

THE UNIVERSITY OF MANITOBA

THE EFFECTS OF PRE-INTERVIEW INSTRUCTIONS AND MODELING AND
INTERVIEWER SELF-DISCLOSURE ON INTERVIEWEES' SELF-DISCLOSURE

by

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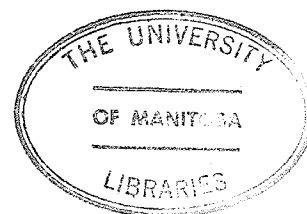
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Geoffrey Nelson

ABSTRACT

Much research has been devoted to the study of factors that facilitate a person's self-disclosure in psychotherapy or in an interview. One line of research has demonstrated that pre-training techniques, involving instructional or modeling procedures, can be used to facilitate a person's self-disclosure. Another body of research has shown the interviewer's self-disclosure to be a powerful determinant of an interviewee's self-disclosure. However, no research has evaluated the interactive effects of pre-training factors and interviewer self-disclosure on interviewee self-disclosure. The purpose of this research was to study the effects of pre-interview instructions and modeling, interviewer self-disclosure, and the various interactions of these factors on interviewee self-disclosure.

A 2 x 2 x 2 x 4 randomized factorial design incorporating two levels of instructions (specific vs. general), two levels of Modeling (model vs. no model), two levels of Interviewer Self-Disclosure (disclosure vs. no disclosure), and one repeated measure (disclosure topic) was used. Eighty male undergraduate students from the University of Manitoba served as subjects and were randomly assigned to the eight treatment conditions. Subjects initially listened to one of four audio tapes comprising the pre-training conditions. Following pre-training, an experimenter, blind of subjects' pre-treatment conditions, interviewed the subjects individually on four disclosure topics.

Subjects' self-disclosure was measured in terms of intimacy and amount. The results showed that: 1) pre-interview instructions and modeling did not significantly affect interviewee self-disclosure, contrary to prediction; 2) interviewer self-disclosure significantly affected interviewee self-disclosure, as was predicted; 3) pre-interview instructions and modeling did not interact with interviewer self-disclosure to significantly affect interviewee self-disclosure, contrary to prediction; 4) the disclosure topics significantly affected interviewee self-disclosure and 5) subject status, paid vs. non-paid, significantly affected interviewee self-disclosure. The results were discussed in terms of their implications for future research.

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CHAPTER I - LITERATURE REVIEW AND HYPOTHESES

Self-disclosure refers to the revealing of information about oneself to another (Cozby, 1973). A number of humanistic psychologists have underscored the importance of self-disclosure, particularly the disclosure of private, intimate information about oneself, for the development of healthy interpersonal relationships (Jourard, 1971b; Mowrer, 1964; Rogers, 1961). They assert that open and honest self-disclosure in interpersonal exchanges sensitizes the individual to the feelings of others as well as helping the individual to come to a better understanding of his own feelings. This heightened interpersonal and intrapersonal sensitivity, they argue, facilitates "growth," "self-awareness," and "self-actualization." Thus, Jourard (1971b) has stated that self-disclosure is both a symptom of and a means of attaining positive mental health.

While the humanistic psychologists feel that self-disclosure is important in all interpersonal relationships, they have particularly stressed the importance of self-disclosure in psychotherapeutic and helping relationships. Jourard (1971b) has called for full therapist self-disclosure or "transparency" as a means of facilitating client self-disclosure; open and honest "confession of sins" is the cornerstone of Mowrer's (1964) "integrity therapy"; and Rogers (1957, 1961) has argued that therapist "self-congruence" or "genuineness" is one of the necessary and sufficient conditions for eliciting client "self-exploration" or "experiencing." Thus, the humanistic psychologists feel that both therapist and client self-disclosure is extremely important for successful psychotherapy.

Evidence in support of this position is provided in a study by Truax and Carkhuff (1965a). Using behavioral measures of self-disclosure in a study of psychotherapy with hospitalized mental patients, the investigators reported two significant findings. First, there was a strong positive correlation ($r=.43$, $p < .05$) between therapist's degree of self-disclosure and client's degree of self-disclosure. Secondly, they found a strong positive correlation ($r=.57$, $p < .05$) between client's degree of self-disclosure in therapy and the extent of positive personality change from pre- to post-therapy. Thus, the results of this study suggest that both therapist and client self-disclosure may play an important role in psychotherapy.

In view of the possible importance of self-disclosure for psychotherapy, much research has been devoted to the study of factors that facilitate a person's self-disclosure in psychotherapy or in an interview (Chaikin & Derlega, 1974; Cozby, 1973; Goodstein & Reinecker, 1974; Jourard, 1971a). One line of research has demonstrated that pre-training techniques, involving either instructional or modeling procedures, can be used to facilitate a person's subsequent self-disclosure in psychotherapy or in an interview (Marlatt, 1972). Another body of research has shown the interviewer's self-disclosure to be a powerful determinant of interviewee's self-disclosure (Jourard, 1971a). The purpose of this research was to study the effects of pre-interview instruction and modeling and interviewer self-disclosure on interviewees' self-disclosure.

First, clinical and analogue studies of pre-training techniques using instructional and modeling procedures will be briefly reviewed and dis-

cussed within the context of Marlatt's (1972) theoretical formulation. Next, studies of the effects of interviewer self-disclosure will be briefly reviewed and theoretical formulations of these findings will be considered. Finally, a formulation of the relationship between pre-interview instructions and modeling and interviewer self-disclosure derived from social learning and cognitive learning theories will be offered. Based on the evidence reviewed and the theoretical formulation suggested, hypotheses about the effects of pre-interview instructions and modeling, interviewer self-disclosure, and the various combinations of these factors will be advanced.

Pre-Training: Instructional and Modeling Techniques

Upon entering psychotherapy, many clients have little or no knowledge of the behavior expected of them by their therapist (Orne & Wender, 1968). Several researchers have suggested that marked incongruence between client expectancies of therapy and the client's actual therapy experiences may hinder the client's progress in psychotherapy and/or lead to premature termination (Goldstein, Heller, & Sechrest, 1966; Heine & Trosman, 1960; Lennard & Bernstein, 1960; Overall & Aronson, 1963). In response to this problem, a number of structured pre-therapy learning techniques have been developed to prepare clients for psychotherapy (Rabin, 1970). One of the primary functions of these techniques is to prepare the client for the role of a self-discloser.

Truax and his colleagues (Truax & Carkhuff, 1967) have applied the principles of modeling and observational learning to pre-training for psychotherapy. In their technique of "vicarious therapy pre-training" (VTP), prior to entering therapy the client listens to a 30-minute audio-

tape recording of a model client self-disclosing about his problems. The rationale of this technique is that providing the client with a model who self-discloses in a therapy situation will facilitate the clients subsequent self-disclosure in therapy. A number of investigations have shown that VTP can facilitate positive therapeutic outcome for chronic mental patients (Truax & Carkhuff, 1965b), juvenile delinquents (Truax, Wargo, Carkhuff, Kodman, & Moles, 1966; Truax, Shapiro, & Wargo, 1968), and neurotic outpatients (Truax & Wargo, 1969). However, none of these studies examined the effects of VTP on clients' self-disclosing behavior in therapy.

Orne and Wender (1968) have developed a "role induction interview" (RII) to instruct clients in appropriate role behaviors before they enter therapy. A number of investigations have shown that the RII facilitates both clients' self-disclosure in therapy and positive therapeutic outcome (Heitler, 1973; Hoehn-Saric, Frank, Imber, Nash & Battle, 1964; Jacobs, Charles, Jacobs, Weinstein, & Mann, 1972; Sloane, Cristol, Peppernik, & Staples, 1970; Yalom, Houts, Newell, & Rand, 1967). Finally, one investigation (Strupp & Bloxom, 1973) found that the RII and a film-modeling technique were equally effective in facilitating both clients' self-disclosure in therapy and positive therapeutic outcome.

In addition to the clinical studies, a number of laboratory analogue studies have demonstrated that pre-training devices can be used to modify self-disclosing behavior. Studies investigating the effects of modeling procedures have shown that exposing subjects to a self-disclosing model prior to an experimental interview can increase subjects' frequency of emission of several different response classes in the subsequent interview, including: first person pronouns (Myrick, 1969), admission of personal

problems (Marlatt, Jacobson, Johnson & Morrice, 1970), positive and negative self-reference (Doster & Brooks, 1974; Sarason, Ganzer & Singer, 1972), intimate self-disclosure (Doster & McAllister, 1973; Liberman, 1970; McAllister & Kiesler, 1975), and duration of speech (Doster & Brooks, 1974; Marlatt et al., 1970). Other analogue studies have shown that giving subjects specific instructions to self-disclose can facilitate subjects' personal self-disclosure in a group interaction situation (D'Augelli & Chinsky, 1974; Rappaport, Gross & Lepper, 1973).

A few analogue studies have compared the relative efficacy of instructions, modeling, and a combination of instructions and modeling in facilitating interviewee self-disclosure. Several studies (Doster, 1972; Green & Marlatt, 1972; Rappaport, Gross & Lepper, 1973) have shown that a combination of instructions and modeling was no more effective in facilitating interviewee self-disclosure than either instructions or modeling alone. On the other hand, two studies (Lack, 1970; Whalen, 1969) found that a combination of instructions and modeling produced more interviewee self-disclosure than either factor alone. However, in the Whalen (1969) study, subjects in the combination of instructions and modeling condition were told to "try and interact in a manner similar to that of the film group" and the film was described as providing "excellent examples of desirable types of group behavior (p. 511)." Similar instructions were not given in the model-only condition. This additional instigation may account for the superiority of the combination condition. In summary the evidence for the superiority of a combination of pre-interview instructions and modeling in facilitating interviewee self-disclosure is equivocal.

In general, clinical and analogue studies have shown that instructions,

modeling, and a combination of instructions and modeling, appear to be effective pre-training techniques for eliciting self-disclosure in psychotherapy and in experimental interviews. Hence, the following hypotheses are proposed. First, specific pre-interview instructions will produce more interviewee self-disclosure than general pre-interview instructions. Secondly, pre-interview exposure to a disclosing model will produce more interviewee self-disclosure than no pre-interview exposure to a model.

Marlatt (1972) has proposed a theoretical framework for the experimental modification of verbal behavior that is particularly applicable to pre-training techniques. Arguing from a cognitive learning point of view (cf. Dulany, 1968), he suggests that these techniques achieve their effects by providing a subject with information about the experimental task. This information increases the subject's awareness of the response-reinforcement contingencies of the experimental task. Thus, he argues that instructional and modeling techniques serve to reduce task ambiguity, which, in turn, facilitates a subject's emission of the correct (reinforced) response on the task.

Consistent with Marlatt's (1972) formulation, Yalom et al. (1967) concluded that the RII achieved its effects in their study by clarifying the goals of therapy and the behavior required of the client. "Excessive initial anxiety, frustration, and unclarity may inhibit learning and be dissonant with successful psychotherapy (Yalom et al., 1967, p. 426)." Thus, providing clients with information about the goals of therapy and appropriate client behavior served to dispel initial anxieties and allowed clients to immerse themselves in the therapeutic task. Similarly, Heitler

(1973) concluded that the role induction technique " . . . has its impact in helping patients take an active collaborative approach to the tasks of their therapy (p. 239)."

Interviewer Self-Disclosure

In addition to interview pre-training techniques, research has shown that the self-disclosure of the interviewer in the actual interview situation is a powerful determinant of interviewee self-disclosure (Jourard, 1971a). A number of early studies by Jourard and his colleagues (Jourard, 1959; Jourard & Landsman, 1960; Jourard & Richman, 1963) established that the amount one self-discloses to another is positively and significantly correlated with the amount one receives from another. In order to determine whether this reciprocal exchange of self-disclosure, which Jourard (1971a) has termed the "dyadic effect," implies any sort of causality, subsequent experimental research has been aimed at testing the hypothesis that one person's self-disclosure induces another to self-disclose.

Drag (1968) found that when she self-disclosed to subjects in an interview, subjects self-disclosed more than when she questioned subjects in the interview but revealed nothing of herself. Jourard and Jaffee (1970) and Davis and Sloan (1974) varied the length of experimenter self-disclosure and found that subjects patterned their self-disclosure after that of the experimenter. When the experimenter disclosed at length, subjects disclosed at length; and when the experimenter disclosed briefly, subjects disclosed briefly. Similarly, Tognoli (1969) and Ehrlich and Graeven (1971) found that subjects' self-disclosure closely matched the intimacy level of the interviewer's self-disclosure in an experimental

interview. Worthy, Gary, and Kahn (1969) found that subjects disclosed intimate information about themselves to other subjects from whom they had received intimate information in a group interaction situation. Vondracek and Vondracek (1971) found that a disclosing interviewer elicited more self-disclosure in pre-adolescents than a non-disclosing interviewer. Finally, studies by Jourard and Resnick (1970) and Doster and Strickland (1971) have shown that self-disclosure on the part of one person can beget self-disclosure in subjects with a low self-disclosure history. In view of these findings, it is hypothesized that interviewer self-disclosure will produce more interviewee self-disclosure than no interviewer self-disclosure.

Altman and Taylor (1973) have interpreted these findings of the reciprocity of self-disclosure in terms of their social penetration theory. According to social penetration theory, interpersonal relationships begin with the exchange of non-intimate information and proceed into more intimate interpersonal exchanges. One of the most important factors in determining the movement in an interpersonal relationship is the reward/cost factors of interpersonal exchanges. From this point of view, self-disclosure is a reward or reinforcer that increases the exchange of intimate information, and thus leads to a deeper interpersonal relationship. Self-disclosure is a particularly potent interpersonal reinforcer, they argue, because to disclose intimate information about oneself to another implies feelings of trust and liking for that person. Research has, in fact, shown that one's self-disclosure to another is highly correlated with feelings of trust and liking for that person (Cozby, 1973; Jourard, 1971a). Emphasizing reward/cost factors, social

penetration theory is thus similar to social exchange theories (Simpson, 1972).

Similarly, according to the theoretical framework set forth by Marlatt (1972), direct reinforcement, as well as the techniques of instruction and modeling, is an effective means of modifying verbal behavior. Consistent with a reinforcement point of view, Powell (1968) found of three types of social reinforcers, approval-supportive statements, reflection-restatement, and open self-disclosure, made contingent upon subjects' emission of positive and negative self-reference statements, only the experimenter's self-disclosure was effective in increasing both positive and negative self-reference significantly over their baseline level.

In a clinical study, Truax (1968) analyzed the effects of high vs. low levels of therapist's empathy, warmth, and genuineness (open and honest self-disclosure) made contingent upon mental patients' self-disclosure in psychotherapy. He found that patients who received high levels of the therapist variables contingent upon their self-disclosure self-disclosed significantly more in therapy and showed significantly greater improvement from pre- to post-therapy than patients who received low levels of therapist variables contingent upon their self-disclosure.

While the self-disclosure of the interviewer may serve a reinforcing function, it is also likely, as Tognoli (1969) has noted, that it serves a modeling function as well. That is, interviewees may be imitating the self-disclosing behavior of the interviewer. For example, Jourard and Jaffee (1970) interpreted the interviewer's self-disclosure on the first topic in their study as serving as an example for interviewees to follow. Furthermore, the analogue studies reviewed earlier showing that exposure

to a self-disclosing model facilitates subjects' self-disclosure in an interview lends support to a modeling interpretation of the "dyadic effect." Thus, interviewer self-disclosure may serve as both a model for and a reinforcer of interviewee self-disclosure.

In an attempt to evaluate the relative utility of the modeling and social exchange hypotheses for explaining the "dyadic effect," Davis and Skinner (1974) compared the effects of interviewer self-disclosure during the interview, exposure to an audio-tape of a self-disclosing model during the interview, and a no treatment control condition. They found that interviewer self-disclosure produced significantly more interviewee self-disclosure than either of the other two conditions. Furthermore, the audio-taped modeling condition was only marginally more effective than the control condition in producing interviewee self-disclosure. Davis and Skinner (1974) attributed the superiority of interviewer self-disclosure over the audio-tape model to the rewarding aspects of the interviewer's exchange of self-disclosure. They argued that the high level of interviewee self-disclosure elicited by the self-disclosing interviewer is more than a modeling phenomenon, it involves the reciprocal social exchange of personal information.

Combination of Pre-Training and Interviewer Self-Disclosure

While research has demonstrated that pre-training, either through instructional or modeling procedures, and interviewer self-disclosure can facilitate interviewee self-disclosure, no research has evaluated the effects of a combination of pre-training and interviewer self-disclosure on interviewee self-disclosure. In many of the studies demonstrating the effectiveness of instructions or modeling in facilitating interviewee

self-disclosure, the effects of interviewer self-disclosure are confounded. For example, in studies examining the effects of pre-training on subject's self-disclosure in a group interaction situation (D'Augelli & Chinsky, 1974; Rappaport et al., 1973; Whalen, 1969) it is possible that the self-disclosure of the "understander" augmented the self-disclosure of the "problem discloser." Similarly, in clinical studies of the RII and VTP, it is possible that therapists' verbal behavior enhanced their clients' self-disclosure.

A possible relationship between pre-training factors and interviewer self-disclosure can be derived from social learning theory (Rotter, Chance & Phares, 1972) and from cognitive learning theory (Marlatt, 1972). According to these perspectives, a person's behavior in a situation is a function of his expectancies and the reinforcement value of the outcome. Viewed in this way, pre-interview instructions and modeling instill in the interviewee a specific "expectancy" or "set" to self-disclose. The self-disclosure of the interviewer then serves two functions. First, through demonstration (modeling of self-disclosure) the interviewer also creates a specific expectancy for the interviewee to self-disclose. Additionally, the interviewer's reciprocal exchange of personal self-disclosure serves as a reward (reinforcement) for the interviewee's self-disclosure.

Since interviewer self-disclosure induces an expectancy to self-disclose by providing a model for disclosure, one would expect that the effects of pre-training would be overridden when the interviewer self-discloses. For an interviewee who receives pre-training, the demand characteristic (Orne, 1962) to self-disclose created by interviewer self-disclosure would be redundant. On the other hand, for an interviewee who

does not receive pre-training, interviewer self-disclosure would instill the expectancy to self-disclose that had not been provided prior to the interview. Thus, when the interviewer self-discloses, interviewees are given the expectancy to self-disclose, regardless of their pre-training. Finally, interviewer self-disclosure is a more powerful determinant of interviewee self-disclosure than exposure to an audio-tape model since it serves a reinforcing function as well as a modeling function (Davis & Skinner, 1974).

When the interviewer does not self-disclose, however, one would expect that the interviewee would behave in accordance with the specific expectancies induced by pre-training. In this case, pre-training provides the only situational cues to which the interviewee can respond.

Thus, the following hypotheses are advanced. Pre-interview instruction will interact with interviewer self-disclosure in the following way. Under interviewer self-disclosure, pre-interview instruction will not differentially affect interviewee self-disclosure; while under no interviewer self-disclosure, specific instructions will produce more interviewee self-disclosure than general pre-interview instructions. It is also hypothesized that pre-interview modeling will interact with interviewer self-disclosure in like manner.

The purpose of this research is to study the effects of pre-interview instruction and modeling, interviewer self-disclosure, and the various interactions of these factors on interviewee self-disclosure. While the effects of pre-training factors (instruction and modeling) and interviewer self-disclosure have been widely studied, at no point have these two bodies of research intersected. These two lines of research on self-disclosure

have developed independently. Thus, I am particularly interested in extending previous research by assessing the effects of the interactions between pre-training factors (instruction and modeling) and interviewer self-disclosure on interviewee self-disclosure.

Hypotheses

To review, the following hypotheses have been advanced:

- 1) Specific pre-interview instructions will produce more interviewee self-disclosure than general pre-interview instructions.
- 2) Pre-interview exposure to a disclosing model will produce more interviewee self-disclosure than no pre-interview exposure to a model.
- 3) Interviewer self-disclosure will produce more interviewee self-disclosure than no interviewer self-disclosure.
- 4) Pre-interview instruction will interact with interviewer self-disclosure in the following way. Under interviewer self-disclosure, instruction will not differentially affect interviewee self-disclosure; while under no interviewer self-disclosure, specific instructions will produce more interviewee self-disclosure than general instructions.
- 5) Pre-interview modeling will interact with interviewer self-disclosure in the following way. Under interviewer self-disclosure, pre-interview modeling will not differentially affect interviewee self-disclosure; while under no interviewer self-disclosure, pre-interview exposure to a disclosing model will produce more interviewee self-disclosure than no pre-interview exposure to a model.

CHAPTER II - METHOD

Subjects

Eighty male undergraduate students at the University of Manitoba served as subjects. Twenty-eight 1974 Summer Session students received two dollars for their participation in the experiment. The remaining fifty-two subjects were enrolled in Introductory Psychology courses during the 1974 Fall Session and received experimental credit toward their course requirements for their participation. Subjects were randomly assigned to one of the eight experimental conditions, yielding a total of 10 subjects per condition.

Design

A 2 x 2 x 2 x 4 randomized factorial design incorporating two levels of Instructions (specific vs. general), two levels of Modeling (model vs. no model), two levels of Interviewer Self-Disclosure (disclosure vs. no disclosure), and four Disclosure Topics (1 - Criticism and Praise, 2 - Opposite Sex Relations, 3 - Body and 4 - Sexual Adequacy) was used.

General Orientation

Subjects (Ss) were seen individually by one experimenter (E) for one interview session. The E escorted the S to the experimental room which contained two chairs and one table with a tape recorder. On the table next to the tape recorder there were four cassette tapes, which were numbered 1, 2, 3 and 4 in a small box. Upon entering the room, the E handed the S a sealed envelope containing a message indicating which tape (1, 2, 3 or 4) the S was to play. The E then gave the S the following instructions:

Basically, this study will involve an interview in which I will ask you to talk about a number of different

topics. Further information about the interview and what will be required of you will be provided on tape. For this part of the study, I will be absent from the room.

After I have left the room, you are to open this envelope (E hands S a closed envelope). Enclosed you will find a piece of paper with either the number 1, 2, 3 or 4 written on it. The number will tell you which one of these tapes you are to play (E points out the four numbered tapes in a box on the table). Select the tape whose number corresponds to the number on the piece of paper. For example, if the paper in the envelope has the number 3 on it, you should select tape number 3.

Once you have selected the appropriate tape, insert the tape into the cassette recorder; close the cartridge; and push the "Forward" button (E demonstrates this for the S without turning on the machine). When the tape has finished playing, press the "Stop" button. Next, press the blue "Eject" button. This will open the cartridge so that you may remove the tape. Remove the tape and place it back in the box with the other tapes (E demonstrates this procedure as well).

After you have put the tape back, sit back and make yourself comfortable. I will be back in a few minutes so that we may begin with the interview part of the session. One last thing, please be sure to place the piece of paper with the number written on it back in the envelope after you have seen the number.

The purpose of this procedure was to keep the E, who subsequently conducted the interview, blind of the S's pre-training condition to minimize E bias. After the E had given the S these initial instructions, he excused himself and left the room.

The S then played one of four audio-tapes. Each tape was prefaced with the following remarks:

You know, everyone talks about students who attend the university and what they are like, but few people have actually tried to find out anything from the students themselves. We are interested in getting an idea of what students think about certain matters which confront all of us. We thought the best way to find out what students think about certain matters would be simply to ask them to talk about their thoughts and feelings about these matters.

Pre-Interview Instruction

Following this introduction, two of the tapes provided the S with the following general instructions:

In this study, you will be asked to talk freely about a number of topics. The interviewer will read you a topic, and he will then give you a few minutes to talk about the topic as it relates to you. Of course, you may say as little or as much as you like about each topic. You may withhold, or you may reveal as much information as you like. Whenever possible, however, we would like you to talk about whatever the topic brings to your mind.

What you say will be recorded on tape, but the tapes will be identified by code number only, so that your name will in no way be associated with the tape. The information you reveal about yourself on the tape will be kept strictly confidential, and only the interviewer and those working with him on the study will have access to the tapes.

The other two tapes provided the S with the following specific instructions:

In this study, you will be asked to talk freely about a number of topics. The interviewer will read you a topic, and he will give you a few minutes to talk about your personal feelings about the topic. Of course, you may say as little or as much as you like about each topic. You may withhold information, or you may reveal as much information as you like.

Whenever possible, however, we would like you to talk about your personal feelings and experiences. When we say that we would like you to talk about a topic, this means that we want you to concentrate on verbalizing your personal emotions, personal reactions, and personal responses to the topic. In emphasizing your feelings concerning these topics, you should talk about your problems and satisfactions, your ups and downs, your good points and your bad points, the things you like and dislike about yourself. That is, you should not only describe your personal feelings, but you should explore them and attempt to make some judgment or evaluation of your feelings about

a topic. So, your job is to talk about the topics in a subjective, spontaneous, and personal manner.

Often, there is a tendency in this type of situation to stray away from talking about how you feel personally into giving objective, impersonal opinions about the topics. This is not what we want. You should avoid statements that are comfortably abstract or impersonal. You should talk about those private, intimate aspects of your life that you do not normally discuss with others. If what you say is not somewhat embarrassing or difficult to talk about, then it is probably not any good. Please be open and honest whenever possible.

Also, try to relate your feelings about the topics to experiences you have had in your life. Reference to events, people, and places often helps us to get a clearer picture of how you feel personally about a topic. So, try to illustrate what you say with examples from your past experiences.

What you say will be recorded on tape, but the tapes will be identified by code number only, so that your name will in no way be associated with the tape. The information you reveal about yourself on the tape will be kept strictly confidential, and only the interviewer and those working with him on the study will have access to the tapes. (These instructions were adapted from Green & Marlatt, 1972).

Pre-Interview Modeling

At this point, one of the tapes which gave the S specific instructions and one of the tapes which gave the S general instructions provided the S with an example of model self-disclosing on three topics not included in the subsequent interview (see Appendix A) which lasted 10 minutes. The model's self-disclosure was prefaced with the following remarks:

Before we begin, we would like to give you an example of the manner in which we would like you to talk on the interview topics. Following these instructions, you will be able to listen to a male university student talking about topics similar to those you will be asked to discuss. The student has granted us his permission to play you the tape. We have selected this student's tape, because we felt that he is

responding to the topics exactly as we wanted him to. In other words, he is a good example to follow. Please listen carefully to the manner in which he responds to each topic.

A male graduate student in psychology with acting experience served as the model. The model's self-disclosure was an adaptation of three disclosure scripts provided in the Doster (1971) training manual for the Self-Disclosure Rating Scale. An example of the model's disclosure is provided in the following paragraph:

I think I am a fairly sensitive person when it comes to my own feelings but ah . . . other people ah . . . I tend to be callous when it comes to others . . . the other person's feelings. I realize that ah . . . I don't want . . . I don't really wish ah . . . to hurt people but it's ah . . . just the way I act . . . as if they are less important than I am. It's not actually that I think they're less important . . . it's ah . . . more the other way around and ah . . . it's hard for me to open up ah . . . I don't open up to people, possibly . . . possibly when they would like to open up to me . . . acting callous toward them . . . and ah . . . I feel guilty about it.

On the 0 to 6 point Self-Disclosure Rating Scale, ranging from very impersonal to very personal self-disclosure, these three transcripts had been rated as indicating a high level of self-disclosure: 5, 5, and 6, respectively. Also, ratings of these three transcripts by the two judges for this study again indicated a high level of self-disclosure: 5, 5, and 6 by one judge, and 5, 4, and 5 by the second judge. The expressed opinion of 10 pilot Ss and graduate students in psychology who were naive as to the role-played nature of the tape was that the example appeared realistic and was genuinely expressed. Also, none of the Ss in the study questioned the authenticity of the model's self-disclosure.

Interviewer Self-Disclosure

Ss who were not exposed to the tape of the disclosing model waited in the experimental room for the experimenter to return. In all cases, the E waited 15 minutes before returning to the experimental room, so that he would not be tipped off to the S's pre-training condition. Upon returning, the E read the S the following instructions for the interview:

Now, we will begin with the interview part of the session. I will read aloud the topic you are to discuss. (Before you talk about the topic, I will tell you about my personal feelings about the topic.)¹ After I have done this, you can begin to talk about the topic. If you like, you can stop and think about the topic before you begin talking about it, or you can jump right in and start talking. Whenever you feel that you have nothing further to say about a topic, tell me and I will then read you the next topic. It's up to you to tell me when you want to move on to the next topic. If you have no questions, then we will begin.

After having read the S these instructions, the E turned on the tape recorder and began the interview. In the Interviewer Disclosure condition, the E read the disclosure topic aloud and then self-disclosed about the topic for approximately 4 to 5 minutes. The E had a general script committed to memory on which he based his self-disclosure in each case. Thus, while the wording of the E's disclosure varied slightly from subject to subject, the content was always the same. Following the E's disclosure on a topic, the S was given as long as he wanted to say anything about the topic. This procedure was repeated for each of four disclosure topics (see Appendix B). Two judges' ratings of the E's disclosure on the four topics indicated that the E disclosed at a high level: 6, 6, 6 and 6 by one judge, and 6, 6, 6 and 6 by the second judge.

¹Statement in parentheses were given only to those Ss in the Interviewer Self-Disclosure condition.

In the No Interviewer Disclosure condition, the E merely read the topic aloud and gave the S as much time as he wanted to talk about it. before going on to the next topic. Other than reading the S the topic, the E remained silent in this condition.

Questions raised by the Ss as to what they should say about a topic were answered in all cases with the following statement: "Whatever you feel would be helpful to me in understanding you." Also, the E kept non-verbal gestures to a minimum in all cases.

Post-Interview Debriefing

At the end of the interview session, the E checked to see if the S played the correct tape by noting which of the four tapes needed to be rewound. Also, at this time the S was thoroughly debriefed by the E as to the nature of the experiment (see Appendix C). Finally, Ss were asked not to discuss the experiment with their fellow students since they might be participating in the experiment.

Measures

The self-disclosure of the Ss was analyzed in terms of: 1) depth or intimacy of self-disclosure and 2) amount of self-disclosure. The 7-point, descriptively anchored Self-Disclosure Rating Scale (Doster, 1971) was used to measure the depth or intimacy of self-disclosure (see Appendix D). The continuum ranges from impersonal to personal self-disclosure. Total time spent talking on a topic, discounting three second pauses, was used to measure the amount of self-disclosure (see Appendix E).

Rater Training

Two undergraduate students in the Honours Program in Psychology at the University of Manitoba served as raters. These two judges were blind

of the hypotheses and the experimental conditions. Prior to rating the taped interviews, the judges were trained by the E for approximately seven to eight hours in four sessions in the use of the two measures. In the beginning, the E discussed the nature of the Self-Disclosure Rating Scale and the time measure with the two judges (see Appendices D and E). Following this general orientation, the judges began practice ratings of transcripts furnished from the Doster (1971) training manual and transcripts made up by the E. The judges used stopwatches to measure total time spent talking.

On a total 31 practice transcripts, the judges attained a high degree of reliability on the time measure, $r = .99$. On a total of 41 practice transcripts, the judges attained a moderate degree of reliability on the Self-Disclosure Rating Scale, $r = .78$. For the first 18 practice transcripts, inter-rater reliability was moderate, $r = .65$; while for the remaining 23 practice transcripts, reliability was high, $r = .91$. Using a Fisher r to Z transformation this difference was found to be significant ($p < .05$) thus indicating a practice effect.

CHAPTER III - RESULTS

Inter-Rater Reliability

Inter-rater reliability was computed using the Pearson product-moment correlation coefficient (Hays, 1963). Reliability coefficients for the intimacy measure were fairly high: $r=.84$, $r=.84$, $r=.77$ and $r=.80$ for topics 1, 2, 3 and 4, respectively. Reliability coefficients for the time measure were greater than .99 for each of the four topics. In view of the satisfactory level of agreement between raters, the two judges' ratings were averaged.

Intimacy Ratings

Table 1 presents the analysis of variance for intimacy ratings. Contrary to the first and second hypotheses, there were no significant main effects for Instruction, $F(1,72)=.75$, $p > .05$, and for Modeling, $F(1,72)=1.20$, $p > .05$. In accordance with the third hypothesis, there was a significant main effect for Interviewer Self-Disclosure, $F(1,72)=46.33$, $p < .01$. Using the omega squared estimate for the proportion of variance accounted for (Vaughn & Corballis, 1969), it was found that Interviewer Self-Disclosure accounted for 14.3 percent of the variance.

Contrary to the fourth and fifth hypotheses, there were no significant interaction effects between Instruction and Interviewer Self-Disclosure, $F(1,72)=.02$, $p > .05$, and between Modeling and Interviewer Self-Disclosure, $F(1,72)=.18$, $p > .05$. Examination of the table of means for intimacy ratings (see Table 2) indicated that under both Interviewer Self-Disclosure conditions (disclosure vs. no disclosure), Ss who had received pre-training (Instruction and Modeling, Instruction, and Modeling) disclosed more than Ss who had not been pre-trained.

TABLE 1
ANALYSIS OF VARIANCE FOR INTIMACY RATINGS

Source	df	MS	F
Instructions (A)	1	2.81	.75
Modeling (B)	1	4.51	1.20
Interviewer Disclosure (C)	1	174.04	46.33**
A x B	1	2.62	.70
A x C	1	.08	.02
B x C	1	.70	.18
A x B x C	1	.80	.21
Error	72	3.76	
Topic (D)	3	5.62	10.71**
A x D	3	1.20	2.29
B x D	3	.60	1.15
C x D	3	.23	.44
A x B x D	3	.82	1.56
A x C x D	3	1.44	2.73*
B x C x D	3	.11	.21
A x B x C x D	3	.09	.17
Error	216	.52	

*p < .05

**p < .01

There was also a significant **TABLE 2** effect, $F(3, 21) = 4.71, p < .01$, and a significant Interviewer's **MEAN INTIMACY RATINGS** behavior effect, $F(1, 21) = 4.71, p < .01$. Neither the topic effect with post hoc comparisons

Interviewer's Behavior	Instructions	Model	Topic ^a				
			1	2	3	4	\bar{x}
Disclosure	Specific	Present	3.70	4.20	3.85	3.30	3.76
		Absent	3.50	4.10	4.10	3.90	3.90
	General	Present	3.85	4.05	4.00	3.65	3.88
		Absent	3.35	3.80	3.80	2.90	3.46
No Disclosure	Specific	Present	2.85	3.00	2.45	1.75	2.51
		Absent	2.25	2.65	2.20	1.95	2.26
	General	Present	2.30	2.25	2.80	2.15	2.37
		Absent	1.70	1.95	2.40	1.80	1.96

^a Topic 1 - Criticism and Praise, Topic 2 - Opposite Sex Relations, Topic 3 - Body, Topic 4 - Sexual Adequacy.

self-disclosure, $F(1, 21) = 4.71, p < .01$. Examination of the table of mean for these responses (see Table 4) indicated that the means for the no-disclosure condition were no lower than disclosure were for the four topics.

There was no other main effect, $F(3, 21) = 1.00, p > .05$, and no interaction effect, $F(3, 21) = 1.00, p > .05$.

There was also a significant Topic effect, $F(3,216)=10.71$, $p < .01$, and a significant Instruction X Interviewer Self-Disclosure X Topic effect, $F(3,216)=2.73$, $p < .05$. Probing the Topic effect with post hoc comparisons (Scheffé, 1959) revealed that Ss disclosed significantly more on topics 2 (opposite sex relations) and 3 (body) than on topics 1 (criticism and praise) and 4 (sexual adequacy), $F(3,216)=13.07$, $p < .01$. The triple interaction was not subjected to post hoc analysis since this effect was not predicted and since the effect was of little, if any, importance to the experiment.

Time Ratings

Table 3 presents the analysis of variance for time ratings. Again, contrary to the first and second hypotheses, there were no significant main effects for Instruction, $F(1,72)=.16$, $p > .05$, and for Modeling, $F(1,72)=.18$, $p > .05$. There was a significant main effect for Interviewer Self-Disclosure, $F(1,72)=21.58$, $p < .01$. Using omega squared, it was found that Interviewer Self-Disclosure accounted for 6.5 percent of the variance. Thus, the third hypothesis was supported.

Again, contrary to the fourth and fifth hypotheses, there were no significant interaction effects between Instruction and Interviewer Self-Disclosure, $F(1,72)=.04$, $p > .05$, and between Modeling and Interviewer Self-Disclosure, $F(1,72)=.54$, $p > .05$. Examination of the table of means for time ratings (see Table 4) indicated that the means for the pre-training conditions under no interviewer disclosure were not in the hypothesized direction.

There was also a significant Topic effect, $F(3,216)=5.00$, $p < .01$, a significant Modeling X Topic interaction effect, $F(3,216)=2.60$, $p < .05$,

TABLE 3
ANALYSIS OF VARIANCE FOR TIME RATINGS

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Instruction (A)	1	6601.10	.16
Modeling (B)	1	7628.33	.18
Interviewer Disclosure (C)	1	893669.00	21.58**
A x B	1	26586.62	.64
A x C	1	1628.12	.04
B x C	1	22368.12	.54
A x B x C	1	1108.75	.03
Error	72	41407.40	
Topic (D)	3	28339.69	5.00**
A x D	3	9107.59	1.61
B x D	3	14717.37	2.60*
C x D	3	15168.43	2.68*
A x B x D	3	5854.25	1.03
A x C x D	3	6279.08	1.11
B x C x D	3	9922.84	1.75
A x B x C x D	3	605.13	.11
Error	216	5669.37	

*p < .05

**p < .01

TABLE 4
MEAN TIME RATINGS^a

Interviewer's Behavior	Instructions	Model	Topic ^b				
			1	2	3	4	\bar{x}
Disclosure	Specific	Present	191.9	298.6	235.5	181.4	226.8
		Absent	130.5	225.0	162.4	195.7	178.4
	General	Present	207.8	225.0	199.4	169.1	200.3
		Absent	132.5	220.3	212.3	217.9	195.8
No Disclosure	Specific	Present	117.9	116.9	78.6	107.4	105.2
		Absent	91.4	110.5	87.8	101.0	96.6
	General	Present	93.5	75.0	80.8	59.1	77.1
		Absent	71.0	108.4	149.3	65.6	98.6

^aIn seconds.

^bTopic 1 - Criticism and Praise, Topic 2 - Opposite Sex Relations, Topic 3 - Body, Topic 4 - Sexual Adequacy.

and a significant Interviewer Self-Disclosure X Topic interaction effect, $F(3,216)=2.68$, $p < .05$. Again, post hoc comparisons (Scheffé, 1959) demonstrated that Ss disclosed significantly more on topics 2 (opposite sex relations) and 3 (body) than on topics 1 (criticism and praise) and 4 (sexual adequacy), $F(3,216)=5.61$, $p < .01$. The interaction effects were not probed further because of their insignificance to the experiment.

Intercorrelations Between Intimacy and Time Ratings

To examine the intercorrelations between the intimacy and time ratings, Pearson product-moment correlations were used. The intimacy and time ratings were moderately correlated: $r=.61$, $r=.70$, $r=.48$ and $r=.51$ for topics 1, 2, 3 and 4, respectively. Since raters were specifically instructed to discount Ss' talk time in rating intimacy of self-disclosure, it seems unlikely that this result represents a rating artifact. Rather, it would appear that the longer Ss spoke, the more intimately they talked about the topics.

Paid versus Non-Paid Subjects

Since Ss from the Summer session were paid for their participation in the experiment while Ss from the Fall session were not paid but received course credit for their participation, analysis for difference between these two groups of Ss on the two measures were performed. On the intimacy measure, it was found that paid Ss self-disclosed significantly more than non-paid Ss, $t(78)=10.6$, $p < .01$. Similarly, on the time measure, it was found that paid Ss self-disclosed significantly more than non-paid Ss, $t(78)=5.0$, $p < .01$.

In view of the possible contaminating effect of this variable (paid vs. non-paid) on the analyses performed, separate analyses of variance for paid and non-paid Ss for each of the two measures were performed. These

analyses revealed the same pattern of results (see Appendices F, G, H and I). Only significant main effects for Interviewer Self-Disclosure for each of the two groups on each of the two dependent measures were found. Thus, it appears that the analyses combining paid and non-paid Ss were not invalidated by the differences between these two groups of Ss.

CHAPTER IV - DISCUSSION

The results of this research demonstrated that: 1) pre-interview instructions and modeling did not significantly affect interviewee self-disclosure; 2) interviewer self-disclosure significantly affected interviewee self-disclosure; 3) pre-interview instructions and modeling and interviewer self-disclosure did not interact to significantly affect interviewee self-disclosure; 4) the disclosure topics significantly affected interviewee self-disclosure; and 5) subject status, paid vs. non-paid, significantly affected interviewee self-disclosure. In this section, each of these findings will be discussed. Finally, the implications of this research for psychotherapy and for future research will be discussed.

Pre-Training: Instructional and Modeling Techniques

A surprising and disappointing result of this study was that neither of the pre-training factors, instructions or modeling, had a significant effect on interviewee self-disclosure as was hypothesized. This result is inconsistent with previous research on pre-training factors that was reviewed earlier. The question to be answered then is: Why didn't the pre-interview instructions and modeling have their intended effect?

The failure to find significant pre-training effects on self-disclosure is indeed puzzling. The experimental procedure, operationalizations of the instruction and modeling variables, and the disclosure topics used in this study were very similar to those used by Doster (1972). Also, the measures of intimacy and length of self-disclosure were the same in both studies.

There were, however, two differences in procedure that may account for

the discrepancy in findings between this study and the Doster (1972) study. In the Doster (1972) study, an attempt was made to create a realistic setting for a psychological interview. Ss were interviewed in a private, comfortable, modestly decorated office in a Psychological Center by a professional. In contrast, in this study Ss were interviewed in a small, brightly lit, semi-private, drab room with uncomfortable chairs in a psychology building by a casually dressed graduate student. It is possible that these differences in contextual variables accounted for the discrepancy in findings. The setting in the Doster (1972) study may have been conducive to self-disclosure and may have enhanced the salience of the pre-training manipulations. The setting in this study may have inhibited self-disclosure, nullifying the effects of the pre-training factors. In fact, several Ss in this study mentioned in the post-interview debriefing that they found it difficult to disclose in such a sterile room.

The second procedural difference involves the mode of presentation of the pre-training manipulations. In the Doster (1972) study, an experimental assistant read the pre-interview instructions to Ss and was present throughout the pre-interview phase of the experiment. In this study, the pre-interview instructions were tape-recorded and Ss listened to the tape recording alone with no E present. In a personal communication, Doster (1975) has suggested that the delivery of instructions by the E may have enhanced their salience for Ss. Thus, Ss may have been more motivated to follow the pre-training instructions because of the presence of the E in Doster's study than were Ss in this study in which the E was not present during pre-training.

It is also possible that the failure to find pre-training effects on self-disclosure was due to differences in the sample used in this study and

the samples used in previous studies. All previous analogue research on the effects of pre-training factors on interviewee self-disclosure was done on American college students. The sample in this study consisted of Canadian college students. While no cross-cultural research has compared the self-disclosure patterns of Canadians and Americans, research comparing Americans with British and Puerto Ricans (Jourard, 1971a) and Americans with Germans (Plog, 1965) has shown that Americans are higher self-disclosers than any of these other national groups. Perhaps, Canadians have a lower proclivity for self-disclosure than Americans and thus require more instigation to self-disclose than mere verbal instruction or demonstration of how to self-disclose.

Also, it is possible that the manipulation of the pre-training factors was simply not strong enough to facilitate interviewee self-disclosure. For example, the model presented on the audio-tape did not disclose as long or as intimately as the interviewer. Thus, to obtain the predicted effects, the operationalizations of the pre-training factors may have to be "beefed up." More detailed instructions and an audio-tape of a model disclosing equally in time and intimacy level to that of the disclosing interviewer may be necessary to facilitate interviewee self-disclosure (McGuire, Thelen & Amolsch, 1975).

Finally, with regard to the time ratings, it is possible that this measure is not a sensitive index of self-disclosure. While some studies (Doster & Brooks, 1974; Marlatt et al., 1970) of pre-training factors have shown significant effects on self-disclosure using the time measure, other studies (Doster, 1972; Doster & McAllister, 1973) have failed to find significant effects using the time measure. Thus, Doster (1972) states:

"that time measures, though easily accessible, cannot replace the more costly and time-consuming content measures" (p. 208). Another explanation of the failure to find pre-training effects on the time measure is that the instructions did not specify that the S disclose at length. Rather the instructions encouraged the S to disclose intimately. Perhaps instructions specifying that the S disclose at length would produce an effect on the amount of time the S spends talking.

Interviewer Self-Disclosure

The results of this research are consistent with previous findings demonstrating that interviewer self-disclosure significantly facilitates interviewee self-disclosure. Interviewer self-disclosure appears to be a particularly powerful situational determinant of interviewee self-disclosure. According to Cohen's (1969) operational definitions of effect sizes in psychological research, the effect of interviewer self-disclosure on the intimacy measure was "large" and the effect of interviewer self-disclosure on the time measure was "medium." It is also noteworthy that while contextual variables or sample characteristics may have vitiated the effects of the pre-training factors, the effects of interviewer self-disclosure were not mitigated by those variables. This attests to the robustness of the "dyadic effect."

Pre-Training and Interviewer Self-Disclosure

Contrary to prediction, pre-interview instructions and modeling did not interact with interviewer self-disclosure to differentially affect interviewee self-disclosure. While these interactions were of central importance to this research, it is possible that they were not adequately tested. Since the pre-training factors may not have been adequately

manipulated, for whatever reason, to obtain their predicted effects, this possible manipulation failure may have invalidated the test of the interaction between pre-training factors and interviewer self-disclosure.

Disclosure Topics

This study showed that Ss disclosed more on topics dealing with opposite sex relations and body than on topics dealing with criticism and praise and sexual adequacy. According to the intimacy ratings, Ss consistently self-disclosed least on the topic of sexual adequacy. Similarly, Davis and Sloane (1974) found that Ss disclosed least on the topic of sexual adequacy. Also, Jourard's (1971a) research using the Jourard Self-Disclosure Questionnaire (JSDQ) has shown that Ss typically disclose least on items dealing with sex.

These findings of reluctance to self-disclose intimately about sex may reflect a cultural norm that one's personal sexual experiences are a private matter and are not to be discussed openly and freely with others. In their study of scaling items for intimacy level, Taylor and Altman (1966) found that Ss rated items dealing with sex as the most intimate items. Thus, it appears that this most intimate topic, sex, is one that is least intimately discussed.

Paid versus Non-Paid Subjects

Another unexpected finding of this research was that paid, volunteer Ss self-disclosed significantly more than non-paid, non-volunteer Ss. This finding conforms with the results of a study by Hood and Back (1971) in which it was found that male volunteers were higher disclosers than male non-volunteers. In summarizing research on the volunteer S, Rosenthal and Rosnow (1969) have shown that volunteers are better

educated, less authoritarian, more sociable, and better adjusted than non-volunteers. Parallel findings can be found in research on self-disclosure. It has been shown that high self-disclosers are high achievers (Jourard, 1961), less authoritarian (Halverson & Shore, 1969), more sociable (Taylor & Oberlander, 1969; Tuckman, 1966), and better adjusted (Halverson & Shore, 1969; Mayo, 1968; Pederson & Higbee, 1969) than low self-disclosers. Thus, a high proclivity for self-disclosure may be another defining characteristic of the volunteer S.

There are also other plausible explanations of this finding. The fact that volunteer Ss were paid for their participation in the experiment while non-volunteer Ss received only credit toward their course may have been the deciding factor. The \$2 payment may have been an incentive for Ss to disclose at a high level. Also, paid, volunteer Ss were selected from the Summer Session, while the non-paid, non-volunteer Ss were selected from the regular Fall Session. While no demographic data is available for these Ss, Summer Session students are typically older and more mature than Fall Session students. This difference in age and maturity may account for the difference between the two groups of Ss in self-disclosure.

Implications for Psychotherapy and for Future Research

Since the effects of pre-training and the interaction effects between pre-training and interviewer self-disclosure were not significant in this study, it is difficult to discuss their implications for psychotherapy. Statements about the potential roles of these factors and their interactions must be deferred until the results of research that provides a more adequate test of such techniques are obtained.

With regard to interviewer self-disclosure, the results of this research and previous research demonstrating a "dyadic effect" suggest that exemplary self-disclosure by the therapist may be sufficient to induce clients to self-disclose. However, one must be cautious in generalizing the results of analogue research to psychotherapeutic situations. Several writers (Polansky, 1967; Vondracek & Vondracek, 1971) have argued that indiscriminate self-disclosure by the therapist may be unprofessional and inappropriate. If the central factor in psychotherapy is the therapist's listening to and understanding the client (Martin, 1972), then therapist self-disclosure might be harmful in that it would shift the focus away from the client's problems or experiences.

Also, a client might lose faith in a therapist who discloses too openly. The client may feel that he came to discuss his problems and not to listen to a therapist talk about himself. Evidence in support of this contention is provided in a recent psychotherapy analogue study by Simonson and Bahr (1974). They found that Ss self-disclosed less and were less attracted to a professional therapist when he disclosed personal information than when he disclosed demographic information. Finally, it is possible that if a therapist self-discloses early in therapy in hopes of opening the client up, he may achieve the opposite effect--scaring the client off. This assertion is suggested by Altman and Taylor's (1973) social penetration theory, which postulates that interpersonal relationships evolve from non-intimate to intimate exchanges over time.

On the other hand, a therapist who never discloses anything personal

about himself may be perceived as cool and aloof. Perhaps, discriminate use of self-disclosure by the therapist, making self-disclosure contingent upon deep self-exploration by the client, may serve an important reinforcing function (Truax, 1966). In any event, further research is needed to examine the role of therapist self-disclosure in psychotherapy. One interesting research endeavor would be to compare strategies of contingent vs. non-contingent self-disclosure by the therapist to examine the relative utility of the reinforcement and modeling explanations of the "dyadic effect."

A number of avenues of research are suggested by the speculations as to why the pre-training factors did not affect interviewee self-disclosure. First, it would be interesting to examine the role of contextual variables (eg. setting characteristics, social climate, privacy, etc.) in facilitating or inhibiting self-disclosure. The interaction between inhibitory influences (eg. a sterile setting, lack of privacy, etc.) and facilitative influences (instructions, exposure to a self-disclosing model, etc.) on interviewee self-disclosure would be an interesting research endeavor. Secondly, cross-cultural research comparing Americans and Canadians in their responsiveness to techniques designed to produce self-disclosure would be a worthwhile pursuit.

The effect of disclosure topics found in this study suggests that further research should more carefully examine the content of self-disclosure. Certain content areas, such as sex, may elicit lower levels of disclosure than others. Interview techniques that facilitate self-disclosure on sexual matters might be useful for research on sexual attitudes and behavior.

Finally, the differences between paid Ss and non-paid Ss in self-disclosure points to the importance of including individual difference variables in experimental research (Cronbach, 1954). In view of the recently emerging "person-situation" interactionism paradigm in personality (Bowers, 1973) and psychotherapy research (Kiesler, 1971), future research should examine the interaction between individual differences in disposition to self-disclose and situational determinants of self-disclosure. Wilson and Rappaport (1974) have found Ss' generalized expectancy to self-disclose, as measured by Ss' self-reported behavioral intention, to be a significant determinant of their self-disclosure in an interview. Strategies combining generalized expectancy for self-disclosure and situational determinants in the research design should serve to further our understanding of self-disclosure.

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A P P E N D I C I E S

APPENDIX A

MODEL DISCLOSURE TOPICS

1. What type of things are you sensitive about or what tends to embarrass you?
2. What do you think of yourself as a person? What do you like and dislike about yourself?
3. In what type of situations do you feel anxious or fearful?

Source: Doster (1971).
What are your feelings about your appearance, sexual behavior, etc.
What are your feelings about your appearance, sexual behavior, etc.
What are your feelings about your appearance, sexual behavior, etc.

Doster, 1971.

APPENDIX B

INTERVIEW DISCLOSURE TOPICS

1. How do you react to others' criticism and praise of you? What are the things they criticize and praise in you?
2. What are your feelings about your adequacy in developing and maintaining relationships with members of the opposite sex? What types of satisfactions and problems have you had in your relationships with members of the opposite sex?
3. How do you feel about the appearance of your body--your looks, weight, etc.--what you dislike and what you accept in your appearance, and how you wish you might change your looks to improve them?
4. What are your feelings about your adequacy in sexual behavior--your abilities to perform adequately in sexual relationships?

Source: Jourard (1971a).

APPENDIX C

EXAMPLE OF SUBJECT DEBRIEFING PROCEDURE

Now I would like to tell you a little more about the experiment in which you have just participated. The study we are doing is concerned with the effects of certain factors on self-disclosure. Self-disclosure refers to the extent to which a person is willing to reveal personal information about himself. Specifically, we are interested in testing the effects of three different factors: 1) instructions to self-disclose, 2) listening to an example of a person who openly self-discloses, and 3) the self-disclosure of the interviewer. We believe that each of these factors will have an effect on interviewees' self-disclosure.

Hopefully, the information we obtain will indicate which type of conditions are most conducive to eliciting a high level of self-disclosure. We also hope to be able to apply our findings to therapeutic and counselling situations so that people who seek these services will be able to more easily discuss their problems.

Again, the information we have collected will be kept strictly confidential. Thank you very much for your cooperation.

Suggested reading for those interested:

Jourard, S.M. The transparent self. Princeton, New Jersey: Van Nostrand, 1971.

APPENDIX D

SELF-DISCLOSURE RATING SCALE

When you are making your ratings you may find it helpful to use the abbreviated form below. Certain phrases have been underscored to help you pinpoint your rating. Familiarize yourself with the detailed level descriptions and definitions of scale components in the previous section before attempting to use this form.

- 0 This person attempts to define, clarify or discuss this topic by focusing on external other people, objects and events rather than on himself. Self-references are lacking or few in number. Although he provides information, he does not claim his ideas as his own through personal pronouns. Or his response is an inability or refusal to disclose to the topic.
- 1 He claims his ideas as his own (e.g., I believe that . . .) but the central focus is on the external events rather than internal experiences. He may reveal self through group membership or "weness" (e.g., In our family . . .). He discloses how he thinks about or perceives external events, but not his interaction with external events or their impact on him.
- 2 The ideas expressed are his own. His disclosures concern his internal experiences rather than himself as an observer of external events. He is primarily at a cognitive level owning his attitudes, beliefs, and perceptions of himself in events. Elaboration beyond cognitions is shallow and not profound in content. Reference to emotionality or actions are vague and general. He does not tie down, explore or make finer discriminations of these references through adjectives (denoting which one, what kind of, how many) or adverbs (denoting how, when, where, to what extent).
- 3 Clearly he places himself within the context of his experiences, but information is oriented more to elaborating or clarifying his perceptions about events he's been involved in. Disclosures about his emotionality or actions enhance the picture you have of his participation in the event, but do not provide an explored, integrated understanding of his internal or nonpublic experiences.
- 4 His disclosures allow for a clear, integrated understanding of his personal frame of reference. Events are a departure point toward a finer exploration of his beliefs, perceptions, ideas about himself and his emotionality. While you clearly understand the impact of

external events on his thoughts and feelings, the reverse remains unclear or vague. Namely, the impact of his cognitions and emotions on his actions, reactions and interactions with the external is absent.

- 5 A clear, integrated understanding of his personal frame of reference is provided by his disclosures of his beliefs, his perceptions, ideas about himself and his emotionality. You understand both the impact of external events on his thoughts and feelings and the impact of his internal experiences on his actions, reactions, or interactions with the external.
- 6 A clear, integrated understanding of the impact of external events on his beliefs, perceptions, ideas about himself and his emotionality as well as the impact of these personal, internal experiences on his actions is provided. He goes beyond providing an intimate picture of his personal frame of reference by making judgments and evaluations of his framework or self-system. Using some chosen standard he is taking a stand on his liking of the self-system, or its adjustiveness, adequacy, feasibility, functionality, or the regard others have for this system.

APPENDIX E

INSTRUCTIONS FOR DURATION OF SPEECH MEASURE

The duration of speech measure is the amount of time a subject spends talking on a topic. Duration of speech will be measured by means of a stopwatch.

All of the time the subject spends talking should be recorded except for the following cases:

- 1) Discount pauses of three seconds or greater in length. When a subject pauses, the rater should begin counting to three with the stop watch still running. If the subject has not resumed talking by the time the rater reaches the count of three, then the rater should click the stop watch off. When the subject resumes talking, the rater should immediately click the stop watch on to resume timing.
- 2) Discount segments in which the subject asks the experimenter to repeat the topic or to clarify the nature of the task. So, do not time any requests made by the subject with regard to the experimental task.

Example:

Subject: Generally, I don't think I have any problem getting it on with the opposite sex. Hmm, do I have to say anything more?

Experimenter: Whatever you feel would be helpful to me in understanding you.

Subject: OK, then I don't have anything more to say.

In this instance, only the subject's statement, "Generally, I don't think I have any problem getting it on with the opposite sex," should be timed.

APPENDIX F

ANALYSIS OF VARIANCE OF INTIMACY RATINGS FOR PAID SUBJECTS

Source	df	MS	F
Instruction (A)	1	1.47	.41
Modeling (B)	1	2.56	.71
Interviewer Disclosure (C)	1	49.91	13.94**
A x B	1	5.11	1.43
A x C	1	.09	.03
B x C	1	.09	.03
A x B x C	1	.09	.03
Error	20	3.58	
Topic (D)	3	1.89	3.52*
A x D	3	1.36	2.54
B x D	3	1.26	2.35
C x D	3	.04	.08
A x B x D	3	1.58	2.95*
A x C x D	3	2.49	4.64**
B x C x D	3	.14	.26
A x B x C x D	3	.31	.58
Error	60	.54	

*p < .05

**p < .01

APPENDIX G

ANALYSIS OF VARIANCE OF INTIMACY RATINGS FOR NON-PAID SUBJECTS

Source	df	MS	F
Instruction (A)	1	1.70	.68
Modeling (B)	1	2.02	.80
Interviewer Disclosure (C)	1	108.52	43.34**
A x B	1	.22	.08
A x C	1	.37	.14
B x C	1	3.14	1.25
A x B x C	1	.05	.02
Error	44		
Topic (D)	3	5.63	12.14**
A x D	3	.39	.85
B x D	3	.12	.26
C x D	3	.21	.47
A x B x D	3	.13	.29
A x C x D	3	.65	1.41
B x C x D	3	.23	.49
A x B x C x D	3	.36	.77
Error	132		

*p < .05

**p < .01

APPENDIX H

ANALYSIS OF VARIANCE OF TIME RATINGS FOR PAID SUBJECTS

Source	df	MS	F
Instruction (A)	1	2170.00	.04
Modeling (B)	1	10.50	.00
Interviewer Disclosure (C)	1	269563.06	5.22*
A x B	1	1249.50	.02
A x C	1	37753.24	.73
B x C	1	15965.20	.30
A x B x C	1	771.43	.02
Error	20	51627.90	
Topic (D)	3	21408.33	3.70*
A x D	3	2217.83	.38
B x D	3	25751.83	4.44**
C x D	3	8723.92	.50
A x B x D	3	4092.67	.70
A x C x D	3	6001.82	1.03
B x C x D	3	12533.63	2.16
A x B x C x D	3	6598.86	1.13
Error	60		

*p < .05

**p < .01

APPENDIX I

ANALYSIS OF VARIANCE OF TIME RATINGS FOR NON-PAID SUBJECTS

Source	df	MS	F
Instruction (A)	1	25631.53	.70
Modeling (B)	1	9708.97	.26
Interviewer Disclosure (C)	1	576344.56	15.83**
A x B	1	58286.31	1.60
A x C	1	5943.63	.16
B x C	1	4410.13	.12
A x B x C	1	13698.47	.38
Error	44	36404.82	
Topic (D)	3	19992.64	3.94**
A x D	3	8079.77	1.60
B x D	3	4581.01	.90
C x D	3	8481.99	1.67
A x B x D	3	10835.92	2.13
A x C x D	3	8755.19	1.72
B x C x D	3	5817.53	1.14
A x B x C x D	3	2955.48	.58
Error	132	5075.48	

* $p < .05$

** $p < .01$