This information may result in a change in the way people treat you because you can express how you feel and even how you would like to feel. (3) Expressing yourself clearly and openly is a way of asserting yourself. Being open about your feelings makes others more likely to accept you. Overall, an expressive person is generally seen as one who is open, honest, direct, easy to get to know and easy to be around. This is in contrast to someone who doesn't let you know what he feels. One often feels the need to be careful around such a closed person.

In this situation, you will have the opportunity to learn to be more expressive about your feelings. By trying to be open and honest, by trying to express yourself clearly and share your feelings, you can begin to interact more freely with others.

These statements (point to instruction cards) summarize briefly what I am talking about. This should help you learn to interact with each other in a free and easy way.

"Any verbal expression of your current feelings resulting from interaction with the group. It may be pleasant or unpleasant feelings you

may be experiencing as a result of interaction with the other group members. You may express pleasant or unpleasant feelings about another group member's behavior or the group's behavior in general.

Some examples are: "Wow, that's really neat!" "I feel good that you said that about me.", or "I feel angry because of what you said."

You can see that these examples have to do with expressing feelings, both pleasant and unpleasant, about another group member's behavior or the group's behavior in general. So, what I'm asking you to do is to interact with each other for fifty minutes while keeping in mind and using these instructions.

I will monitor the group through the one-way mirror and the microphone. What you say may be recorded, but will be kept completely confidential. It will be used only in this project, then erased.

You have undoubtedly noticed these boxes and have probably wondered why they're here. Well, whenever any of you makes a statement that follows these instructions, I will activate the counter in front of that person. It makes an audible click, and this will let you know how well you are using these instructions in your interaction. This counter will register your total, and if anyone falls ten points behind the person with the most points, the red light above his counter will come on. This will be a sign that this person may need assistance, or that another person is tending to dominate the conversation. The red light will go off when the point difference becomes less than ten again. Another important sign for you is this: if no one gets a click for three minutes, all of your lights will flash on and will do so every three minutes until a click is registered. This will indicate to you that the group as a whole is not following the instructions, and that you should all

change how you are interacting with each other.

Are there any questions?

WARM-UP EXERCISE

I know that using these instructions in your interaction may be difficult for you but your efforts in following the instructions can have beneficial results. You will be helping yourself and the other group members to learn to interact with others more freely. To make sure that each of you understands how I want you to use the instructions, I want to go through a short exercise. First, I want you to gaze into the eyes of the person next to you. I know that this is not the normal way of getting acquainted but we've found it is a very good way to start these groups. The two people on the right side of the table should turn your chairs toward one another and gaze into one another's eyes. (Experimenter waited until subjects complied). The two people on the left side of the table should also turn your chairs toward each other and gaze into one another's eyes. (Experimenter waited until subjects complied). (Count 10 seconds).

The Expressive group members were then asked "How do you feel now?"

After the warm-up exercise, the groups were told: I think you all have a better idea of what you'll be doing in here. Let me remind you that you should keep these instructions in mind while you are interacting. To get reinforcement, you need to either add new information, that is, express something that hasn't been said previously, OR demonstrate an additional understanding of information that has been previously reinforced.

Are there any questions?

Verbal Instructions--Historical Information
Condition

As you all know, this is an interpersonal communications research project. We are comparing several good approaches to find the best one to use to help people interact more easily. One of the best ways to learn to interact with others more freely is to express information about yourself, people are better able to relate to you since they really know who you are. You should avoid expressing feelings about this information, however. When you express information about yourself in a noncommittal or non-judgemental fashion, people tend to like you better because you trust them enough to let them make their own decisions about you. Because of this, expressing information about yourself without expressing feelings will help you to get to know one another in intimate and important ways and can be the basis of a trusting relationship.

In this situation, you will have the opportunity to share information about yourself with others. By expressing information about yourself in a non-judgemental fashion, you give others the chance to like you and to trust you, and the resulting interaction can begin to help you to interact more freely with others.

These statements (point to instruction cards) summarize briefly what I am talking about. This should help you learn to interact with each other in a free and easy way.

"Any verbal expression of information about yourself to other group members. It may be statements conveying information about yourself in a noncommittal, non-judgemental fashion."

Some examples are: "I went waterskiing last weekend" "I am from Enid", or "My favorite pasttime is listening to music."

You can see that these examples have to do with expressing informa-

tion about yourself in a non-judgemental fashion. So, what I'm asking you to do is to interact with each other for fifty minutes while keeping in mind and using these instructions.

I will monitor the group through the one-way mirror and the microphone. What you say may be recorded, but will be kept completely confidential. It will be used only in this project, then erased.

You have undoubtedly noticed these boxes and have probably wondered why they're here. Well, whenever any of you makes a statement that follows these instructions, I will activate the counter in front of that person. It makes an audible click, and this will let you know how well you are using these instructions in your interaction. This counter will register your total, and if anyone falls ten points behind the person with the most points, the red light above his counter will come on. This will be a sign that this person may need assistance, or that another person is tending to dominate the conversation. The red light will go off when the point difference becomes less than ten again. Another important sign for you is this: if no one gets a click for three minutes, all of your lights will flash on and will do so every three minutes until a click is registered. This will indicate to you that the group as a whole is not following the instructions, and that you should all change how you are interacting with each other.

Are there any questions?

WARM-UP EXERCISE

I know that using these instructions in your interaction may be difficult for you but your efforts in following the instructions can have beneficial results. You will be helping yourself and the other group members learn to interact with others more freely. To make sure that

each of you understands how I want you to use the instructions, I want to go through a short exercise. First, I want you to gaze into the eyes of the person next to you. I know that this is not the normal way of getting acquainted but we've found it is a very good way to start these groups. The two people on the right side of the table should turn your chairs toward one another and gaze into one another's eyes. (Experimenter waited until subjects complied). The two people on the left side of the table should also turn your chairs toward each other and gaze into one another's eyes. (Experimenter waited until subjects complied). (Count 10 seconds).

The Historical Information group members were told: Now that you've had a chance to let another group member look closely at you, can you express to that person some information about yourself that will tell him/her more about you?

After the warm-up exercise, the groups were told: I think you all have a better idea of what you'll be doing in here. Let me remind you that you should keep these instructions in mind while you are interacting. To get reinforcement, you need to either add new information, that is, express something that hasn't been said previously, OR demonstrate an additional understanding of information that has been previously reinforced.

Are there any questions?

APPENDIX C

SHORT INSTRUCTIONS TO SUBJECTS

SHORT INSTRUCTIONS

(These instructions will be given before the second and third session.)

Let me remind you that the purpose of this project is to help you learn to interact more freely with others. I am asking you to accomplish this by using these instructions (points to cards). Again, today, we will use the feedback procedure so as not to interrupt the flow of interaction. Is everything clear?

APPENDIX D

SOCIAL AVOIDANCE AND DISTRESS (SAD) SCALE

Social Avoidance and Distress Scale (SAD)

This inventory consists of numbered statements. Read each statement and decide whether it is true as applied to you or false as applied to you.

You are to answer on the computer card given to you. If a statement is TRUE or MOSTLY TRUE as applied to you, mark answer "a". If a statement is FALSE or NOT USUALLY TRUE as applied to you, mark answer "b".

Remember to give your own opinion of yourself. Do not leave any statements unanswered.

1. I feel relaxed even in unfamiliar social situations.
2. I try to avoid situations which force me to be very sociable.
3. It is easy for me to relax when I am with strangers.
4. I have no particular desire to avoid people.
5. I often find social occasions upsetting.
6. I usually feel calm and comfortable at social occasions.
7. I am usually at ease when talking to someone of the opposite sex.
8. I try to avoid talking to people unless I know them well.
9. If the chance comes to meet new people, I often take it.
10. I often feel nervous or tense in casual get-togethers in which both sexes are present.
11. I am usually nervous with people unless I know them well.
12. I usually feel relaxed when I am with a group of people.
13. I often want to get away from people.
14. I usually feel uncomfortable when I am in a group of people I don't know.
15. I usually feel relaxed when I meet someone for the first time.
16. Being introduced to people makes me tense and nervous.
17. Even though a room is full of strangers, I may enter it anyway.

18. I would avoid walking up and joining a large group of people.
19. When my superiors want to talk with me, I talk willingly.
20. I often feel on edge when I am with a group of people.
21. I tend to withdraw from people.
22. I don't mind talking to people at parties or social gatherings.
23. I am seldom at ease in a large group of people.
24. I often think up excuses in order to avoid social engagements.
25. I sometimes take the responsibility for introducing people to each other.
26. I try to avoid formal social occasions.
27. I usually go to whatever social engagements I have.
28. I find it easy to relax with other people.

APPENDIX E

ELM'S EMPATHY SCALE

ELM'S EMPATHY SCALE

Fill in the appropriate letter for each item.

1. When I read an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.

extremely true	moderately true	neutral	moderately false	extremely false
A	B	C	D	E

2. When I see strangers, I almost never try to imagine what they are thinking.

A	B	C	D	E
---	---	---	---	---

3. I like to imagine myself as being various different types of persons.

A	B	C	D	E
---	---	---	---	---

4. I usually feel that I know exactly what mood my friends are in, even when nothing is said in words.

A	B	C	D	E
---	---	---	---	---

5. I find it hard to imagine how a poor southern negro feels about white people.

A	B	C	D	E
---	---	---	---	---

6. It's hard for me to act as if I'm a different kind of person than I really am.

A	B	C	D	E
---	---	---	---	---

7. After acting in a play myself, or seeing a play or movie, I have felt partly as though I were one of the characters.

A	B	C	D	E
---	---	---	---	---

8. When I disagree with a person, I do not try to feel in my own mind the reason why the person holds an opinion different from mine.

A	B	C	D	E
---	---	---	---	---

9. I often try to guess what people are thinking, before they tell me.

A	B	C	D	E
---	---	---	---	---

10. A person can't really know what is going on inside someone else's head.

A	B	C	D	E
---	---	---	---	---

APPENDIX F

MODIFIED JOURARD SELF-DISCLOSURE QUESTIONNAIRE

JOURARD AND LASAKOW'S (1958) MODIFIED SELF-
DISCLOSURE QUESTIONNAIRE

Mark the appropriate rating on your computer card by filling in the appropriate letter.

Rating:

A would tell this group of people nothing about this aspect of me or would lie or misrepresent myself

B would talk in general terms about this item to this group

C would talk in full and complete detail about this item to this group

1. What I think and feel about religion; my personal religious views.
2. My views on the present government--the president, government, policies, etc.
3. My personal views on sexual morality-how I feel that I and others ought to behave in sexual matters.
4. The things that I regard as desirable for a man to be--what I look for in a man.
5. My favorite reading matter.
6. The style of house, and the kinds of furnishings that I like best.
7. The kind of party or social gathering that I like best and the kind that would bore me, or that I wouldn't enjoy.
8. My favorite ways of spending spare time, e.g., hunting, reading, cards, sports events, parties, dancing, etc.
9. What I would appreciate most for a present.
10. What I find to be the worst pressures and strains in my work.
11. What I feel are my shortcomings and handicaps that prevent me from getting further ahead in my work.
12. What I feel are my special strong points and qualifications for my work.
13. My ambitions and goals in my work.
14. How I feel about the choice of career that I have made--whether or not I'm satisfied with it.
15. Whether or not I owe money; if so, how much.

16. The aspects of my personality that I dislike, worry about, that I regard as a handicap to me.
17. What feelings, if any, that I have trouble expressing or controlling.
18. The facts of my present sex life--including knowledge of how I get sexual gratification; any problems that I might have; with whom I have relations, if anybody.
19. Whether or not I feel that I am attractive to the opposite sex; my problems, if any, about getting favorable attention from the opposite sex.
20. Things in the past or present that I feel ashamed and guilty about.
21. The kinds of things that make me just furious.
22. What it takes to get me feeling real depressed or blue.
23. What it takes to get me real worried, anxious, and afraid.
24. What it takes to hurt my feelings deeply.
25. The kind of things that make me especially proud of myself, elated, full of self-esteem, or self-respect.
26. My feelings about the appearance of my face--things I don't like, and things that I might like about my face and head--eyes, nose, hair, teeth, etc.
27. How I wish I looked: my ideals for overall appearance.
28. Whether or not I now have any health problems--e.g., trouble with sleep, digestion, female complaints, heart condition, allergies, headaches, piles, etc.
29. Whether or not I have any long-range worries or concerns about my health, e.g., cancer, ulcers, heart trouble.
30. My feelings about my adequacy in sexual behavior--whether or not I feel able to perform adequately in sex relationships.

APPENDIX G

FOUR-ITEM QUESTIONNAIRE

FOUR-ITEM QUESTIONNAIRE

On the four five-point scales below rate the way you see the group.

Mark your response on the computer card.

	extremely	moderately	neutral	moderately	extremely	
1. attractive	A	B	C	D	E	unattractive
2. like to continue contact with group	A	B	C	D	E	not like to con- tinue contact with group
3. meaningful	A	B	C	D	E	not meaningful
4. enjoyable	A	B	C	D	E	not enjoyable

APPENDIX H

OPERANT REINFORCEMENT DATA

TABLE XIII
OPERANT REINFORCEMENTS

	Empathy	Expression	Information	Totals
Replication #1				
Session 1	60	14	139	
Session 2	18	1	26	
Session 3	19	14	53	
Total	97	29	218	344
Replication #2				
Session 1	28	7	139	
Session 2	7	10	71	
Session 3	4	8	102	
Total	39	25	312	376
Replication #3				
Session 1	29	1	92	
Session 2	33	12	122	
Session 3	16	4	128	
Total	78	17	342	437
Replication #4				
Session 1	11	14	211	
Session 2	10	17	104	
Session 3	13	19	97	
Total	34	50	412	496
TOTALS	248	121	1284	1653

VITA ^a

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