

EFFECTS OF PRETHERAPY MODELING
MODEL STATUS AND THERAPIST STATUS
ON CLIENT SELF-DISCLOSURE:
AN ANALOGUE STUDY

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
THADDEUS IGNATIUS STACHOWIAK
1974

LIBRARY
Michigan State
University

This is to certify that the
thesis entitled
Effects of Pretherapy Modeling, Model and
Therapist Status, on Client Self-Disclosure:
An Analogue Study.

presented by
Thaddeus I. Stachowiak

has been accepted towards fulfillment
of the requirements for
Ph.D. degree in Education

William H. Hurd

Major professor

Date 4/19/74

Q-7639

BINDING BY
HOAG & SONS
BOOK BINDERY
LIBRARY BINDERS
SPRING RT. MICHIGAN

ABSTRACT

EFFECTS OF PRETHERAPY MODELING MODEL STATUS AND THERAPIST STATUS ON CLIENT SELF-DISCLOSURE: AN ANALOGUE STUDY

By

Thaddeus Ignatius Stachowiak

In the investigation of the psychotherapeutic relationship, the behavior of the therapist and the behavior of the client share equal importance. In determining the success of therapy, the client's behavior becomes the prime target of investigation. For purposes of this study, it is assumed that the client's behavior ultimately determines whether therapy is successful. Consequently, if the effectiveness of psychotherapy is to be maximized, then the impact of therapy situation upon the client must be understood.

The need to thoroughly understand the therapy situation from the client's point of view has been reflected within the past decade by an increase in the investigation of client variables, such as the client's knowledge about therapy before the client actually enters the therapy situation.

It has been demonstrated that pretherapy information can positively affect the behavior of clients

01222
during therapy. This study investigated several variables which were thought to be important for pretraining clients through modeling procedures.

The purpose of the study was to investigate the importance of three variables related to pretraining clients for therapy: 1) the level of the model's self-disclosure (high *vs.* low); 2) the status of the model (high *vs.* low); and 3) the status of the therapist (high *vs.* low). There were three independent variables, with two levels of each variable.

Fifty six, undergraduate, female subjects were randomly assigned to two experimental groups. Both groups listened to an eight minute recording of a male model self-disclosing. One group heard the model self-disclose to a high degree. The other group heard the same model self-disclose to a low degree on the same topic. Before hearing the model, subjects were informed that the model was either a graduate student (low status) or an experienced professional (high status). After listening to the model, each subject was interviewed by a therapist, to whom a high or a low status was also attributed, defined similarly to the status of the model. Therapists asked subjects to self-disclose for five minutes on each of three topics--Anger, Embarrassment, and Hurt, the three dependent variables. At the end of each topic, therapists rated the level of the subject's

self-disclosure by means of the Self-Disclosure Rating Scale, a four level scale adapted for this study ranging from impersonal to personal content. Subjects also completed a one-item questionnaire which was intended to reflect the subject's willingness to self-disclose further to the same therapist.

All interviews were tape recorded. Two independent raters rated the first, fifth, and tenth interviews, and three weeks after the study therapists were asked to rate their own first, fifth, and tenth interviews a second time. Reliability estimates were performed on the therapists' and raters' ratings, and measures of association were computed for the one-item questionnaire.

The design was a 2 X 2 X 2 posttest only, balanced and completely crossed. Multivariate and univariate analyses were performed to test the main and interaction hypotheses related to 1) the level of model self-disclosure, 2) the status of the model, and 3) the status of the therapist. High levels of the independent variables were hypothesized to elicit more self-disclosure than the low levels. Multivariate hypotheses were tested at $\alpha = .05$, and univariate hypotheses at $\alpha = .017$. Additional analyses were performed to investigate the effect of the sex of the therapist and the therapists themselves (four male, four female). The design for the additional analyses was unbalanced, and the p of a

Type I error set at .05

The results of the study were as follows. The null hypothesis of the level of model self-disclosure was not rejected ($p < .0651$). The null hypotheses for the status of the model ($p < .1818$) and the status of the therapist ($p < .2863$) were also not rejected. These results did not support previous studies related to the level of model self-disclosure and the status of the model. The null hypotheses for the interaction effects were not rejected.

Reliability for the Self-Disclosure Rating Scale was .91 for training, and ranged from .52 to .89 on actual sample data. A positive but low correlation was found between the subjects' self-disclosures on the topic of Hurt and their reported willingness to self-disclose further.

The results of the additional analyses were as follows. The null hypothesis for the main effect of therapists was not rejected. The null hypothesis for the main effect of therapist's sex was rejected at $\alpha = .05$. It was concluded that the level of subject self-disclosure on the topic of Hurt was higher according to female therapists than according to male therapists.

The implications of the results and recommendations for future studies were discussed.

EFFECTS OF PRETHERAPY MODELING
MODEL STATUS AND THERAPIST STATUS
ON CLIENT SELF-DISCLOSURE:
AN ANALOGUE STUDY

By

Thaddeus Ignatius Stachowiak

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Counseling, Personnel Services
and Educational Psychology

1974

© Copyright by
THADDEUS IGNATIUS STACHOWIAK
1974

ACKNOWLEDGMENTS

Without the cooperation of many individuals, this study would not have been possible. I would like to express my appreciation to all those who contributed cognitively and emotionally to the completion of this study. I would like to thank the following individuals in particular.

William C. Hinds, committee Chairman and major advisor, who supported me throughout my graduate study with his helpful contributions and his friendship, and provided an often needed anchor.

William W. Farquhar, committee member, who extended a friendly hand to me at the beginning of my studies, and provided challenging ideas and a feeling of respect.

Samuel Plyler, committee member and practicum supervisor, whose impact on me will always be remembered as a turning point in my life.

Charles Bassos, committee member and practicum instructor, who willingly spent many hours with me in my research struggles, and contributed greatly to my learning by sharing his ideas.

Cecil Williams, practicum instructor, who filled many critical needs, and positively affected my skills as a therapist.

Linda Glendening, research consultant, for her many hours of patience, encouragement, and willingness to explain many, many times.

The eight therapists who participated in this study, for their willingness to give up precious time and be inconvenienced for my benefit.

Becky, my wife, for many things, but in particular for her patience and perserverance at a time that pushed understanding to its limits.

TABLE OF CONTENTS

Chapter	Page
I. THE PROBLEM	1
Introduction.	1
Need	6
Purpose	10
Hypotheses	11
Theory.	12
Overview	16
II. REIVEW OF THE LITERATURE	17
Preconceptions About Therapy	17
Client Anxiety	18
Need for Structure.	18
Perceptual Anticipation	20
Low Prognosis Clients.	21
Direct Training.	21
Example Setting.	22
Theory.	23
Role Induction Interview.	25
Vicarious Therapy Pretraining	27
Therapeutic Reading	28
Film Modeling	31
Audio Modeling	32
Model Characteristics.	35
Self-Disclosure.	37
Summary	39
III. DESIGN OF THE STUDY.	42
Sample.	42
Sample Characteristics	43
Generalizability	44
Procedure.	45
Experimental Apparatus	46
Independent Variable:	
Status of the Model	47
Independent Variable:	
Self-Disclosure of the Model	48
Independent Variable:	
Status of the Therapist	49
Questionnaire	50
Therapists	50

Chapter	Page
Independent Raters	52
Training of Therapists and Independent Raters.	54
Dependent Measure	54
Reliability Estimates	57
Design	60
Control Group.	61
Hypotheses.	64
Analysis	66
Summary.	67
IV. ANALYSIS OF RESULTS	69
Hypothesis 1	72
Hypothesis 2	76
Hypothesis 3	77
Hypothesis 4	78
Hypothesis 5	79
Questionnaire.	79
Additional Independent Variables	82
Unbalanced Design	83
Summary.	89
V. SUMMARY, CONCLUSIONS, AND DISCUSSION	91
Summary.	91
Conclusions	94
Model Self-Disclosure	94
Model Status	94
Therapist Status.	95
Interactions	95
Questionnaire.	95
Therapist Effect.	96
Sex Effect.	96
Discussion.	97
Model Self-Disclosure	97
Model Status	100
Therapist Status.	104
Therapist Sex and Self-Disclosure	104
Limitations	105
Implications for Future Research	109
LIST OF REFERENCES	113
APPENDICES	
Appendix	
A. Transcript of High Self-Disclosure of the Model	122

Appendix	Page
B. Transcript of Low Self-Disclosure of the Model	126
C. Self-Disclosure Rating Scale.	130
D. Agreement to Participate as a Subject.	131
E. Master Sign-In Schedule for Subjects	133
F. Agreement to Participate in a Research Study on Meaningful Communication	143
G. Introduction to Participants Low Status Model.	144
H. Introduction to Participants High Status Model	146
I. Low Status Therapist Instructions for the Interview.	148
J. High Status Therapist Instructions for the Interview.	149
K. Experimental Instructions for Therapists.	150
L. Questionnaire for Participants	161
M. A Final Note to Participants.	162
N. Rating Scale Score Sheet	163
O. Guidelines for Training Therapists.	164
P. Intraclass Correlation Coefficient of Therapists and Raters Following Training on the Self-Disclosure Rating Scale	181
Q. Data and Computation of Intraclass Correla- tion Coefficient for Anger	182
R. Data and Computation of Intraclass Correla- tion Coefficient for Embarrassment.	184
S. Data and Computation of Intraclass Correla- tion Coefficient for Hurt.	186
T. Research Assistant Instructions.	188

Appendix	Page
U. Research Assistant for Collection of Data	191
V. Transcripts of Levels 2 and 3 of the Self-Disclosure Rating Scale	193
W. Schedule of Randomn Assignment of Subjects to Therapists	201
X. Raw Scores	202

LIST OF TABLES

Table	Page
3.1 Pearson Product-Moment Correlations: Reliability Coefficients of the Self- Disclosure Rating Scale on Actual Sample Ratings	59
3.2 Variable Matrix.	62
3.3 Frequency distribution of experimental conditions (matrix cells) as assigned randomnly to therapists	63
4.1 Variable Matrix and Cell Means A Completely Crossed and Balanced Design.	70
4.2 Pooled Within Cell Correlations for the Three Dependent Measures.	71
4.3 Multivariate Analysis of Variance Three Independent Variables Three Dependent Variables.	73
4.4 Univariate Analyses Three Dependent Measures Model Self-Disclosure: H_1	74
4.5 Means of the Three Dependent Measures for the Model Self-Disclosure Treatment	75
4.6 Model Status Treatment Means Three Dependent Measures: H_2	76
4.7 Therapist Status Treatment Means Three Dependent Measures: H_3	77
4.8 Point-Biserial Correlations.	80
4.9 Unbalanced Design Three Independent Variables: Sex, Therapist, and Model Self-Disclosure	84
4.10 Unbalanced, Mixed Design ANOVA on Embarrassment	88

LIST OF FIGURES

Figures	Page
4.1 Mean scores of male and female therapists under high and low disclosure conditions	86

CHAPTER I

THE PROBLEM

Introduction

This study is an investigation of the importance of several variables which have been used to pretrain clients for psychotherapy. The direction of the study emanates from the writings of Gilbert (1952), Sanford (1953), Kiesler (1966), Krumboltz (1967), and others who have called for an end to "Does it work?" research in psychotherapy.

From a practical point of view, the potential client may justifiably ask the question, "Does psychotherapy work?" From a scientific point of view, Sanford (1953) suggests that this question is meaningless. He states, "The question is, which people, in what circumstances, responding to what psychotherapeutic stimuli." The "question", as Sanford (1953) states it, assumes that psychotherapy does work. It also implies that sometimes psychotherapy doesn't work, and more specific information is needed to understand why some variables do not perform the same from study to study.

Therapy is a heterogeneous phenomenon (Kiesler, 1966). Therapists and clients are the logical independent variables in a research study related to psychotherapy. But they are also rich sources of other variables which frequently confound experimental results. If the relevant variables are to be systematically isolated, therapy research cannot continue to regard clients, therapists, and the therapy process as homogeneous. In order to set up a therapy situation so that it can have the greatest, therapeutic effect (Krumboltz, 1967), the essential variables, including client and therapist behaviors, must be defined in very precise terms (Kiesler, 1966). "One of the extremely important problems in psychological counseling and therapy is that concerning the need for being able to describe and quantify different types of psychotherapeutic relationships" (Gilbert, 1952, p. 360). The task is complex, because human relationships are complex, and the investigation of psychotherapeutic relationships is largely an investigation of human relationships. In the psychotherapy relationship, it is the behavior of the therapist and the behavior of the client in that particular situation which Gilbert (1952) proposes to "describe and quantify."

In the investigation of the psychotherapeutic relationship, the behavior of the therapist and the behavior of the client are equally important. In

determining the success of therapy, however success may be defined, the client's behavior becomes the prime target of investigation. For purposes of this study, it is assumed that the client's behavior ultimately determines whether therapy is successful. Consequently, if the effectiveness of psychotherapy is to be maximized, then the impact of the therapy situation upon the client must be understood.

The need to thoroughly understand the therapy situation from the client's point of view has been reflected within the past decade by an increase in the investigation of client variables, such as the client's knowledge about therapy before the client actually enters the therapy situation.

Some studies indicate that clients approach their first therapy situation with a variety of preconceptions about the process of therapy (Goldstein, Heller, & Sechrest, 1966). "Only the most sophisticated (clients) are perfectly clear about why they are there and what they expect" (Frank, 1961, p. 128). Pretherapy information can affect the client's behavior during therapy, particularly the beginning phase of the therapy process.

Certain information, or lack of information, may lead to a serious disruption of the therapy process. One possible result is that the client does not remain in

therapy. If the client fails to remain in therapy long enough, the developmental process of therapy will not have a chance to have an impact on the client, and the client's desire for behavior change is likely to be frustrated. Persistence in the therapy situation is a critical ingredient.

A number of studies have investigated the characteristics of clients who persist in counseling or therapy. Studies tend to show that approximately 30 to 60 percent of people seeking help from outpatient facilities terminate in six visits or fewer (Feldman, 1958; Garfield and Kurz, 1952; Kurland, 1956). This tendency seems to operate rather consistently across all types of treatment or treatment facilities and represents a phenomenon which Stieper and Wiener (1965) term a "phase theory." It is as though an initial process of engagement between counselor and client must be explored before much productive interaction can occur. This writer chooses to call this phase of counseling the "negotiation period." Apparently only from one-half to two-thirds of the typical clientele of most counseling facilities survive this negotiation stage (Blocher, 1967, p. 6).

Perhaps the "negotiation period", which Blocher (1967) associates with high client mortality, is the period during which the client tries to find out what the therapy situation is all about, i.e. what the therapist expects and what he, the client, is supposed to do. The drop-out client has frequently been characterized as "resistant," or "unamenable to psychotherapy." However, another explanation is suggested by Goldstein, Heller, &

Sechrest (1966), namely that limited experience may contribute to the appearance of "resistance" in the client substantially more than actual unwillingness.

The effects of "limited experience" are not peculiar to psychotherapy. In several studies involving perceptual-motor learning, Garner (1962) reported that perceptual anticipation could affect the subject's learning and performance. He cited several studies which lead to the conclusion that uncertainty and the inability to anticipate or predict in an unfamiliar situation consistently results in poorer performance.

The reduction of the client's uncertainty about therapy is a prime responsibility of the therapist, according to Lennard & Bernstein (1967). They believe that teaching an individual how to be a client and what to expect from a therapist is an important part of therapy, and that the process of therapy will be disturbed if the therapist does not take time in the early sessions to prepare the client in his role as client.

It is quite possible that many clients, out of a need to reduce the ambiguity of the therapy situation, struggle for information and cues to give meaning to their behavior, but are many times frustrated in this struggle. It would be reasonable to assume that a client who is faced with continual role frustration will not return to the therapy situation.

Several authors have suggested that it would be beneficial to the client to provide the client with advance information about the behaviors which the therapist expects (Hoehn-Saric, Frank, Stanley, *et alii*, 1964). If the information is not specifically given, the client is likely to take whatever information is available through contact with the therapist and other cues, and formulate his own meaning of the therapy situation. This meaning may emanate more from the client's uncertainty and fear than from an accurate perception of the therapy situation, and the result can easily be the client's internal decision to discontinue therapy. The therapist may perceive the client as lacking motivation.

"Some patients who appear to lack motivation for treatment may be capable of profiting from psychotherapy if they are taught what to expect, if they understand the rules of the game" (Orne & Wender, 1968, p. 1202). This study focuses on providing potential clients with information about the expected behavior during the initial contact with a therapist, and the effect of this information on the client's behavior.

Need

The literature contains sufficient research to strongly support the notion that pretherapy information

does positively affect the behavior of clients during therapy. The issue at hand is not whether pretherapy information is effective, but rather what kinds of information are needed, what methods of providing the information are most effective, and to whom should the information be presented. This study will attempt to pursue some aspects of Sanford's (1953) question: "...which people, in what circumstances, responding to what psychotherapeutic stimuli."

Investigators who studied the effects of providing clients with information about the expectations and the process of psychotherapy have used a wide variety of techniques. The basic techniques used include transmitting the information to the client verbally, by written materials, by having the client listen to an audio recording of information, view a video recording of "good" and "bad" client behaviors, and various combinations of these approaches. Several of these methods will be considered further in the Review of the Literature in Chapter II.

The method used to communicate the information to the client is an important consideration in pretherapy training. This investigator, however, will not pursue methodological questions in this study. The direction of investigation will be to focus on the content of the pretherapy information, and certain characteristics which

may affect the client's attention to the information, and subsequent performance in an interview.

One important variable which contributes to the success of psychotherapy, according to Orne & Wender (1968), is the extent to which the client understands his role as a client, and is able to fulfill that role. Certain characteristics of the pretherapy information may affect the client's ability to fulfill his role as client.

A key characteristic of psychotherapy is the client's behavior (Orne & Wender, 1968). The client must exhibit frequent, verbal behavior if therapy is to take place. To assist the client in his verbal task, and to help the client and the therapist avoid frustration and dissatisfaction, Orne & Wender (1968) suggest that the client be prepared for the therapeutic interaction by means of a process called "anticipatory socialization." This process essentially enables the client to anticipate the specific therapy interaction, to know what responses the therapist will expect, and to give the client some immediate idea of what therapy is about.

Providing clients with advance information is not a guarantee that the clients will be able to profit from psychotherapy. The client may still resist therapy. However, providing clients with advance information may greatly alleviate client and therapist frustration which

may result from the client's ambiguity about the therapy situation, and particularly the client's role in that situation.

Modeling has frequently been used to prepare clients for therapy. The content of the modeling and the characteristics of the model have been varied and investigated under a variety of conditions. Some studies have suggested that model characteristics are important in eliciting imitative behaviors from observers (Mowrer, 1950; Sears, 1957; Asch, 1948; Lefkowitz, Blake, & Mouton, 1955; Bandura & Huston, 1961; Bandura, Ross, & Ross, 1963; Burnstein, Stotland, & Zander, 1961; Stotland & Patchen, 1961). In a recent investigation, Doster & McAllister (1973) reported more self-disclosure from subjects when the model was identified as having clinical expertise than when the model was attributed peer status. The investigators presented identical modeling content to two groups of subjects, identifying the model to one group as an experienced professional, and identifying the same model to a second group as a peer. The higher status of the model elicited more self-disclosure from subjects than did the lower status of the model.

The results of the Doster & McAllister (1973) study raise a question regarding the important ingredients of effective therapy pretraining. Their study suggests that

the effectiveness of pretherapy training may be related to more than an accurate presentation of what the client is expected to do in the therapy session. As suggested by the Doster & McAllister (1973) study, is the status of the model vital to improving subjects' imitation of modeled behaviors? In the modeling of therapy behaviors, is the status of the model as important, more important, less important than the content of the modeling?

In order to prepare clients as adequately and efficiently as possible, more information is needed about the importance of certain model characteristics. Knowledge of the effects of these variables upon the actual interview behavior of the client may be helpful in making pretherapy training more effective.

Purpose

The purpose of this study is to investigate the importance of modeling content, status of the model, and status of the therapist in pretraining subjects to self-disclose in an actual interview with a therapist. The main effects of high versus low self-disclosure of the model, high versus low status of the model, and high versus low status of the therapist are investigated. Several interactions are also investigated for first and second order interaction effects.

Hypotheses

The first three hypotheses are related to the main effects of the three independent variables--level of self-disclosure of the model, model status, and therapist status.

1. Subjects who are exposed to a high degree of model self-disclosure self-disclose more than subjects who are exposed to a low degree of model self-disclosure.

2. Subjects who are exposed to a high status model self-disclose more than subjects who are exposed to a low status model.

3. Subjects who are interviewed by a high status therapist self-disclose more than subjects who are interviewed by a low status therapist.

The following two hypotheses are related to interaction effects of the independent variables.

4. Subjects who are exposed to a high degree of model self-disclosure and a high status model self-disclose more than subjects who are exposed to a low degree of model self-disclosure and a low status model.

5. Subjects who are exposed to a high degree of model self-disclosure, a high status model, and a high status therapist, self-disclose more than subjects who are exposed to other second order combinations of

independent variables.

Theory

Miller & Dollard, Mowrer, and Bandura are the primary theorists who have contributed to a theoretical understanding of the process of learning through modeling. The theoretical explanations of each of the theorists will be considered briefly.

Miller & Dollard

Miller & Dollard (1941) offered an explanation of imitation learning in their theory of matched-dependent behavior. Matched-dependent behavior consists of a drive, followed by a cue, followed by a response, which is followed by a reward. The matched-dependent theory proposes that a model's behavior acquires a reward value when the observer matches the model's behavior and the observer's imitation of the model's behavior is followed by a reward. Matched behaviors can generalize to other situations in which the behavior was imitated and rewarded. The more similar the situation, the more the transfer is likely to occur.

Miller & Dollard's (1941) theory of matched-dependent behavior accounts for the learning of behaviors when these behaviors are matched by an observer. However,

since direct reinforcement seems to be a necessary ingredient in the learning process, the matched-dependent theory is not able to explain novel responses, such as those which might occur as a result of modeling. Miller & Dollard hold that even the observation of the model receiving reinforcement for the modeled behavior has no effect upon the imitation of modeled behavior. Miller & Dollard (1941) would argue that if imitation occurred, direct reinforcement was present.

Mowrer

Mowrer deviated from Miller & Dollard's (1941) position and introduced the concept of empathic learning. According to Mowrer (1960), empathic learning occurs when the observer sees the model being reinforced, anticipates a similar consequence to the behavior exhibited by the model, and imitates the model's behavior "in hopes" of achieving the same or a similar reward. In empathic learning, the consequence of the model's behavior takes on a reward value. Miller & Dollard (1941) attribute reward value to the model's behavior only when the observer imitates the model and actually receives a reward.

Bandura

Bandura (1962, 1965b) argued that neither Miller & Dollard nor Mowrer adequately accounted for the learning

of modeled behaviors which occurs in situation in which the observer makes no response, and neither the model nor the observer receives a reward. Bandura (1969) divided the process of learning modeled behaviors into two phases, acquisition and performance, and stated that the two phases are influenced by different variables. The acquisition of a matched behavior "results primarily from stimulus contiguity and associated symbolic processes, whereas the performance of observationally learned responses will depend to a great extent upon the nature of reinforcing consequences to the model or to the observer" (Bandura, 1969, p. 128). The variables or conditions under which a modeled behavior is learned are not the same conditions under which the observer performs the modeled behaviors. In the study involving children observing a filmed model of novel responses, Bandura (1965b) demonstrated that learned behaviors would not be performed unless the reinforcement conditions were sufficient to elicit the behaviors.

Perhaps Bandura's most radical departure from the positions of Miller & Dollard (1941) and Mowrer (1960) is his proposition that behaviors can become part of the observer's repertoire without actually being performed or rewarded at the time they are observed. Miller & Dollard (1941) hold that the observer has to experience

reinforcement in order for imitation to occur. Mowrer's (1960) opinion is that the observer has to see the model being reinforced in order to imitate the behavior.

Bandura (1963, 1965b) proposes that imitation can occur even though the model is not reinforced for his behavior, and the observer is not immediately reinforced for imitating the behavior. His reasoning is that reinforcement can be experienced vicariously. "The anticipation of positive reinforcement for matching responses by the observer may...indirectly influence the course of observational learning by enhancing and focusing observing responses" (Bandura, 1969, p. 120).

Bandura's notion of *observational learning* is that it can lead to novel responses, i.e. vicarious reinforcement conditions are capable of eliciting novel responses. Subjects in the present study were asked to self-disclose. It is quite likely that all of the subjects in the study have a history of self-disclosing behavior. Rather than have the effect of eliciting novel responses, it is more likely that the effects of the modeling will have a *response facilitation effect* (Bandura, 1969) upon the subjects. Bandura's concept of *vicarious reinforcement* provides the theoretical framework for the occurrence of behavioral imitation under conditions of no reinforcement.

Overview

In this study the effects of three independent variables on subject self-disclosure during the initial interview with a therapist were investigated. The three independent variables were; 1) level of modeled self-disclosure (high versus low), 2) status of the model (high versus low), and 3) status of the therapist (high versus low). Following Bandura's (1969) concept of vicarious reinforcement, subjects were placed in nonreinforcement modeling conditions, and asked to perform behaviors similar to those which were modeled.

In Chapter II, the literature pertinent to pretraining clients for counseling and psychotherapy is reviewed. Chapter III contains a description of procedures, subjects, hypotheses, measures, analyses, and the experimental design. In Chapter IV, the analyses of the data are presented, and the results are interpreted for each of the hypotheses. A summary of the study, discussion of the results and their implications for continued research can be found in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

Research efforts directed at training clients in one or more therapy variables have generally investigated the following: 1) the extent to which pretrained clients fare better in psychotherapy than untrained clients; 2) the variables which are amenable to a pretraining procedure; and 3) the procedures that best accomplish the pretraining. In reviewing the literature, each of the three research directions will be considered.

Preconceptions About Therapy

A variety of pretherapy attitudes and expectations, not all of which are helpful to either the client or the therapist, are generated by cultural overtones regarding therapists, by public conceptions about mental illness, and by the "mystery" of what actually happens during the therapy process. Few potential clients are clear about why they enter therapy, or what to expect (Frank, 1961). Perhaps ambiguity is one of the main factors contributing to the various preconceptions which clients bring with them to the initial therapy encounter (Bordin, 1955). The client's uncertainty about the therapist's expectations makes the therapist's first task imperative--acquainting

the client with the process of therapy, clarifying the therapist's expectations of the client, and structuring the task before the client (Frank, 1961; Bordin, 1955).

Client Anxiety

The anxiety which clients bring to psychotherapy is not, of itself, an inhibiting force to the process of change. There is evidence to support the notion that clients who show anxiety are more likely to profit from the therapy experience than clients who show a lack of anxiety (Frank, 1961). However, a client who is overwhelmed by anxiety is likely to direct all of his energies in self-preservative efforts, leaving little or no energy for therapeutic movement (Bordin, 1955). If the chief, immediate objective of clients is to survive in the highly ambiguous therapy situation, they are not likely to focus on the task of changing their behavior. Excessive ambiguity leads to excessive anxiety which detours the client's energies from the purpose of coming to therapy.

Need for Structure

Much of the client's anxiety during the initial session of therapy can be thought of as an attempt to create structure, to make meaning out of his experiences in the therapy situation. The need to organize novel

experiences into some meaningful structure is not peculiar to the novice client in therapy. The human cognitive processes seem to naturally organize and incorporate novel experiences into some meaningful and useful concept. When a client is not able to make sense of the variables he perceives before him, increased anxiety and a sense of impotence is likely to result (Garner, 1962).

The search for structure seems to be such a dominating characteristic of behavior that structure will be created if none exists (Garner, 1962). If the client has to structure the therapy situation without new information, he is likely to be frustrated in his attempt to find meaning in what is before him, and the therapist's task becomes increasingly complicated. If no meaning is offered, the client will decide on his own what meaning to attribute to the therapy situation. The meaning that the client attributes may be formed from variables which the therapist considers irrelevant. Consequently, a situation can be generated in which the therapist's meaning and the client's meaning about the therapy situation are highly discrepant.

Effectively prestructuring the therapy process by providing advance information to the client about what is expected of him and what he can expect from the therapist is likely to reduce the client's ambiguity and anxiety,

free more of the client's energy for immediate, therapeutic movement, and ease the therapist's task in assisting the client in reaching his personal goals. Anxiety about personal difficulties can be a positive ingredient in helping the client to solve the personal difficulties. However, anxiety about the therapy situation itself is not productive, and simply detains the client from the therapeutic task before him. In some cases, anxiety about the therapy situation may prevent the client from any therapeutic growth.

Perceptual Anticipation

Studies on perceptual anticipation, i.e. having advance information about a coming event, suggest that performance on a task can be improved when the subject is given some information about the task before it is encountered (Leonard, 1954). Poulton (1957b,c) found that subject performance on a task increased significantly when the subject was given advance information about the stimulus and the required response. Garner (1962) was of the opinion that even passive observation of a stimulus sequence may be of great value to the subject.

Specific to psychotherapy, Orne & Wender (1968) translate perceptual anticipation (Leonard, 1954) into the concept of "anticipatory socialization." These authors believe that inadequate preparation about role

expectations and treatment expectations in psychotherapy can lead to anxiety, resistance, discontent, hostility, and impede the effects of therapy.

Low Prognosis Clients

Inadequate preparation for psychotherapy may show its effects most strongly in the low prognosis client, usually resulting in an early termination from therapy (Warren & Rice, 1972). Traditionally, the low prognosis type client has been regarded from the onset as poorly motivated for therapy. Some recent studies have offered an alternate explanation, suggesting that the low prognosis type client may be more unprepared than he is unwilling. Heller (1969) reports that many clients do not have the behaviors available to them which are necessary for successful therapy. Limited experience may appear as resistance, but resistance may in fact be a lack of appropriate in-therapy behaviors (Goldstein, Heller, & Sechrest, 1966). Heller (1969) supports the idea that providing unprepared clients with an opportunity for observational learning in a benign therapeutic environment will serve to overcome these behavioral deficiencies.

Direct Training

Carkhuff (1971) suggests that the most direct and effective way to help clients is to train them in those

behaviors which will help the client move to a higher level of functioning. Such training involves providing the client with an understanding of the treatment process and the client's role in it (Carkhuff, 1969). Carkhuff's concept of direct training is a step beyond client preparation for psychotherapy. It is a form of therapy itself. Pierce & Drasgow (1969), using chronic neuro-psychiatric patients, Minuchin, Chamberlain & Graubard (1967), using disturbed, delinquent children, Carkhuff (1970), using ghetto school children, and Gittelman (1965), using aggressive, acting-out children, have demonstrated the effectiveness of using direct client training to teach appropriate social behaviors and to increase interpersonal skills.

Example Setting

Kell & Burrow (1966) view modeling as essentially example setting in which the therapist stimulates thinking, feeling, and risk-taking in clients, which leads not to a complacent imitation of the therapist, but to independent and creative development for the client. Modeling is aimed not so much at telling the client what he should be, but more at demonstrating the process which the client can use to facilitate change.

Theory

Some of the research efforts which have direct bearing on theoretical constructs related to learning through modeling are presented below. The theories themselves were presented earlier in Chapter I.

The matched-dependent behavior theory of Miller & Dollard (1941) seemed to account for the learning of matching responses (drive-cue-response-reward), but did not explain the acquisition of novel responses. Mowrer (1960) introduced the concept of *empathic learning* which did not require that the observer be reinforced for performing the modeled behavior. Mowrer predicted that the observer would imitate the behavior in anticipation of receiving the reward which the model received. Bandura was not satisfied with either Miller & Dollard's or Mowrer's explanations. Bandura (1962, 1965b) pointed out that neither of the two preceding theories accounted for the occurrence of imitation in situations where the observer made no response, or neither the model nor the observer were reinforced.

Bandura (1969) divided learning into an acquisition and a performance phase, and theorized that behaviors can become part of the observer's behavioral repertoire without actually being performed or rewarded at the time they are observed. Flanders (1968) and Berger (1966) found support

for Bandura's position. However, Kelly, Thibaut, & Mundy (1962) argued that modeling conditions are not without reinforcement. They propose that an implied or eventual reward situation may exist when an observer is exposed to a consistent pattern of responses. Their contention is that persisting behavior, even in the absence of apparent reward, suggests that some reward is occurring or will occur.

The vicarious reinforcement effect is implied by Stotland (1969) in the situation in which an individual is perceived as potentially being effective in providing help, and the mere presence of the individual has a rewarding effect upon the perceiver.

Rosenbaum & Arenson (1967) and Gilmore (1967) suggested that the very act of imitation, irrespective of apparent reward, has a reinforcing effect. Their reasoning is that, in the past, rewards were received for doing what others did. These rewards occurred frequently enough that the S-R imitation chain itself now holds the promise of a reward, even though none may be apparent in the immediate situation. (It is also possible that the apparent reward is not the reward eliciting the modeled behavior from the observer.)

If it can be assumed that no response is emitted or continued without reinforcement, the difficulty of explaining why some behaviors are acquired or maintained

without apparent reinforcement lies partly in the present inability of researchers to identify the multitude of reinforcers to which individuals differentially respond. Complicating the identification of reinforcers is the fact that reinforcers do not always remain constant. They seem to shift through the developmental stages of human growth. Even within a stable period of human development, reinforcers seem to shift frequently, sometimes from one day to the next.

Perhaps Miller & Dollard (1941) are accurate in their statement that imitation does not occur without direct reinforcement, and that it is our present inability to identify reinforcers that lead us to explain imitation behavior by way of such constructs as *vicarious reinforcement*. However, for the present, the theoretical formulations of Bandura (1969), particularly with respect to the acquisition and performance phases of learning, provide the strongest framework for investigating modeling and behavioral imitation.

Role Induction Interview

Based on the *anticipatory socialization* concept (Orne & Wender, 1968), Hoehn-Saric, *et alii* (1964) designed a study to impart appropriate expectations about certain aspects of psychotherapy to patients of an outpatient clinic. The procedure, called Role Induction Interview,

consisted of an interview between patient and psychiatrist before assignment to a therapist for actual therapy. The Role Induction Interview was an informal exchange between patient and interviewer in which the task of the interviewer was to stress points which seemed appropriate to each patient, but to include the following points in each interview with each patient: 1) a general exposition of psychotherapy; 2) a description of what was expected from the patient and what the patient might expect from the therapist; 3) a preparation for typical events in the course of therapy, such as resistance, etc.; 4) an idea of what the patient could realistically expect in terms of improvement within a specified period of time.

One of the outcome expectations was that the patients who received the Role Induction Interview would present themselves to their therapists as more favorable candidates for therapy, evoking a more positive response from therapists, and in turn resulting in a more favorable outcome for the patients. The therapy sessions were tape recorded and analyzed. The authors concluded that the Role Induction Interview patients showed significantly more "good therapy patient" behaviors with more improvement from treatment than the patients who did not receive the Role Induction Interview. In addition, the authors reported that an analysis of the tapes from the first sessions showed that therapists gave control patients

significantly more role induction than was given to the patients who received the Role Induction Interview.

Hoehn-Saric and his associates (1964) were not concerned with possible interaction effects which may have contributed to the effectiveness of the Role Induction Interview. However, they did raise the question of the importance of status. A senior psychiatrist, presented as senior to the therapists who conducted therapy, gave the Role Induction Interview to all patients. Whether a high status individual is essential to the effectiveness of the Role Induction Interview is a question the authors raised for further study.

Vicarious Therapy Pretraining

Vicarious Therapy Pretraining (VTP) is the name given by Truax & Wargo (1969) to a procedure designed to provide clients with cognitive and experiential structuring of "good" therapy behaviors. In VTP, clients are exposed to a thirty minute tape recording of excerpts of "good" patient in-therapy behavior. Vicarious Therapy Pretraining was used by Truax & Wargo (1968) on a mildly disturbed, neurotic outpatient group, hypothesizing that patients receiving VTP prior to group therapy would show a greater evidence of constructive personality change than patients not receiving VTP, as measured by a battery of ten tests. The study was conducted over twenty-four therapy sessions.

Truax & Wargo (1968) reported that "There is a striking tendency for VTP to show therapeutic advantage over NVTP" (p. 442). On other measures used in the study, the authors concluded that the subjects in the VTP condition self-explored more than NVTP subjects, and that this increase in self-exploration was positively related to therapeutic outcome.

Therapeutic Reading

Bibliotherapy is a form of therapeutic reading which has been used with a variety of clients, and with limited success (Wolberg, 1954). Reading has been introduced into several pre-therapy training studies as another means by which a client could be prepared for therapy. The emphasis on therapeutic reading is not as an alternative to therapy, but as a means to facilitate the client's participation in the psychotherapy process. Sauber (1971) conducted a study in which he compared the merits of therapeutic reading with two other pretherapy training procedures, Role Induction Interview and Vicarious Therapy Pretraining. Thirty-six female clients were randomly assigned to one of four experimental conditions: 1) Role Induction Interview, 2) Vicarious Therapy Pretraining, 3) therapeutic reading, 4) no treatment.

In the role induction interview condition, nine subjects met in a group, as a group, with the interviewer,

and were given a verbal introduction and description of the counseling process. In the vicarious therapy pretraining condition, Sauber reported that subjects were shown a videotape which focused primarily on the dialogue, showing what actually took place in a "live" therapy session. This investigator reviewed the transcript of the videotape, and disagrees with Sauber's contention that the vicarious therapy pretraining condition focused primarily on in-therapy dialogue. It was this author's impression that the videotape was primarily a monologue of instruction of "good" client behavior. Consequently, this author questions the appropriateness of labeling this treatment condition "vicarious therapy pretraining."

In the therapeutic reading condition, subjects were provided with instructions related to the counseling process, and examples of therapy dialogue. It was Sauber's expressed intent to keep the content of the pre-training constant, and to vary only the method of presenting the information. This author questions the extent to which Sauber maintained content across methods. It is quite likely that content varied with the method, and that the treatment conditions were methodologically contaminated.

Sauber concluded that the Role Induction Interview was the most effective method in preparing clients for the

therapy process. The Vicarious Therapy Pretraining and therapeutic reading conditions were statistically significant over the control group on several measures. His conclusions were based on self-reports elicited through questionnaires. Apparently all subjects receiving some kind of treatment reported that their experience was "worthwhile". It is not clear what meaning "worthwhile" can have in this study. Since subjects were measured before therapy actually began, "worthwhile" apparently is not related to the subsequent therapy sessions. The subjects had no way of evaluating how helpful the pretraining might have been for therapy, since the subjects had received only the pretraining at the time that the measures were taken. Herein lies one of the major difficulties in assessing the meaning of this study. Sauber investigated the effects of several pretraining methods upon the self-reports of subjects. The reports which the subjects gave were independent of their subsequent experience in therapy, because their reports were made before they actually entered therapy.

The statistical findings of Sauber's study require further analysis. In the Role Induction Interview, Sauber presented his treatment to subjects in groups of three. He failed to take account of this unit of treatment and analysis in his statistical procedures, thus violating

the independent assumption necessary for the statistical methods which were used to analyze the data. It is quite possible that the probability of a Type I error is greater than assumed.

Film Modeling

Whalen (1969) concluded that modeling with a video-tape alone was not sufficient to produce interpersonal openness in leaderless groups. Male college students participated in leaderless, group discussion after receiving one of four treatment conditions: 1) a film showing interpersonal openness, accompanied by written, detailed instructions (F-DI); 2) the film of interpersonal openness, accompanied with minimal instructions (F-MI); 3) detailed instructions only (DI); 4) minimal instructions only (MI). Whalen concluded that the F-DI groups exhibited more interpersonal openness than the other groups. Whalen further concluded that film modeling alone is not enough to occasion imitation of complex verbalizations.

Whalen's latter conclusion is difficult to follow on the basis of the study, since there was no film only treatment condition in the study. Whalen apparently equated the F-MI condition with a film only condition. However, in doing so Whalen did not allow for the possible negative effects of minimal instructions which may have offset the positive effects of the film only condition. It

is quite possible that the film only condition produced the effects which Whalen attributed to the F-DI condition.

Ohlson (1970) reported results from film modeling which were not supportive of Whalen (1969). Videotapes of peers were presented to male subjects who were engaged in sensitivity training. In one tape, the peer models were emitting maximum levels of self-disclosure. In a second tape, peer models were self-disclosing only minimally. A third group of male subjects served as a no treatment group. The sensitivity training session which followed exposure to the films was itself videotaped and rated for level and content of self-disclosure. Ohlson concluded that a single training session using only film models was sufficient to elicit significantly higher levels of self-disclosure.

Audio Modeling

In an analogue study, Greenberg (1969) found support for the notion that information about the therapist given prior to an actual therapy experience can affect the therapy relationship. To four different groups, Greenberg presented information about the therapist's warmth or coldness and experience or lack of experience. All four groups listened to the identical audio tape. Greenberg showed that information about therapist characteristics can significantly affect the therapy relationship.

Anstett (1971) concluded that subjects who are given information about appropriate client role behavior will disclose themselves more to their counselors, explore themselves more deeply, better express their problems to their counselors, and demonstrate more appropriate role behavior during the first counseling interview.

Liberman (1970) investigated the effects of modeling on certain patient behaviors--attraction-to-the-therapist and self-disclosure. His subjects were male, alcoholic inpatients. Liberman concluded that high disclosure modeling behavior resulted in significantly greater self-disclosure than either low disclosure modeling, or no modeling. He was not able to report significant results regarding attraction-to-the-therapist. Given the procedures used in this study, Liberman's results suggest that self-disclosure is easier to model than attraction-to-the-therapist.

Klepper (1971) showed that instrumentation may offset any actual differences which result from treatment conditions. His intent was to increase self-disclosure through audio tape modeling. However, in collecting his data, Klepper attempted to have his subjects exhibit self-disclosing behavior to an unresponsive interviewer.

In a study aimed at increasing self-exploration, Goi (1971) exposed university counseling center clients to one of three treatment conditions: 1) a nine and one half minute audio tape which contained instructions and examples

of essential concepts and behaviors related to the process of self-exploration; 2) an eleven and one half minute audio tape of general counseling information; 3) a no-treatment condition. Goi found no treatment differences, but found that females self-disclosed significantly more than males. However, his study showed an attempt to measure treatment affects on actual clients after an actual interview with a therapist.

In an attempt to improve the effects of time-limited group psychotherapy, Truax, Shapiro & Wargo (1968) wanted to improve self-exploration in clients by giving them examples of other clients engaging in high levels of expected in-therapy behavior. The treatment consisted of exposure to audio recordings of several segments of actual group therapy interactions involving relatively deep exploration of problems and feelings. The subjects were groups of hospitalized mental patients and groups of male juvenile delinquents. The authors concluded that the treatment (vicarious therapy pretraining) had its greatest effect upon the patients' concepts of what they ought to be. The training proved to be effective in teaching the patients what the therapist expected from patients when they described themselves, but it apparently did not have much effect on the patients' self perceptions after psychotherapy.

In a follow-up study with a group of outpatient neurotics, Truax & Wargo (1969) found that exposing outpatient neurotics to a thirty minute VTP tape recording (vicarious therapy pretraining) prior to the first session showed a greater improvement on twenty-one of twenty-three measures of outcome than non-VTP patients.

Warren & Rice (1972) focused on typically resistant and high drop-out clients, and achieved positive results when these clients were given additional training and intervention. Thoresen & Krumboltz (1967) significantly affected the information seeking behavior of high school students interested in receiving counseling about their future educational and vocational plans. These authors used modeling procedures. Zerfas (1965) found modeling procedures to be effective in teaching role expectations to both hospitalized psychotics and college undergraduates.

Model Characteristics

Doster & McAllister (1973) investigated the effect of the "status" of the model upon the imitation of self-disclosing behavior of subjects. Based on the research findings presented by Bandura (1969), these authors hypothesized that a model identified as having professional training in psychotherapy would elicit greater imitation of modeled behavior than would a model identified as a peer.

Thirty, male, undergraduate psychology students listened to a tape recording of a model who disclosed feelings of discomfort in social situations. Ten subjects were told that the model was an experienced therapist, ten subjects were told that the model was a peer, and ten subjects did not listen to the audio tape. The tape was approximately four minutes long.

After treatment, experimental and control subjects were escorted to an interviewer's office and were requested to spend about four minutes self-disclosing on each of six topics (spare time, fear, shame and guilt, sensitivity, self-esteem, and sexual gratification). One interviewer interviewed all subjects. He served primarily as a time-keeper and was instructed to avoid verbal and non-verbal cues to the subjects. The interview topics were presented sequentially to the subjects on 3 x 5 cards. The interviews were tape recorded.

An analysis of the tape recordings of the subjects' self-disclosures showed that both experimental conditions (high and low status) resulted in significantly more self-disclosing than the control group condition. Further, the authors reported that the higher status model condition elicited significantly more self-disclosure from subjects than the lower status model, even though both disclosures were identical. The authors attributed the difference to the characteristic of "status" which differentiated the

model to the two experimental groups. They stated that the training and experience associated with the professional status enhanced the value of the modeled behavior.

The Doster & McAllister (1973) study underscores the need for users of modeling procedures to attend more closely to the characteristics of the model. It also raises the question of the relationship between characteristics of the model and the content of the modeling. Is one more important than the other? Is it possible for one to negate the effects of the other? For instance, would knowledge that the model is of low status have a detrimental effect upon an otherwise effective modeling procedure? Does the status of the interviewer significantly affect the subject's self-disclosing behavior?

Self-Disclosure

Although a thorough review of the literature on self-disclosure would not be appropriately included with this study, it does seem appropriate to mention the role that self-disclosure in psychotherapy is given by several prominent writers.

Most of the pretherapy training studies published have centered on the task of facilitating the client's self-disclosure to the therapist early in the therapeutic relationship. Jourard (1964) states that there is a curvilinear relationship between self-disclosure and

mental health. The optimum amount of self-disclosure is undetermined. However, too much or too little self-disclosure seems to be associated with maladaptive functioning. For Jourard (1964) the quantity and quality of self-disclosure is related to the presence of pathology, and the process of therapy. With respect to the presence of pathology, Jourard (1964) states, "Every maladjusted person is a person who has not made himself known to another human being and in consequence does not know himself" (p. 26). With respect to the process of therapy, Jourard (1964) states, "An operational analysis of what goes on in counseling and therapy shows that the patients and clients discover themselves through self-disclosure to the counselor" (p. 24). The right amount of self-disclosure is a symptom of a healthy personality. "A person who displays many of the other characteristics that betoken healthy personality will also display the ability to make himself fully known to at least one other significant human being" (Jourard, 1964, p. 25).

For Mowrer (1966), self-disclosure is "confession" which allows the individual to check troublesome impulses, take responsibility for his guilt, and allow him to reintegrate himself with his family or community. Mowrer believes that unless secrets are unveiled which generate internal conflict, the internal conflict cannot be resolved.

Self-disclosure is an ongoing process of "confession." It is followed by some form of "penance", which leads to a reintegration of the self with the environment (family, neighborhood, community, etc.). It is a process of emotional honesty and uncovering of misdeeds, followed by behavioral actions which restore integrity in interpersonal relationships.

Without self-disclosure, one does not know oneself, and is incongruent (Rogers, 1959). The therapy process is one of exploring and coming to know oneself through self-disclosure. An accurate experiencing of oneself leads to a state of congruence. Truax & Carkhuff (1965) found that constructive personality change was directly related to the degree of self-disclosure.

Self-disclosure is an integral part of the theories of psychotherapy mentioned above. Self-disclosure was also used extensively by Freud (1920) in uncovering repressed and unconscious material through free association.

Summary

The use of modeling procedures to maximize the effectiveness of psychotherapy have their strongest theoretical foundations in Bandura's (1965) research on behavioral imitation under vicarious reinforcement conditions. While the theoretical explanations of

modeling and imitated behaviors are still debated (Miller & Dollard, 1941; Kelley, *et alli*, 1962; Bandura & McDonal, 1963; Marston & Kanfer, 1963; Kelley, Thibaut, Radloff, & Mundy, 1962; Wheeler, 1966; Willis, 1966; Stein, 1967; Walters & Amoroso, 1967; McMains & Liebert, 1968), researchers have demonstrated that providing clients with advance information about the process of therapy has facilitated clients' participation in the therapy process. Pretherapy information can serve to establish "the rules of the game" (Orne & Wender, 1968), reduce the ambiguity of what is expected, and positively affect the client's participation (Lennard & Bernstein, 1967).

Several methods have been used to pretrain clients for therapy, such as verbal explanations (Hoehn-Saric, *et alli*, 1964), written instructions (Sauber, 1971), video-tape modeling (Ohlson, 1970), audio tape modeling (Anstett, 1971), role rehearsal (Doster, 1972), and a combination of procedures (Whalen, 1969). The results of these investigations indicate that pretherapy training can be an effective way of facilitating the client's participation in the therapy process.

The majority of investigations have dealt primarily with the client's imitation of the verbal behavior modeled. However, investigations related to characteristics of the model have been reported as early as 1948 (Asch), with the

conclusion that some characteristics of the model seem to account for differences in behavior imitated by clients. Bandura & Huston (1961), Hicks (1965), Hetherington & Frankie (1967), Klinger (1967), and Bandura (1969) reported that various model characteristics differentially affected responses imitated by observers. Doster & McAllister (1973) found that the status of the model significantly affected the self-disclosure of observers. The study by Doster & McAllister (1973) raised several questions regarding the relationship between the behaviors modeled and the model characteristic of status.

This study is investigating the main and interaction effects of self-disclosure of the model, model status, and therapist status. Each of the independent variables have two levels, high and low. The use of multiple dependent measures provide an opportunity to observe possible effects of the independent variables on the topics presented for self-disclosure.

CHAPTER III

DESIGN OF THE STUDY

Sample

The population for this study consisted of single, undergraduate, female students who resided on the campus of Michigan State University, East Lansing, Michigan, during the fall term of 1973. The subjects who participated in this study resided in one of three residence halls--Shaw, Fee, or McDonald. All three halls were within short walking distance to the offices of the Fee Counseling Center, the site of the study.

Subjects for this study were solicited from groups of students who were interested in taking a personality test under the direction of the University Counseling Center. The study itself was not associated with the personality test. Prior to the administration of the personality test by Counseling Center personnel, the investigator was permitted several minutes to ask for the students' cooperation. If interested, students were asked to sign a written agreement (personal commitment contract). After the signed agreements (Appendix D) were collected, the investigator left the room. Subjects for this study were obtained in the above manner over a

period of approximately six weeks.

At the time that subjects were asked to participate in this study, they were informed that the study was a research project for a doctoral dissertation. They were told that the study would investigate several variables which were thought to be important to the process of meaningful communication. They were informed that the investigator was particularly interested in the communication that occurred between a client and a therapist. Their involvement in the study was explained very generally by informing them that they would receive some information, and then would be asked to give some information. Nothing else regarding the study was made known to the subjects at the time they were asked to participate. Several days prior to the study, subjects were notified in writing of the exact time they were to be present.

Sample Characteristics

A total of 100 undergraduate female subjects agreed to participate in the study. These 100 subjects were given written notification of the exact time they were scheduled to participate. The notices were delivered four days before the day of the study. At the time that subjects were recruited, they were told that their participation would take approximately one-half hour.

Of the 100 subjects who originally agreed to participate, fifty nine actually kept their agreement and were present for the study. In order to have equal observations (7) in each of the eight cells of the variable matrix, it was necessary to randomly exclude three subjects. The total number of subjects for this study was fifty six. Twenty seven were freshmen, twelve were sophomores, thirteen were juniors, and four were seniors. Two were 17 years of age, twenty seven were 18, twelve were 19, eleven were 20, and four were 21.

Generalizability

In generalizing the results of the study to other populations, the specificity of the population from which the sample for this study was taken must be considered (Cornfield & Tukey, 1956). The subjects in this study were individuals who expressed an interest in learning something about their own personalities, as evidenced by their volunteering to take a personality test, and have the results interpreted to them. Those who signed the agreement to participate probably had an interest in meaningful communication, or were hopeful of learning something about themselves, or were willing to be helpful to the investigator. The fifty six subjects who actually participated in the study were probably highly motivated. For these subjects, participation in the study meant a

disruption of their Saturday morning, sometime between 8:30 A.M. and 1:30 P.M. It can be assumed that the level of motivation of these subjects was greater than the motivation of individuals of a similar age range and academic status.

Procedure

Subjects were scheduled to participate in the study for one-half hour blocks of time, beginning at 8:30 A.M. The last group of subjects was scheduled for 1:00 P.M. The experimental procedures were able to accomodate eight subjects during each one-half hour block of time, and the entire study was set to include ten such groups of eight subjects. The number of subjects who actually composed a group could vary from 0 to a maximum of 8, depending on how many subjects actually kept their agreement. Since a total of 100 subjects were scheduled, more than eight subjects were scheduled for each one-half hour block in anticipation that not all subjects would keep their agreement.

When subjects arrived at the place of the study, they were greeted by a receptionist who took the letter which the subjects were instructed to bring with them. This letter had been sent to the subjects several days before the study. It contained the name of the place at which the investigation would be conducted, and the time

the subject would be expected. Each subject was asked to be present ten minutes before the actual start of the study. The receptionist then had each subject sign the master schedule next to a code number (Appendix E). The code numbers had been previously assigned to experimental conditions by means of a table of random numbers (Glass & Stanley, 1970). The subject was then given a 3 x 5 card which contained the following information: 1) the time the subject was scheduled to participate in the study; 2) the subject's code number; 3) the room number in which the subject would be interviewed by a therapist; and 4) the number of the cell in the variable matrix which corresponded to the experimental conditions administered to the subject. The subjects were instructed to keep the 3 x 5 cards for the duration of the study.

Experimental Apparatus

After signing the master schedule, subjects proceeded to a large room which was a few feet away from the sign-in area. The room contained an oblong table, large enough to accomodate eight chairs. On the table were eight sets of headphones, linked to a stereo tape recorder. Four headphones were connected to the output of one half of the tape (one channel), and four were connected to the other half of the tape output (a second channel). This electrical arrangement permitted the simultaneous output

of two, different, monaural recordings of modeling content. When the subjects entered the room, two research assistants seated them at a headphone which corresponded to the modeling content to which the subject had been randomly assigned.

Independent Variable: Status of the Model

After the subjects were seated, the research assistant handed each subject a written agreement which they were asked to sign before the study began (Appendix F). Part of the agreement informed the subjects that they were completely free to discontinue participation at any time. After each subject signed the agreement, the research assistant presented each subject with written introductory comments, briefly explaining the procedures of the study. A second written page was also handed to the subjects which identified the status of the model. To some subjects, the model was identified as a graduate student, and to other subjects the model was identified as an experienced therapist (Appendices G & H). After the subjects had sufficient time to read the written material, they were instructed to put on their headphones, and the tape recorder was turned on.

Independent Variable: Self-Disclosure of the Model

By using a stereo tape recorder, it was possible to simultaneously play two monaural recordings of a model self-disclosing. One recording was fed to four headphones, and the second recording was fed to the remaining four headphones. Subjects listening to one recording had no way of knowing that other subjects were listening to a different recording.

Both recordings were made by the same male model. They were within four seconds of being the same length of time, each lasting approximately seven minutes and forty five seconds. In one recording, the male model self-disclosed to a high degree on the topic of social gatherings (Appendix A). In the second recording, the same male model self-disclosed to a low degree on the same topic (Appendix B).

The high and low self-disclosure levels of the recordings were validated before the study by the therapists who interviewed the subjects, and by the independent raters. The validation was achieved in the following manner. After the therapists and independent raters had practiced for several hours, the two self-disclosure tapes were presented with several other recordings in order to establish the degree of agreement achieved on the Self-Disclosure Rating Scale. The

therapists and raters had no knowledge that two of the recordings might be used as modeling tapes. On one tape, there was 100 per cent agreement that the model self-disclosed with a rating of 4, the highest level on the Self-Disclosure Rating Scale. On the other tape, there was 100 per cent agreement that the model had self-disclosed with a rating of 1, the lowest level of the Self-Disclosure Rating Scale.

Independent Variable: Status of the Therapist

After the subjects listened to the tape recordings of the model self-disclosing, they were given a brief set of written instructions for the interview with the therapist. The instructions identified the therapist as a graduate student (low status), or as an experienced therapist (high status) (Appendices I & J). After the subjects completed reading the instructions, they left the treatment room and proceeded to individual offices where the therapists were present.

Each subject was randomly assigned to a therapist, and this randomization was done prior to the study by means of a table of random numbers (Glass & Stanley, 1970). The therapists were instructed to turn on the tape recorder as soon as the subject entered the office. Each office had a tape recorder which was used to record the interviews. The therapist gave the subject brief

instructions (Appendix K), and the interview began.

Questionnaire

At the end of the interview, the therapists instructed the subjects to return to a table near the reception area. At this point a research assistant handed each subject a one-item questionnaire. The questionnaire was intended to assess the subject's willingness to self-disclose again to the same therapist, if given the opportunity (Appendix L). After the questionnaire was completed, the research assistant collected the questionnaire and the 3 x 5 card which had been given to the subject at the beginning of the study. A final set of comments was given to the subjects (Appendix M) which thanked them for their participation and indicated that a summary of the results could be obtained when available.

Therapists

The eight individuals who served as interviewers were employed by a Community Mental Health Board as professional therapists. Seven of the eight had experience beyond their Master's degree. The eighth had two years of experience as a professional therapist, and was in process towards a Master's degree at the time of the study. Four of the therapists were male, and four were

female. Their ages ranged from twenty three to thirty, with a mean age of twenty seven. Their professional experience ranged from one to seven years, with a mean of three years. At the time of the study, four were pursuing advanced degrees while they were employed (one in process for the Ms.W., and three for the Ph.D.). The theoretical orientations of the therapists, as indicated by the therapists themselves, were as follows: Rogerian; Humanistic; Phenomenological; Ego-Psychology; Learning theory. Some therapists indicated more than one of the above orientations.

Therapist's Functions In this study the therapists had two main functions: 1) to interview the subject; and 2) to evaluate the subject's self-disclosure on a specific topic by using the rating scale provided. As an interviewer, the primary task of the therapist was to facilitate the subject's participation in the interview. The interview was not intended nor structured to be a form of therapy for the subject.

It was the intent that the therapist serve as an attentive recipient of the subject's communications, and that ideally the subject would do all of the talking. As facilitators, the therapists were instructed to help the subject focus on whatever content the subject chose.

The therapist facilitated only when facilitation was necessary, but did not remain completely passive during the interview. Therapists were permitted to respond to the subject's request for help in making a point and to convey to the subject that the therapist understood what was being said. The restrictions under which the therapists operated are outlined in more detail in Appendix K.

After the subject's self-disclosure on the first topic was completed, the therapist left the room for approximately one minute to make the rating on the Self-Disclosure Rating Scale Score Sheet (Appendix N). The therapist returned to the room for the next topic, and proceeded as above until all three topics had been presented to the subject.

Approximately three weeks after the study was conducted, the therapists were asked to rate their own first, fifth, and tenth interviews a second time, as a check for the stability of therapists' ratings. The *intra* therapist agreement is discussed in a later section.

Independent Raters

Two independent raters were used as additional checks for the reliability of the dependent measures, and to serve as substitute interviewers if necessary. (It was not necessary to actually use the independent

raters as interviewers.)

One independent rater was male, the other was female. The male independent rater was thirty one years of age, possessed an M.A. degree in Clinical Psychology, had more than six years of experience as a professional therapist, was currently employed by a Community Mental Health Board, and was in process towards the Ph.D. degree.

The female independent rater was twenty seven years of age, possessed a B.A. degree in Psychology, had been employed more than two years as a therapist, and was currently employed by a Community Mental Health Board.

Independent Rater Functions During the study, the independent raters were seated in a private area. Each had a set of headphones which were connected to a tape recorder. Immediately after the first interview, the independent raters began to rate the first interviews which the therapists brought to them after the first subject had departed.

The independent raters used the Self-Disclosure Rating Scale to rate the tapes. The fifth and tenth interviews were also rated by the independent raters during and after the study. All ratings by the two independent raters had been completed two hours after the last subjects had been interviewed.

Training of Therapists and Independent Raters

Therapists and Independent Raters received the same training in the use of the Self-Disclosure Rating Scale. It was the intent that the independent raters serve as alternate interviewers, in the event that it was not possible for a scheduled therapist to participate or continue in the study. For this reason, therapists and independent raters were trained simultaneously.

The training manual used to train the therapists and raters in the use of the Self-Disclosure Rating Scale can be found in Appendix O. Several concepts in this training manual were borrowed from a training manual sent to the investigator in a personal communication from Joseph A. Doster (1973).

Dependent Measure

The dependent variable in this study was verbal self-disclosure, as defined and measured by the Self-Disclosure Rating Scale. The Self-Disclosure Rating Scale (Appendix C) is a modification of the Disclosure Rating Scale used by Doster & Strickland (1971), and Doster & McAllister (1973). The Disclosure Rating Scale contains seven levels, ranging from impersonal to personal content. The Self-Disclosure Rating Scale is a four level scale, ranging similarly from impersonal to

personal verbal content. The modification was made with the reasoning that the task of discriminating between seven levels was not practical. In reviewing the Disclosure Rating Scale (Doster, 1973), it was concluded that the differences between several adjacent levels were difficult to conceptualize, and presented difficulties in training individuals as they listened to actual tape recordings and attempted to apply the seven levels of the Disclosure Rating Scale. Seven levels seemed to be too much for therapists to keep in mind as they listened to subjects self-disclose. It was felt that a four level rating scale could be simpler for individuals to learn, and provide good reliability without sacrificing discrimination between impersonal and personal content.

The four levels of the Self-Disclosure Rating Scale are presented below. Level 1 represents impersonal involvement on the part of the subject, and Level 4 represents a high degree of personal self-disclosure.

Level 1.--Absence of personal involvement. The topic has been explored in an impersonal manner--The subject has made observations about others rather than himself. The focus is on other people, objects, events. Self-references are lacking or few in number.

Level 2.--The subject has placed himself within the context of the topic, but talked predominantly about his ideas, rather than his personal experiences. Self-references enhanced the picture of the subject, but there was little exploration

or elaboration of personal thoughts, feelings, behaviors. The subject talked about possible feelings, thoughts, behaviors, but did not attach personal meaning to the topic except in a general way.

Level 3.--The subject dealt with the topic predominantly on a personal level. He elaborated on his thoughts and feelings, giving some idea of how external events affect his thoughts and feelings, and how his thoughts and feelings affect his behavior.

Level 4.--The subject focused entirely or almost entirely on himself. He talked about his thoughts and feelings, and how these affect his behavior. He used self-references entirely or almost entirely, and evaluated his thoughts, feelings, behaviors in terms of his like or dislike of them. He discussed the personal impact of feedback from others on his thoughts, feelings, behaviors. He provided an idea of how he regards himself.

After approximately four hours of training in the use of the Self-Disclosure Rating Scale, the therapists and independent raters achieved an IntraClass Correlation of .91 (Ebel, 1951). The IntraClass Correlation was computed from data obtained by having the therapists and independent raters listen to tape recordings which represented the levels of the rating scale. The recordings were presented in random order, and during the same training session that other practice tapes were heard. The therapists and independent raters were unaware of which recordings represented levels of the Self-Disclosure Rating Scale. The ANOVA table and computation of the reliability coefficient are presented in Appendix P.

Reliability Estimates

Reliability estimates for the Self-Disclosure Rating Scale were computed on the actual sample data. The IntraClass Correlation (Ebel, 1951) and the Pearson Product-Moment Correlation (Hays, 1973) were the statistics used to obtain reliability estimates.

Anger.--The reliability coefficient for the Self-Disclosure Rating Scale on the topic of Anger was .771. The coefficient was computed on the ratings of the therapists and the two independent raters by means of the Intraclass Correlation (Ebel, 1951). The ANOVA table and the computation of the reliability coefficient for Anger are shown in Appendix Q.

Embarrassment.--The reliability coefficient for the Self-Disclosure Rating Scale on the topic of Embarrassment was .899. The coefficient was computed on the ratings of the therapists and the two independent raters by means of the Intraclass Correlation (Ebel, 1951). The ANOVA table and the computation of the reliability coefficient for Embarrassment are shown in Appendix R.

Hurt.--The reliability coefficient for the Self-Disclosure Rating Scale on the topic of Hurt was .517. The coefficient was computed on the ratings of the therapists and the two raters by means of the Intraclass Correlation (Ebel, 1951). The ANOVA table and the computation for the reliability coefficient for Embarrassment are shown

in Appendix S.

Intratherapist.--Approximately three weeks after the study was completed, therapists were asked to listen to the recordings of their first, fifth, and tenth interviews, and to rate them a second time, using the Self-Disclosure Rating Scale. Seven of the eight therapists complied with the request. Because not all therapists had first, fifth, and tenth interviews (due to subjects failing to participate), and because data was missing completely from one therapist, the *n* for the computation of the *intratherapist* reliability was limited to 16--6 first interviews, 6 fifth interviews, and 4 tenth interviews. The Pearson Product-Moment Correlation Coefficient (Hays, 1973) was used to obtain the reliability estimates for each of the three topics. The *intratherapist* reliability coefficient for Anger was .88, for Embarrassment .53, and for Hurt .56.

Intertherapist and Rater.--By means of the Pearson Product-Moment Correlation Coefficient (Hays, 1973), reliability coefficients for each of the three measures--Anger, Embarrassment, Hurt--were obtained for ratings 1) between the two independent raters, and 2) between each independent rater and the therapists. The reliability coefficients are presented in Table 3.1.

Table 3.1

Pearson Product-Moment Correlations: Reliability
Coefficients of the Self-Disclosure Rating Scale
on Actual Sample Ratings

Self-Disclosure Measures	Independent Raters A & B	Independent Rater A & Therapists	Independent Rater B & Therapists
Anger	.88	.75	.66
Embarrassment	.53	.58	.62
Hurt	.56	.33	.16

$n = 56$

Design

The experimental design of the study is described by Campbell & Stanley (1963) as the Posttest-only design. The matrix is a 2 x 2 x 2, consisting of two levels of modeling (high and low self-disclosure by a male model), two levels of model status, (high--experienced professional versus low--beginning student), and two levels of therapist status (high--experienced professional versus low--beginning student). The level of status was defined in a way similar to the Doster & McAllister (1973) definition, that is, according to expertise. The *high level of model status* was structured by the following written instructions: "This recording was made by an experienced mental health professional who has worked successfully as a therapist for the past five years." Instructions for the *high status therapist* condition were as follows. "The therapist for your interview, whom you will meet shortly, is a professional therapist who has spent the past several years working in the mental health field, and is presently a practicing psychotherapist."

Instructions for structuring the *low level of model status* were as follows. "This recording was made by a graduate student who has recently begun studies related to the mental health profession." Instructions

regarding the *low status therapist* were as follows. "The therapist for your interview, whom you will meet shortly, is a beginning graduate student for the psychotherapy profession."

It should be pointed out that the therapists who conducted the interviews were totally unaware of any of the experimental conditions in this study. In addition, all research assistants were also unaware of the various experimental conditions.

Subjects were randomly assigned to experimental conditions and to therapists. As a result, cells 4, 5, and 8 in the variable matrix (Table 3.2) originally contained an extra subject. In order to have equal observations in each cell, one subject was randomly excluded from each of the three cells.

With randomization, it was possible for a therapist to be assigned the conditions of all eight of the cells of the variable matrix, or to be assigned repeatedly the conditions of only one cell. A breakdown of the frequency with which therapists were actually assigned to the experimental conditions, using random assignment, is presented in Table 3.3.

Control Group

The study does not contain the traditional no-treatment control group. The vast majority of studies

Table 3.2

Variable Matrix

Independent Variables	High Status Interviewer	Low Status Interviewer	$n =$
High Status	Cell #1 $n = 7$	Cell #2 $n = 7$	14
High Disclosure			
Low Status	Cell #3 $n = 7$	Cell #4 $n = 7$	14
High Status	Cell #5 $n = 7$	Cell #6 $n = 7$	14
Low Disclosure			
Low Status	Cell #7 $n = 7$	Cell #8 $n = 7$	14
$n =$	28	28	$N = 56$

Table 3.3

Frequency distribution of experimental conditions (matrix cells) as assigned randomly to therapists.

[illegible]

in pretraining have shown that non-treatment conditions consistently result in significantly less self-disclosure than conditions in which there is even minimal pretherapy information given (Heller, 1969; Doster & McAllister, 1973; Flanders, 1968). The effectiveness of pretherapy training on self-disclosure in a treatment versus no treatment design has been demonstrated. It is the conditions under which self-disclosure is optimally facilitated which require further investigation (Kiesler, 1966; Krumboltz, 1967; Blocher, 1967).

Hypotheses

1. *Null Hypothesis:* There is no difference in self-disclosure between subjects who are exposed to modeling of a high degree of self-disclosure and subjects who are exposed to modeling of a low degree of self-disclosure.

1. *Alternate Hypothesis:* Subjects who are exposed to modeling of a high degree of self-disclosure self-disclose more than subjects who are exposed to modeling of a low degree of self-disclosure.

2. *Null Hypothesis:* The status of the model has no effect on the self-disclosure of subjects.

2. *Alternate Hypothesis:* Subjects who are exposed to a model of high status self-disclose more than subjects who are exposed to a model of low status.

3. *Null Hypothesis:* The status of the interviewer has no affect on the self-disclosure of subjects.

3. *Alternate Hypothesis:* Subjects who are interviewed by a high status therapist self-disclose more than subjects who are interviewed by a low status therapist.

4. *Null Hypothesis:* There is no difference in the self-disclosure of subjects exposed to a high degree of self-disclosure modeling and a high status model, and subjects exposed to a low degree of self-disclosure modeling and a low status model.

4. *Alternate Hypothesis:* Subjects who are exposed to a high degree of self-disclosure modeling and a high status model self-disclose more than subjects who are exposed to a low degree of self-disclosure modeling and a low status model.

5. *Null Hypothesis:* Subjects who are exposed to a high degree of self-disclosure modeling, a high status model, and a high status interviewer self-disclose no more than subjects exposed to any other combination of conditions.

5. *Alternate Hypothesis:* Subjects who are exposed to a high degree of self-disclosure modeling, a high status model, and a high status interviewer self-disclose more than subjects exposed to any other combination of conditions.

Analysis

This study is composed of three independent variables, with two levels in each of the independent variables, and three dependent variables, each measured by the Self-Disclosure Rating Scale. The three dependent variables are self-disclosure on Anger, Embarrassment, and Hurt. The data is analyzed using the Multivariate Analysis of Variance (MANOVA). The MANOVA procedure was chosen because of its ability to consider the relationships among the three dependent measures. A multivariate approach is likely to be more powerful than a univariate analysis since it is possible to obtain significant multivariate differences without obtaining significant univariate effects. The MANOVA procedure weighs the contribution of each dependent variable in such a way as to obtain the most efficient combination of dependent measures. Using MANOVA it is possible to obtain significance with groups of measures, and not simply with a single measure examined in isolation.

In considering the assumptions required for a univariate analysis, one assumption is that each response occurs independently of every other response. In this study, it would be a questionable assumption that the three self-disclosure's of each subject are independent

of each other. Self-Disclosure is a multi-faceted behavior and seems best analyzed by a procedure that is able to capitalize upon the relationships between several dependent measures. In addition, MANOVA is less likely than ANOVA to occasion a Type I error (Hummel & Sligo, 1971). The nature of this study would seem to necessitate a close guarding against the possibility of a false rejection of the null hypothesis.

The assumptions of the MANOVA are: the dependent variables are multivariate normally distributed; have homogeneous variances; and the errors of measurement are normally distributed across the treatment population (Cooley & Lohnes, 1971). Equal numbers of observations in each cell were insured so that the test would be robust to possible violations of the assumption. There were no indications that the assumptions required for the Multivariate Analysis of Variance were not met.

Summary

Fifty-six undergraduate, female residents of Michigan State University were randomly assigned to experimental conditions involving three independent variables: the degree of self-disclosure of the model (high versus low), the level of status of the model (high versus low), the level of status of the interviewer (high versus low).

After hearing a recording of a male model self-disclosing, subjects were interviewed by a therapist and were asked to self-disclose on three topics (Anger, Embarrassment, and Hurt) for approximately five minutes on each topic.

The Self-Disclosure Rating Scale, a four level discrimination of personal versus impersonal content, was used by therapists to rate the degree of self-disclosure of the subjects. The interviews were recorded, and first, fifth, and tenth interviews were rated a second time by therapists in order to have a measure of the stability of ratings over time.

The therapists, four male and four female, were professionally experienced. They were unaware of the experimental conditions, and unaware of the exact purpose of this study.

With three dependent measures for each subject, the data was analyzed using the Multivariate Analysis of Variance. The analysis of the data is presented in Chapter IV.

CHAPTER IV

ANALYSIS OF RESULTS

The variable matrix for the study is shown in Table 4.1. There were three independent variables, with two levels in each variable: 1) model self-disclosure, high versus low; 2) model status, high versus low; and 3) therapist status, high versus low.

There were three dependent measures--the ratings of subject self-disclosure on three topics, Anger, Embarrassment, and Hurt. Each of the eight cells of the matrix (Table 3.2) contained seven replications, yielding a total sample size of fifty six. Both multivariate and univariate analyses were performed.*

A multivariate analysis of variance, which included all three dependent measures, was performed with the probability of a Type I error for hypothesis testing set at .05. In addition, univariate analyses of variance were calculated separately for each dependent measure. An attempt was made to control for the probability of a Type I error for hypothesis testing by using a controlled

*Finn program entitled "Univariate and Multivariate Analysis of Variance, Covariance, and Regression, Version 4, June, 1968"

Table 4.1

Variable Matrix and Cell Means

A Completely Crossed and Balanced Design

		High Status Therapist	Low Status Therapist
High Self- Disclosure of the Model	High Status Model	A* 2.4	A 3.3
		E* 3.0	E 3.4
		H 3.1	H 3.3
	Low Status Model	A 3.7	A 3.1
		E 3.1	E 3.4
		H 3.3	H 2.7
Low Self- Disclosure of the Model	High Status Model	A 2.6	A 2.3
		E 2.4	E 2.6
		H 2.9	H 2.4
	Low Status Model	A 3.1	A 2.6
		E 2.4	E 2.6
		H 3.4	H 2.7

* Cell Means of A = Anger n = 7 per cell
E = Embarrassment N = 56
H = Hurt

alpha for each set of univariate analyses. The univariate F tests were considered significant for *p* less than .017 (i.e., .05 divided by 3, the number of univariate F tests in each set).

The results of the hypotheses are presented in numerical order, beginning with hypothesis 1. It should be pointed out, however, that the interaction hypotheses were given first consideration because of their importance in interpreting and limiting the generalizability of the main effects.

Before proceeding with an examination of the hypotheses, the correlation matrix of the pooled within cell correlations of the three dependent measures is presented in Table 4.2

Table 4.2

Pooled Within Cell Correlations
for the Three Dependent Measures

	Anger	Embarrassment	Hurt
Anger	1.000	0.256	0.415
Embarrassment	0.256	1.000	0.348
Hurt	0.415	0.348	1.000

n = 56

The pooled within cell correlations of the three dependent measures are relatively low, suggesting low redundancy of measurement.

The cell means of each dependent measure for each cell of the experimental design are presented in Table 4.1.

The hypotheses in this Chapter are stated in the direction of anticipated significance. However, it is understood that the analysis of variance test is a non-directional test, and that directionality is established on significant effects by means of post hoc techniques.

The results of the multivariate analysis of variance are summarized in Table 4.3. Although the complete results of the analysis are presented, no hypotheses were made in relation to the model self-disclosure x therapist status interaction, nor in relation to the model status x therapist status interaction. These two sources of variation were not of interest in the study.

Hypothesis 1

Subjects who are exposed to a high degree of self-disclosure modeling self-disclose more than subjects who are exposed to a low degree of self-disclosing modeling.

The multivariate F value for the main effect of model self-disclosure was 2.58. This value was not significant at the .05 *alpha* level (Table 4.3). The null

Table 4.3
Multivariate Analysis of Variance
Three Independent Variables
Three Dependent Variables

Sources of Variation		df^*	Multivariate F	p less than
Model Self-Disclosure	(A)	3	2.58	.0651
Model Status	(B)	3	1.69	.1818
Therapist Status	(C)	3	1.30	.2863
A X B		3	1.11	.3553
A X C		3	0.60	.6163
B X C		3	1.31	.2814
A X B X C		3	0.61	.6119

* df for Error = 46.

hypothesis for the model self-disclosure main effect was not rejected.

The univariate analyses were examined for each of the three dependent measures--Anger, Embarrassment, and Hurt. Each univariate F was tested at the .05/3 *alpha* level, .017, with 1 and 48 degrees of freedom. The univariate analyses for hypothesis 1 are presented in Table 4.4.

Table 4.4

Univariate Analyses
Three Dependent Measures
Model Self-Disclosure: H_1 .

Dependent Measure	Mean Square Error	Mean Square Hypothesis	Univariate F	p less than
Anger	.69	3.50	5.07	.029
Embarrassment	.80	4.02	5.00	.030
Hurt	.64	0.85	1.36	.249

alpha = .017

df = 1, 48

Each of the univariate F tests exceeded the controlled *alpha* level. It was concluded that none of dependent measures were significant in either the high or the low conditions of model self-disclosure.

The Self-Disclosure Rating Scale, which was used to measure the self-disclosure of subjects on each of the three topics, contained four levels. Levels 1 and 2 referred to exclusive or predominant use of impersonal self-disclosure. Levels 3 and 4 referred to predominant or exclusive use of personal self-disclosure.

Table 4.5

**Means of the Three Dependent Measures
For the Model Self-Disclosure Treatment**

	Anger	Embarrassment	Hurt
High Disclosure	3.1	3.2	3.1
Low Disclosure	2.6	2.6	2.9

The treatment means for the high self-disclosure of the model and the low self-disclosure were in the direction predicted by Hypothesis 1. As shown in Table 4.5, the means of each of the three dependent measures are consistently higher in the high self-disclosure of the model.

Hypothesis 2

Subjects who are exposed to a high status model self-disclose more than subjects who are exposed to a low status model.

The multivariate F value for the model status main effect was 1.69. This value was not significant at the .05 *alpha* level (Table 4.3). The null hypothesis for the model status main effect was not rejected. It was concluded that the status of the model had no measureable effect upon the self-disclosure of the subjects.

The means for the independent variable Model Status are presented in Table 4.6. The low status model means

Table 4.6

Model Status Treatment Means
Three Dependent Measures: H_2 .

	Anger	Embarrassment	Hurt
High Status Model	2.6	2.9	2.9
Low Status Model	3.1	3.0	3.0

were higher on each of the three measures than the high status model means. The differences between the high and low status means were not regarded as significant, but it is pointed out that the direction of the means were

opposite the direction predicted by Hypothesis 2.

Hypothesis 3

Subjects who are interviewed by a high status therapist self-disclose more than subjects who are interviewed by a low status therapist.

The multivariate F value for the therapist main effect was 1.30. The null hypothesis of no differences between the high status therapist and the low status therapist was not rejected, since the probability of a Type I error exceeded the .05 *alpha* level. The means for the therapist status main effect are presented in Table 4.7.

Table 4.7

Therapist Status Treatment Means
Three Dependent Measures: H_3 .

	Anger	Embarrassment	Hurt
High Status Therapist	3.0	2.9	3.2
Low Status Therapist	2.8	2.9	2.8

Since the dependent measure Hurt yielded the largest mean difference between the high status therapist and the low status therapist conditions, the univariate

analysis for Hurt was examined. The univariate F for the dependent measure Hurt on the therapist status main effect was 3.361. The univariate F for Hurt was not regarded as significant because with 1 and 48 df , the p of a Type I error was .073.

Hypothesis 4

Subjects who are exposed to a high degree of self-disclosure modeling and a high status model self-disclose more than subjects who are exposed to a low degree of self-disclosure modeling and a low status model.

The multivariate F value for the interaction of model disclosure and model status was 1.11. The null hypothesis for the model disclosure X model status interaction was not rejected because the probability of a false rejection of the null hypothesis was greater than .05. It was concluded that there were no treatment differences which resulted from the model disclosure X model status interaction. Therefore, subjects who were exposed to a high degree of self-disclosure modeling and a high status model did not self-disclose on any of the three dependent measures more than subjects who were exposed to a low self-disclosing model and a low status model.

Hypothesis 5

Subjects who are exposed to a high degree of self-disclosure modeling, a high status model, and a high status therapist self-disclose more than subjects who are exposed to any other combination of conditions.

The multivariate F value for the interaction of model disclosure, model status, and therapist status was 0.61. The probability of a Type I error exceeded the .05 level. Consequently, the null hypothesis was not rejected. It was concluded that there were no treatment differences attributable to the interaction of model disclosure X model status X therapist status. Therefore, subjects who were exposed to a high degree of self-disclosure modeling, a high status model, and a high status therapist did not self-disclose more on the three topics than subjects who were exposed to any other combination of conditions.

Questionnaire

After subjects had completed their interviews with the therapists, each was asked to check one of five statements which were intended to reflect the subject's attitude towards future involvement with the therapist (Appendix L). The purpose of the questionnaire was to investigate a possible relationship between the therapists' ratings of the subjects' self-disclosures

on Anger, Embarrassment, and Hurt, and the subjects' willingness to self-disclose to the same therapists in the future, if given the opportunity.

Table 4.8
Point-Biserial Correlations

	Attitude
Anger	.035
Embarrassment	.131
Hurt	.316
$n = 56$	

The Point-Biserial Correlation Coefficient was used to estimate the association between the subjects' reported willingness to self-disclose further to the same therapist and the therapists' ratings of the subjects' self-disclosures during the interviews. The Point-Biserial was chosen because of its ability to measure associations between nominal-dichotomous and interval measures. For the purpose of obtaining a measure of association with the five levels of the questionnaire, the data obtained from the Self-Disclosure Rating Scale was not assumed to have a normal distribution, and was considered to be dichotomous. The Point-Biserial Correlation Coefficient is described

by Glass & Stanley (1970, p. 163).

The correlation coefficients shown in Table 4.8 suggest that there was no relationship between the subject's willingness to disclose further to the same therapist and the therapist's ratings of the subject's self-disclosures on the topics of Anger and Embarrassment, and a positive but low association between the subject's willingness to disclose further to the same therapist and the therapist's ratings of the subject's self-disclosure on the topic of Hurt.

The above statements regarding the Point-Biserial Correlation Coefficients were made on the following basis. The null hypothesis that the Point-Biserial Correlation Coefficient is equal to zero in the population sampled was tested for each of the three coefficients. The coefficient for Anger yielded a t value of .257, which exceeded the 60th percentile of the Student's t -distribution with 54 df . The coefficient for Embarrassment yielded a t value of .970, which exceeded the 80th percentile of the Student's t -distribution, with 54 df . The null hypothesis that the Point-Biserial Correlation Coefficient for Anger and Embarrassment is equal to zero in the population sampled was not rejected.

However, it was concluded that the Point-Biserial Correlation Coefficient for Hurt was not equal to zero in the population sampled, since the t value of 2.450 exceeded

the 99th percentile of the Student's t -distribution, with 54 df . The method used to test the above null hypotheses for the correlation coefficients can be found in Glass & Stanley (1970, p. 318).

Additional Independent Variables

As shown in the variable matrix (Table 4.1), the primary independent variables in this study were those related to conditions of treatment. These conditions were imposed by the investigator, and subject to manipulation by the investigator. These independent variables were 1) self-disclosure of the model (two levels, high and low), 2) status of the model (two levels, high and low), and 3) status of the therapist (two levels, high and low).

There were other variables in the study which were less subject to direct manipulation, but which may have been important in contributing to the results of the hypotheses tested. The additional independent variables which will be considered in this section are 1) the sex of the therapists, and 2) the therapists themselves. It was determined that it would be productive to examine the variables of sex and therapists, with the reasoning that they may provide some assistance in understanding the results of the hypotheses previously tested.

In the randomization process used to assign subjects to experimental conditions, care was taken to insure that an equal number of observations would occur in each cell of the design. Therapists were also randomly assigned to treatment conditions, but no attempt was made to insure that each therapist appeared in each cell of the design an equal number of times. It was not possible to do this because it was not possible to predict which subjects would actually participate in the study. Consequently, the rearranging of the data into a matrix with sex and therapist as independent variables resulted in an unbalanced design, as shown in Table 4.9.

Unbalanced Design

The independent variable *level of model self-disclosure* was a fixed variable with two levels, high and low. The results from the previous multivariate analysis of variance (Table 4.3) were such that the probability of a Type I error for the three main effects was least for the main effect of model self-disclosure. The Type I error probabilities for the model status and the therapist status main effects were substantially greater than the probability for model self-disclosure. For this reason the model self-disclosure was chosen to be included in the unbalanced design as an independent variable.

Table 4.9

Unbalanced Design
Three Independent Variables:
Sex, Therapist, and Model Self-Disclosure

		High Self- Disclosure of the Model	Low Self- Disclosure of the Model	<i>n</i> =
Male	T ₁ [*]	<i>n</i> = 3	5	28
	T ₂	3	2	
	T ₃	6	3	
	T ₄	3	3	
Female	T ₅	1	7	28
	T ₆	5	1	
	T ₇	4	4	
	T ₈	3	3	
		<i>n</i> = 28	28	<i>N</i> = 56

^{*}T = Therapist

In the unbalanced matrix, sex is a fixed independent variable, with two levels, male and female. Therapist is a random independent variable nested within sex. To consider the therapist variable as a fixed variable would have meant that the eight therapists were the entire population of therapists to which the results would be applicable. In order to have greater generalizability, the eight therapists were considered to be one possible sample of eight therapists from a population of therapists (Cornfield & Tukey, 1956). A description of the therapists which were used as the sample for the study can be found in Chapter III.

Prior to analyzing the data, the mean scores for each of the dependent measures were graphed according to the three independent variables, model self-disclosure, sex, and therapists. Possible therapist or sex main effects, or interaction effects involving therapist and sex were not indicated in the graphs for Anger and Hurt. The graph for the dependent measure Embarrassment is presented in Figure 4.1.

In Figure 4.1 it can be seen that the scores of the male therapists for both disclosure conditions were consistently below those of the female therapists. The lower scores of male therapists was the result of male therapists reporting that their subjects self-disclosed consistently lower on the topic of Embarrassment than the

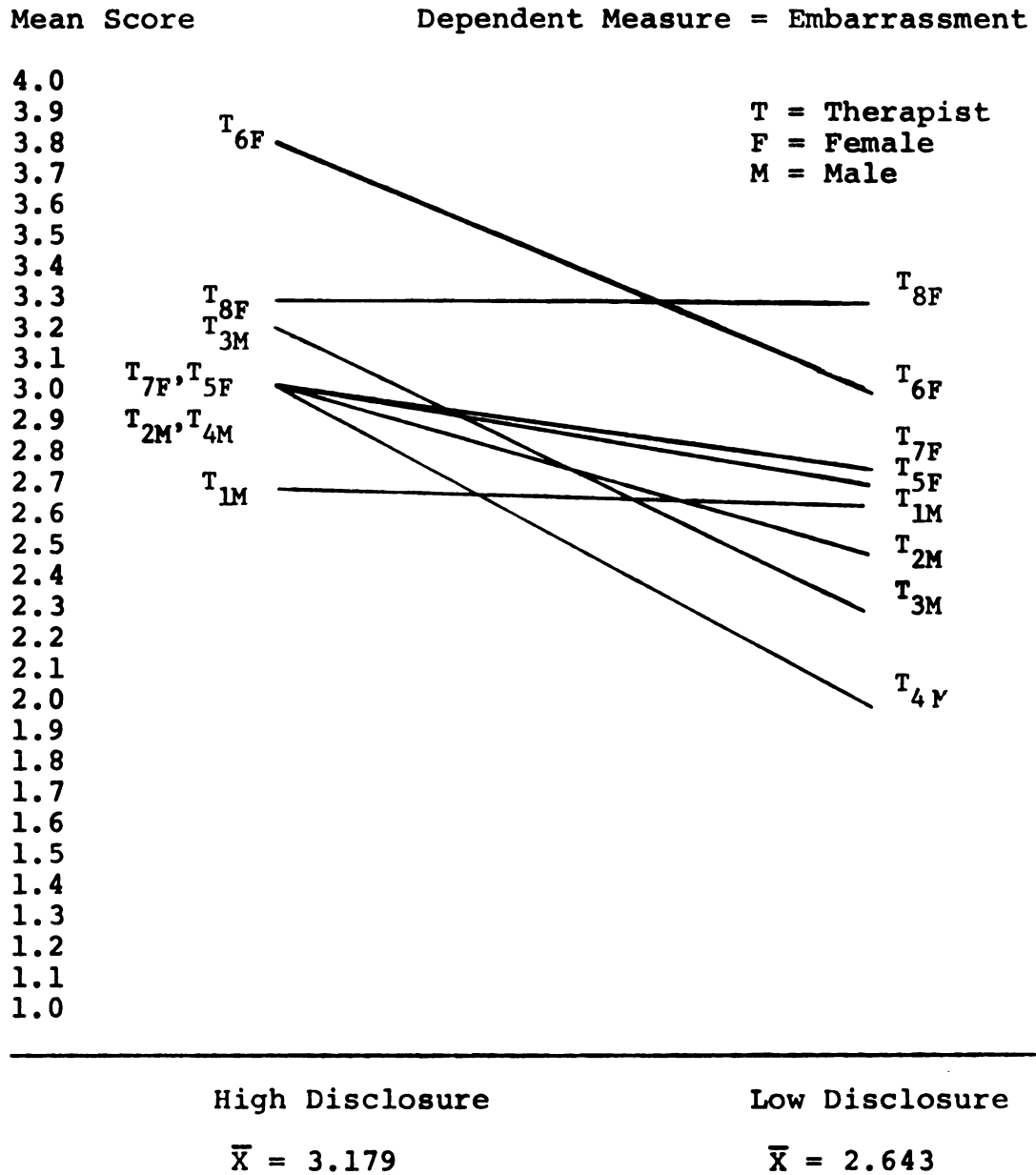


Fig. 4.1. Mean scores of male and female therapists under high and low disclosure conditions.

female therapists reported.

To test the presence of a sex main effect on the topic of Embarrassment, a univariate analysis of variance was performed. Before presenting the results of the analysis, it should be noted that an unbalanced design does not allow the sources of variation to be tested independently. The lack of independence of the sources of variation means that the tests of significance are dependent upon the order in which the tests are conducted. Consequently, the sources of variation should be tested in the order of importance, because a different sequence of sources of variation would likely result in different conclusions. The sources of variation were tested in the order of their presentation in Table 4.10, i.e. the test for an interaction of disclosure X therapist within sex (DT:S) was done last, the therapist main effect (T:S) was done second to last, etc..

The univariate analysis of variance was performed with the probability of a Type I error set at .05. As indicated in Table 4.10, the analysis suggested that the subjects (female) self-disclose more on the topic of Embarrassment to female therapists than to male therapists. The mean score given by male therapists to the female subjects on the topic of Embarrassment was 2.7. The mean score given by the female therapists to the female subjects on the topic of Embarrassment was 3.1. It was

Table 4.10
Unbalanced, Mixed Design
ANOVA on Embarrassment

Sources of Variation		<i>df</i>	Error Term	Mean Squares	Univariate F
Disclosure	(D)	1	DT:S	4.02	19.47
Sex	(S)	1	T:S	2.62	6.35*
D X S		1	DT:S	0.03	0.16
Therapists:S	(T:S)	6	R:DTS	0.41	0.48
DT:S		6	R:DTS	0.21	0.24
R:DTS	(Residual)	40			

* significant at the .05 *alpha* level

concluded that the ratings of self-disclosure on the topic of Embarrassment were significantly higher for female therapists than for male therapists.

The second additional independent variable, Therapist, failed to achieve significance.

No conclusion was made regarding the Disclosure main effect in the unbalanced design. Because the sources of variation were not independent of each other, the Disclosure main effect was confounded with the sex main effect, thus prohibiting an accurate test of the Disclosure main effect in this particular design.

The multivariate analysis of the level of model self-disclosure performed earlier (Table 4.3) led to the conclusion that the level of model self-disclosure did not have a significant affect ($\alpha = .05$) on the self-disclosure of subjects on any of the three topics.

Summary

Hypotheses were tested regarding the main and interaction effects of the three independent variables: 1) level of model self-disclosure; 2) level of the model's status; and 3) level of the therapist's status. The dependent measures were the therapists' ratings of the subjects' self-disclosures on three topics--Anger, Embarrassment, and Hurt. The ratings were made by using the Self-Disclosure Rating Scale. Multivariate and univariate analyses of variance were performed with the probability of a Type I error set at the .05 α level. The null hypothesis was not rejected for any of the hypotheses tested.

The questionnaire administered to subjects was intended to reflect the subject's attitude towards future involvement with the therapist. The results suggested that there was a positive relationship between subjects' willingness to disclose further and the therapists' ratings on the topic of Hurt. No relationships were indicated for the topics of Anger and Embarrassment.

It was concluded from the analysis of the unbalanced, mixed design, with model self-disclosure, therapist's sex, and therapists as the independent variables, that the ratings of self-disclosure on the topic of Embarrassment were higher with female therapists than with male therapists. The random, independent variable therapists did not achieve significance.

A discussion of the results of the analysis of the data is in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, AND DISCUSSION

This Chapter contains a summary of the investigation, and the conclusions of the data analysis. The limitations of the study and the implications for future research are included in the discussion section.

Summary

The study focused on the effects of providing pretherapy information to potential clients, and the effect of this information upon the client's behavior. Modeling has frequently been used as a method to prepare clients for therapy. Modeling content and the characteristics of the model have been investigated under a wide variety of conditions. The purpose of this study was to investigate the importance of three variables related to pretraining clients for therapy: 1) the content of pretherapy modeling; 2) the status of the model; 3) the status of the interviewing therapist.

The fifty six female subjects listened to one of two audio recordings of a male model self-disclosing on the topic of social gatherings. In the high disclosure condition, subjects heard the model self-disclosing to a high degree. A high degree of self-disclosure was defined

as consisting of predominantly personal responses. In the low disclosure condition, subjects heard the model self-disclosing to a low degree. A low degree of self-disclosure was defined as consisting of predominantly impersonal responses. Both high and low levels of self-disclosure were validated by trained raters and therapists.

In the high status model condition, the subjects were informed that the model was an experienced and successful mental health professional who had been practicing as a therapist for five years. In the low status model condition, the subjects were informed that the model was a graduate student who had recently begun studies in the mental health profession, but was essentially without experience.

After listening to an eight minute tape under the above conditions, the subjects were interviewed by therapists who had been identified to the subjects as being of either high or low status. The status of the therapists was presented to the subjects in essentially the same concept as that of the status of the model, that is inexperienced graduate student versus experienced mental health professional. Therapists asked each subject to self-disclose on three topics--Anger, Embarrassment, and Hurt for approximately five minutes on each topic.

Therapists rated the level of subjects' self-disclosure on each topic by using the Self-Disclosure Rating Scale, a

four level rating scale adapted for this study. Levels 1 and 2 were related to exclusive or predominant impersonal content, and levels 3 and 4 were related to predominant or exclusive personal content. Independent raters were used as a check for the stability of therapists' ratings. Several weeks after the study was completed, therapists rated selected recordings of their own interviews a second time as a check for the stability of their ratings over time.

Multivariate and univariate analyses of variance were performed to test main effect and interaction hypotheses related to 1) the level of self-disclosure of the model, 2) the status of the model, and 3) the status of the therapist. Additional analyses were performed to investigate the effect of the sex of the therapists and the therapists themselves. Four male and four female therapists participated as the interviewers in the study.

After subjects had completed their interviews with the therapists, each was asked to check one of five statements which were intended to reflect the subject's attitude towards future involvement with the therapist. The purpose of the questionnaire was to investigate a possible relationship between the therapists' ratings of the subjects' self-disclosures on Anger, Embarrassment, and Hurt, and the subjects' willingness to self-disclose to the same

therapist in the future, if given the opportunity.

Conclusions

Model Self-Disclosure

The multivariate analysis of the effect of the level of model self-disclosure led to the conclusion that there was no significant difference between the high level of model self-disclosure and the low level of model self-disclosure. The treatment means of the high level of model self-disclosure were consistently above those of the low level of model self-disclosure across all three measures, but the differences were not significant at the .05 *alpha* level.

Model Status The multivariate analysis of the model status main effect failed to reject the null hypothesis. It was concluded that the status of the model was not a significant variable in affecting the personal self-disclosure of the subjects, as indicated by the therapists' ratings. For each of the three dependent variables, the means of the low status model condition were consistently higher than the means of the high status model condition. The direction of the treatment differences was the reverse of the direction predicted by the model status hypothesis.

Therapist Status The status of the therapist who interviewed the subjects apparently had no measurable effect upon the content of the subjects' disclosures. The multivariate analysis suggested that the status of the therapist who conducted the interview was irrelevant in affecting the personal or impersonal content of the subjects' self-disclosures on each of the three topics--Anger, Embarrassment, and Hurt.

Interactions There were no significant interactions. Consequently, the null hypothesis of no significant differences was not rejected for Hypotheses 4 and 5.

Questionnaire

A positive but weak relationship was found between the therapists' ratings of the subjects' self-disclosures on the topic of Hurt and the subjects' indicated disposition to self-disclose to the same therapist in the future. The Point-Biserial Correlation Coefficients for Anger and Embarrassment were not sufficient to reject the null hypothesis that they were equal to zero in the population from which the sample was drawn. Almost all subjects indicated that they would be willing to further disclose some personal content to the therapists. It is likely that the subjects had insufficient interaction with the therapists

to formulate decisive opinions about continued involvement with the therapists, or that the experience of the subjects' brief interactions with the therapists were, for the most part, positive. The decision to self-disclose further was apparently unaffected by the experimental conditions. There was an indication that a greater willingness to continue to self-disclose intimate information to the same therapist was associated with the higher ratings of self-disclosure on the topic of Hurt.

Therapist Effect A multivariate analysis of variance was performed on an unbalanced, mixed design, with therapist as the randomn variable. The purpose of the analysis was to investigate the possible effect of therapists themselves, irrespective of any other experimental conditions. The analysis led to the conclusion that there were no significant therapist main effects.

Sex Effect A sex main effect was found on the dependent variable Embarrassment. A univariate analysis was performed on the unbalanced, mixed design, with Embarrassment as the dependent variable, and the null hypothesis was rejected at the .05 *alpha* level. It was concluded that the female therapists reported that the female subjects self-disclosed more on the topic of Embarrassment than the male therapists reported.

Discussion

Model Self-Disclosure

At the .05 probability level of a Type I error, support was not found for the prediction that subjects who listened to a model talking about himself in a very personal way would talk about themselves in a more personal way than subjects who listened to a model talking in an impersonal way. Hence, at the .05 *alpha* level, the null hypothesis for the model self-disclosure main effect was not rejected. The treatment means for the level of model self-disclosure, as shown in Table 4.5 were found to be consistently higher in the direction predicted by hypothesis 1. Each of the three dependent measures reflected differences between the means of the high and low levels of model self-disclosure. These differences were not sufficient to permit a rejection of the null hypothesis at the .05 *alpha* level.

The absence of a significant model self-disclosure main effect does not support Bandura's theoretical position that imitation can occur without reinforcement for the model or the observer (1969). In presenting the modeled behaviors to the subjects, an audio recording was used. The recording did not contain any reinforcement for the model, nor were the written instructions or

verbalizations by the research assistants aimed at stating or implying any type of reinforcement for the model. The audio recording (Appendix A) contained only the model's monologue. The subjects who listened to the model were not directed or led to either written or verbal instructions to perceive the audio recordings in a positive or negative manner. It seems that the conditions for the occurrence of behavioral imitation without reinforcement were met. Bandura's (1969) concept of vicarious reinforcement provided the framework for explaining the possible occurrence of imitation under nonreinforcement conditions. This is not to say that behavioral imitation did not occur, but perhaps the design of this study was not able to detect the occurrence of behavioral imitation at the level specified for this study, i.e., the .05 *alpha* level.

Bandura (1969) proposed that imitation learning has two phases, acquisition and performance. In the acquisition phase, Bandura theorized that behaviors can become part of the observer's behavioral repertoire without actually being performed or rewarded at the time they are observed. The present study failed to support Bandura's acquisition phase of imitation learning.

Since it was not likely that this study would elicit novel responses from subjects (i.e., the responses of self-disclosing), it was not intended to produce *observational*

learning, which Bandura defined in terms of the occurrence of novel responses. Bandura (1969) reported that modeling could also have a *response facilitation effect*, that is, the modeling of self-disclosure would have a disinhibitory effect (Bandura & Barab, 1973) upon observers, facilitating the occurrence of responses already within the behavioral repertoire of the subjects. Bandura's concept of response facilitation through modeling was not supported by this study.

Miller & Dollard (1941) held that if imitation occurred, direct reinforcement was present. Kelley, *et alii* (1962) are also supportive of the notion that modeling conditions are not without reinforcement. They contend that a consistent pattern of responses suggests that reinforcement is occurring or will occur. If the reader views the outcome of the main effect of level of model self-disclosure as significant, then an alternate explanation for the occurrence of behavioral imitation, given Miller & Dollard's (1941) assumption that reinforcement is present, might be that the observance of a model self-disclosing is reinforcing to the observer. Kelley, *et alii* (1962) would argue that reinforcement is implied to occur for the imitation of the self-disclosing behavior.

Jourard (1964), Mowrer (1966), and Rogers (1966) might support the notion that self-disclosing is reinforcing

to the individual because it represents some kind of movement towards greater harmony with the self, towards increased self-understanding, less internal conflict, and congruence. If the assumption is made that self-disclosing is or can be reinforcing, then Miller & Dollard's (1941) position that reinforcement is present when imitation occurs becomes a plausible alternative to Bandura's (1969) concept of vicarious reinforcement in explaining the imitation of self-disclosing behaviors. Bandura's concept of vicarious reinforcement provides a more complete explanation. However, with the single assumption that self-disclosing is or can be reinforcing, Miller & Dollard (1941) provide an alternate, theoretical explanation for the occurrence of imitated behaviors.

Model Status

Doster & McAllister (1973) exposed male undergraduate subjects to a taped example of self-disclosure, and manipulated the status of the model by identifying the model as either a peer or an experienced clinical intern. These authors reported that exposure to a model of clinical expertise elicited greater imitation of modeled behavior than when the modeled was identified as a peer.

The present study does not support the findings of Doster & McAllister (1973) regarding the effect of model status. In the present study, the imitation of modeled

behaviors did not seem to be significantly affected by the status of the model. There was, in fact, a trend in the opposite direction as reported by Doster & McAllister (1973). For each of the three dependent variables, the means of the low status model condition were consistently higher than the means of the high status model condition.

There are several differences between the present study and the Doster & McAllister (1973) study which might account for the failure to support the model status hypothesis. It may be that the effect of model status was not evidenced in behaviors which were measured by the Self Disclosure Rating Scale. The Self Disclosure Rating Scale was a modification of the rating scale used in the Doster & McAllister (1973) study, and may not have been as suited to the measurement of the model status effect as the rating scale used by Doster & McAllister (1973).

The subjects in the Doster & McAllister (1973) study were male, whereas the subjects in the present study were female. It may be that the effect of status as defined is greater upon male subjects than it is upon female subjects.

In the Doster & McAllister (1973) study, a male model was used for male subjects. In the present study, a male model was used for female subjects. The effect of the model's status may be related to the similarity

of sex between model and observers.

Another explanation of the difference in findings between the Doster & McAllister (1973) study and this study may lie in the definition of "status". In the Doster & McAllister (1973) study, the low status was defined as a volunteer peer, and the high status was defined as a clinical intern with experience. In the present study, low status was defined as an inexperienced graduate student, and high status was defined as an experienced professional. It is possible that in the present study, the definitions of high versus low status were not actually as different as assumed. Perhaps to undergraduate female students, the status of a graduate student is not really "low," and the status of an experienced professional is not sufficiently higher than the status of the graduate student. If the status "graduate student" had a positive effect upon the self-disclosure of the subjects, adding more status--experienced professional--may not have resulted in an increase in effect, because the effect of status may have peaked in the "graduate student" condition.

Perhaps the Doster & McAllister (1973) definition of status permitted a more pronounced separation between high and low status conditions. These authors defined the low status condition in terms of peer status, and the high

status condition in terms of an experienced, graduate student.

Although it was concluded that there was no significant model status effect upon the self-disclosure of the subjects, the means of the three dependent measures merit some attention, since all three were in the opposite direction predicted by the hypothesis, and opposite the direction found in the Doster & McAllister (1973) study. Flanders (1968) cited several investigations which support the notion that high status models are more effective than low status models. However, there have been some indications that subjects who believe that they are like the models in some qualities are more likely to imitate models than if they perceive that the models are very different from themselves (Burnstein, Stotland, & Zander, 1961; Stotland & Patchen, 1961). If subjects cannot in some way identify with the model, they may be less inclined to imitate the model. The *identification* process may explain the trend found in the present study, that the consistently higher scores on all three dependent measures were associated with the low status model condition. It may be that female subjects were more able to identify with the low status qualities of "student" and "inexperienced" than they were able to identify with the qualities of "experienced" and

"professional." The separation of "student" and "professional" also suggests an age separation, i.e., the "student" would more likely be of similar age to the subject than the "professional."

Therapist Status

Similar to the model status condition, there were no treatment differences attributable to the status of the therapist. Unlike the model status condition, there were no consistent directions in the means of the three dependent variables. It is quite possible that the occurrence of "status" more than once resulted in an overload of the "status" variable, and that subjects were unaffected by the second appearance of this attribute.

Therapist Sex and Self-Disclosure

In the ratings of self-disclosures made by therapists at the end of each topic on which the subjects focused, a therapist sex main effect was found for the topic of Embarrassment. Female therapists reported that the female subjects self-disclosed more on the topic of Embarrassment than was reported by the male therapists.

One explanation for such a result is that the subjects did, in fact, self-disclose more on the topic of Embarrassment to the female therapists than to the male

therapists. It is not surprising that female subjects would have felt more comfortable in revealing personal embarrassment to other females than to males. However, one might also speculate that female subjects would have also revealed more personal anger and hurt to the female therapists than to the male therapists. Apparently, such was not the case, at least not statistically. It should be pointed out, however, that the means for Anger and Hurt favored greater self-disclosure to the female therapists, but only self-disclosures on the topic of Embarrassment achieved statistical significance.

From the female therapists perspective, it could be argued that the female therapists were more responsive to the disclosures of the female subjects, and tended to rate the self-disclosures of the female subjects higher than the male therapists rated the female subjects. Perhaps the male therapists needed more blatantly personal content for a particular rating than was needed by the female therapists, i.e., the female therapists were more sensitive to or understanding of "female" embarrassment than were the male therapists.

Limitations

The limitations of measurement are not unique to this study, but they are real and undoubtedly had their

influence. The verbalizations of the subjects in the study were assessed for their personal versus impersonal content, and the assessment was given a value along a four point rating scale. The unit of analysis was the therapist's rating of the subject's self-disclosure. Consequently, the assumption is made that the therapist's rating is directly related to subject self-disclosure. To the extent that this is true, the dependent variable was, indeed, self-disclosure.

The reliability of the Self-Disclosure Rating Scale fell within acceptable limits, but its validity is yet to be established. Acceptable reliability and stability of scores with the Self-Disclosure Rating Scale can be achieved with several hours of training. However, the validity of the Self-Disclosure Rating Scale must remain questionable.

Sample The size and the sex of the sample limited the power and the generalizability of the investigation. In several instances, a larger sample would have possibly provided sufficient power to achieve statistical significance.

A sample of male and female subjects would have increased the generalizability of the results, and would have permitted an opportunity to investigate the effect

of the sex of the therapist on male subjects. It was found that female subjects apparently self-disclosed more to female therapists on the topic of embarrassment. Perhaps male subjects would have also favored their own sex in the self-disclosure of one of the topics.

Treatment Effects and Instrumentation Subjects were exposed to one of two examples of a model self-disclosing. The levels of self-disclosure corresponded to levels 1 and 4 of the Self-Disclosure Rating Scale. Subjects who were exposed to the Level 1 model could move in only one direction in their own self-disclosures, that is, towards a higher level. At worse, they would have remained at Level 1. But, if deviation were to occur at all, it could only be a positive deviation, towards Level 2 or greater.

The reverse was true for subjects who were exposed to the Level 4 model. If the subjects deviated from the model's example, the deviation was in the direction of a lower level. Because the models of self-disclosure were representative of the extreme ends of the rating scale, deviation occurred towards the middle of the scale. It may be that the translation of the extremes of a rating scale into examples of behavior (to be rated by the rating scale) tends to encourage a regression towards the middle of the scale, and create a

masking of the treatment effects. If the effects of treatment are to be observed as accurately as possible, perhaps measurement should not be limited to behaviors which occur in one direction only.

Hawthorn Effect The subjects who participated in the study were aware that they were in an experiment. To the extent that this knowledge differentially affected the subjects' responses, the results cannot be attributed only to the experimental conditions. In addition, the "demand characteristics of the experimental situation" (Bracht & Glass, 1968, p.457), that is, the extent to which the purpose of the study was clear to the subjects, may have affected the subjects' behavior.

The effects of social desirability may have been present in the study. Subjects who volunteer for experiments want to do the right things, and be well evaluated (Bracht & Glass, 1968). Subjects are likely to perform specifically for the experiment. "Once a subject has agreed to participate in a psychological study, he implicitly agrees to perform a very wide range of actions on request without inquiring as to their purpose..." (Orne, 1962, p. 777).

The external validity of experiments is a difficult quality to assess, and perhaps is never totally established (Campbell & Stanley, 1963). The

above sources of external invalidity are mentioned, not because it is known that these sources of invalidity did in fact occur in the study, but more in keeping with Campbell & Stanley's (1963) position that dangers to external validity may never be completely avoided, and can always be expected to play a part as new studies and refinements of previous studies are generated.

Implications for Future Research

Of particular interest would be the replication of the model self-disclosure variable. The null hypothesis for this variable was rejected at the .05 level, but could have been considered significant at a higher *alpha* level (.0651). In view of the relatively small sample size of fifty six which was used, one possible outcome of a replication with a larger sample would be a rejection of the null hypothesis at the .05 level, indicating that the present design lacked the needed power to reject the null hypothesis at the .05 level. On the other hand, replication might confirm the results of the present study, i.e., no significant effects on self-disclosure attributable to the self-disclosure of the model.

The independent variable status did not achieve statistical significance in either the model or the therapist conditions, but the means of the three dependent

measures in the model status variable consistently favored the low status model treatment. The direction of the model status means, though not significant, was opposite the direction reported by Doster & McAllister (1973). These authors reported that more self-disclosure was associated with the high status model condition. The means of the model status condition in the present study favored the low status of the model. Since the Doster & McAllister (1973) study used all male subjects and the present study used all female subjects, it may be that either females do not respond to status in the same way that males respond, or that females respond to a different type of status. The failure of this study to support the status main effect of the Doster & McAllister (1973) study may also be due to the differences between the two studies in the definition of status.

In order to permit a more precise measurement of the variability of subject responses than achieved in the present study, it may be that a refinement of the levels of the Self-Disclosure Rating Scale is needed, along with a modification of the modeled examples of self-disclosure. The modeled examples used may have encouraged a regression towards the mean of the Self-Disclosure Rating Scale.

The application of modeling procedures to non-college subjects needs to be investigated. It seems that the Community Mental Health Centers which have recently begun to provide mental health services to primarily the non-college population would be an excellent source of investigations for modeling procedures. In particular, the male population has received less attention than the female population in psychological experiments related to the effects of modeling procedures and pretherapy training.

In the present study, a male was used to model verbal behavior for female subjects. Future studies using modeling procedures might incorporate the sex of the model with the topic of self-disclosure as independent variables. It may be that same sex modeling would be more effective in the modeling of some behaviors, but less effective in the modeling of other behaviors. Perhaps there are some behaviors for which an opposite sex model would be more effective for pretraining clients.

The length of the modeled example has not been systematically investigated. It would be helpful to know the optimum length of a modeled example. It is possible that too much modeling may have the same effect as too little modeling.

In the study, the topic of the modeled example was not related to any of the topics which were presented

to the subjects for self-disclosure. It was intended that the *process* of self-disclosure be the focal point of the modeling. However, it may be that modeling of the same topic which is subsequently presented for self-disclosure results in greater self-disclosure for that topic.

Ultimately, the purpose of research in modeling procedures for pretherapy training is to discover those variables which will maximize the effectiveness of psychotherapy. In order to realistically assess the value of pretherapy training, hypotheses need to be tested with actual clients who have presented themselves to therapists for the purpose of therapy. Long term studies need to be conducted on actual clients, and the effects of pretherapy training need to manifest themselves beyond the initial interview. The initial interview has frequently been recognized as a critical moment between client and therapist. However, whether or not pretherapy training significantly affects the disposition to change needs to be evaluated in terms of the client who experiences the results of therapy.

LIST OF REFERENCES

LIST OF REFERENCES

- Anstett, Richard E. The effect of presenting clients with information about appropriate role behavior on the in-counseling behavior of clients. Unpublished doctoral dissertation, Ohio State University, 1971.
- Asch, S.E. The doctrine of suggestion, prestige and imitation in social psychology. Psychological Review, 1948, 55, 250-276.
- Bandura, A. Social learning through imitation. In M.R. Jones (Ed.), Nebraska symposium on motivation. Lincoln, Nebraska: University of Nebraska Press, 1962, Pp, 211-269.
- Bandura, A. Influence of model's reinforcement contingencies on the acquisition of imitative responses. Journal of Personality and Social Psychology, 1965, 1, 589-595. (a)
- Bandura, A. Vicarious processes: A case of no-trial learning. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology, 2, New York, Academic Press, 1965. (b)
- Bandura, A. Behavioral modifications through modeling procedures. In L. Krasner & L.P. Ullman (Eds.), Research in behavior modification. New York: Holt, Rinehart & Winston, 1965. Pp. 310-340. (c)
- Bandura, A. Principles of behavior modification. New York: Holt, Rinehart & Winston, 1969.
- Bandura, A., & Barab, P.G. Processes governing disinhibitory effects through symbolic modeling. Journal of Abnormal Psychology, 1973, 82, 1-9.
- Bandura, A., & Huston, A.C. Identification as a process of incidental learning. Journal of Abnormal and Social Psychology, 1961, 63, 311-318.

- Bandura, A., & McDonald, F.J. The influence of social reinforcement and the behavior of models in shaping children's moral judgments. Journal of Abnormal and Social Psychology, 1963, 67, 274-281.
- Bandura, A., Ross, D., & Ross, S. Imitation of film-mediated aggressive models. Journal of Abnormal and Social Psychology, 1963, 66, 3-11.
- Berger, S.M. Observer practice and learning during exposure to a model. Journal of Personality and Social Psychology, 1966, 3, 696-701.
- Blocher, D. What counseling can offer clients: Implications for research on selection. In J.M. Whiteley (Ed.), Research in counseling. Columbus, Ohio: Charles E. Merrill Publishing Co., 1967, Pp. 5-20.
- Bordin, E.S. Psychological counseling. New York: Appleton-Century Crofts, 1955.
- Bracht, G.H., & Glass, G.V. The external validity of experiments. American Educational Research Journal, 1968, 5, 437-474.
- Burnstein, E., Stotland, E., & Zander, A. Similarity to a model and self-evaluation. Journal of Abnormal and Social Psychology, 1961, 62, 257-264.
- Campbell, D.T., & Stanley, J.C. Experimental and quasi-experimental designs for research. Chicago: Rand, McNally and Co., 1963.
- Carkhuff, R.R., Helping and human relations: A primer for lay and professional helpers. Volume 2. Selection and training. New York: Holt, Rinehart & Winston, 1969
- Carkhuff, R.R. The development of effective courses of action for ghetto children. Psychology in the Schools, 1970, 7, 272-274.
- Carkhuff, R.R. Training as a preferred mode of treatment. Journal of Counseling Psychology, 1971, 18, 123-131.
- Cooley, W.W., & Lohnes, P.R. Multivariate data analysis. New York: Wiley and Sons, Inc., 1971.

- Cornfield, J., & Tukey, J. W. Average values of mean squares in factorials. Annals of Mathematical Statistics, 1956, 27, 907-949.
- Doster, J. A. Effects of instructions, modeling, and role rehearsal on interview verbal behavior. Journal of Consulting and Clinical Psychology, 1972, 39, 202-209.
- Doster, J. A., & McAllister, A. Effect of modeling and model status on verbal behavior in an interview. Journal of Consulting and Clinical Psychology, 1973, 40, 240-243.
- Doster, J. A., & Strickland, B. R., Disclosing of verbal material as a function of information requested, information about the interviewer, and interviewee differences. Journal of Consulting and Clinical Psychology, 1971, 37, 187-194.
- Doster, J. A. Disclosure rating scale. Mimeograph, personal communication, 1973.
- Ebel, R. L. Estimation of the reliability of ratings. Psychometrika, 16, 1951, 407-424.
- Feldman, R., Lorr, M., & Russell, S. A mental hygiene case survey. Journal of Clinical Psychology, 1958, 14, 245-250.
- Flanders, J. P. A review of research on imitative behavior. Psychological Bulletin, 1968, 69, 316-337.
- Frank, J. Persuasion and healing. Baltimore: John Hopkins Press, 1961.
- Freud, S. A note on the prehistory of the technique of analysis, 1920. In J. Strachey (Ed.), Sigmund Freud: Collected papers, Volume 5, 1959.
- Garfield, S., & Kurz, M. Evaluation of treatment and related procedures in 1,216 cases referred to a mental hygiene clinic. Psychiatric Quarterly, 1952, 26, 414-424.
- Garner, W. R. Uncertainty and structure as Psychological Concepts. New York: John Wiley & Sons, Inc., 1962.

- Gilbert, W. Counseling: Therapy and diagnosis. Annual Review of Psychology, 1952, 3, 351-380.
- Gilmore, J. B. Toward an understanding of imitation. In Simmel, Hoppe, & Milton (Eds.), Social Facilitation and imitative behavior. New York: Allen and Bacon, 1968.
- Gittleman, M. Behavior rehearsal as a technique in child treatment. Journal of Child Psychology and Psychiatry, 1965, 6, 251-255.
- Glass, G. V., & Stanley, J. C. Statistical methods in education and psychology. New Jersey: Prentice-Hall, Inc., 1970.
- Goi, Fedele J. The effect of actual therapy pretraining upon the depth of self-exploration of university counseling center clients during the initial interview. Unpublished doctoral dissertation, Temple University, 1971.
- Goldstein, A. P., Heller, K., & Sechrest, L. B. Psychotherapy and the psychology of behavior change. New York: Wiley, 1966.
- Goldstein, A. P., & Shipman, S. G. Patients' expectancies, symptom reduction, and aspects of the initial psychotherapeutic interview. Journal of Clinical Psychology, 1961, 17, 129-133.
- Greenberg, R. P. Effects of presession information on perception of the therapist and receptivity to influence in a psychotherapy analogue. Journal of Consulting and Clinical Psychology, 1969, 33, 425-429.
- Hays, W. L. Statistics for the social sciences. New York: Holt, Rinehart & Winston, Inc., 1973.
- Heller, K. Effects of modeling procedures in helping relationships. Journal of Consulting and Clinical Psychology, 1969, 33, 522-526.
- Hetherington, E. M., & Frankie, G. Effects of parental dominance, warmth, and conflict on imitation in children. Journal of Personality and Social Psychology, 1967, 6, 119-125.

- Hicks, D. J. Imitation and retention of film-mediated aggressive peer and adult models. Journal of Personality and Social Psychology, 1965, 2, 97-100.
- Hoehn-Saric, R., Frank, J. D., Imber, S. D., Nash, E. H., Stone, R. G., & Battle, C. C. Systematic preparation of clients for psychotherapy. 1. Effects on therapy behavior and outcome. Journal of Psychiatric Research, 1964, 2, 267-281.
- Hummel, T. J., & Sligo, J. R. Empirical comparison of univariate and multivariate analysis of variance procedures. Psychological Bulletin, 1971, 76, 49-57.
- Jourard, S. M. The transparent self. Princeton: Van Nostrand, 1964.
- Kell, B. L., & Mueller, W. J. Impact and change: A study of counseling relationships. New York: Appleton-Century-Crofts, 1966.
- Kelley, H. H., Thibaut, J. W., Radloff, R., & Mundy, D. The development of cooperation in the "minimal social situation." Psychological Monographs, 1962, 76(19)(Whole No. 538).
- Kiesler, D. J. Some myths of psychotherapy research and the search for a paradigm. Psychological Bulletin, 1966, 65, 110-136.
- Klepper, I. L. The effects of pre-interview exposure to vicarious reinforcement on disclosure and attraction in alcoholics: A psychotherapy analogue. Unpublished, doctoral dissertation, Syracuse University, 1971.
- Klinger, E. Modeling effects on achievement imagery. Journal of Personality and Social Psychology, 1967, 7, 49-62.
- Krumboltz, J. Future directions for counseling research. In J. M. Whiteley (Ed.), Research in counseling. Columbus, Ohio: Charles E. Merrill Publishing Co., 1967.
- Kurland, S. Length of treatment in a mental hygiene clinic. Psychiatric Quarterly Supplement, 1956, 30, 83-90.

- Lefkowitz, M., Blake, R. R., & Mouton, J. S. Status factors in pedestrian violation of traffic signals. Journal of Abnormal and Social Psychology, 1955, 51, 704-706.
- Lennard, H. L., & Bernstein, A. Role learning in psychotherapy. Psychotherapy: Theory, Research and Practice, 1967, 4, 1-6.
- Leonard, J. A. An experiment with occassional false information. Quarterly Journal of Experimental Psychology, 1954, 6, 79-85.
- Liberman, B. L. The effect of modeling procedures on attraction and disclosure in a psychotherapy analogue. Unpublished doctoral dissertation, Syracuse University, 1970.
- McMains, M. J., & Liebert, R. M. The influence of discrepancies between successively modeled self-reward criteria on the adoption of self-imposed standard. Journal of Personality and Social Psychology, 1968, 8, 166-171.
- Marston, A. R., & Kanfer, F. H. Group size and number of vicarious reinforcements in verbal learning. Journal of Experimental Psychology, 1963, 65, 593-596.
- Miller, N. E., & Dollard, J. Social learning and imitation. New Haven: Yale University Press, 1941.
- Minuchin, S., Chamberlain, P., & Graubard, P. A project to teach learning skills to disturbed delinquent children. American Journal of Orthopsychiatry, 1967, 37, 558-567.
- Mowrer, O. H. Learning theory and personality dynamics. New York: Ronald, 1950.
- Mowrer, O. H. Learning theory and the symbolic processes. New York: Wiley, 1960.
- Mowrer, O. H. Crisis in Psychiatry and Religion. Princeton: Van Nostrand, 1965.
- Ohlson, Ronald W. The effects of video-tape modeling of self-disclosure upon client revealingness and personality change. Unpublished doctoral dissertation, Fuller Theological Seminary, 1970.

- Orne, M. T. On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. American Psychologist, 1962, 17, 776-783.
- Orne, M. T. & Wender, P. H. Anticipatory socialization for psychotherapy: Method and rationale. American Journal of Psychiatry, 1968, 124, 1202-1212.
- Pierce, R., & Drasgow, J. Teaching facilitative interpersonal functioning to psychiatric patients. Journal of Counseling Psychology, 1969, 16, 295-298.
- Poulton, E. C. Learning the statistical properties of the input in pursuit tracking. Journal of Experimental Psychology, 1957, 54, 28-32. (a)
- Poulton, E. C. On prediction in skilled movements. Psychological Bulletin, 1957, 54, 467-478. (b)
- Rogers, C. R. The necessary and sufficient conditions of therapeutic personality change. Journal of Consulting Psychology, 1957, 21, 95-103.
- Rosenbaum, M. E., & Arenson, S. Observational learning: Some theory, some variables, some findings. In Simmel, Hoppe, & Alexander (Eds.), Social Facilitation and Imitation. New York: Aken and Bacon, 1968.
- Sanford, N. Clinical methods: Psychotherapy. Annual Review of Psychology, 1953, 4, 317-342.
- Sauber, S. Richard. Approaches to precounseling and therapy training: An investigation of its potential influence on process and outcome. Unpublished doctoral dissertation, Florida State University, 1971.
- Sears, R. R. Identification as a form of behavioral development. In D. B. Harris (Ed.), The concept of development: An issue in the study of human behavior. Minneapolis: University of Minnesota Press, 1957.
- Stein, A. H. Imitation of resistance to temptation. Child Development, 1967, 38, 157-169.

- Stieper, D. R., & Wiener, D. N. Dimensions of psychotherapy: An experimental and clinical approach. Chicago: Aldine, 1965.
- Stotland, E. The psychology of hope. San Francisco: Jossey-Bass, Inc., 1969.
- Stotland, E., & Patchen, M. Identification and changes in prejudice and in authoritarianism. Journal of Abnormal and Social Psychology, 1961, 62, 265-274.
- Thoresen, C. E., & Krumboltz, J. D. Sex of counselors and models: Effect on client career exploration. Journal of Counseling Psychology, 1967, 14, 503-508.
- Truax, C. B., & Carkhuff, R. R. Personality change in hospitalized mental patients during group psychotherapy as a function of the use of alternate sessions and vicarious therapy pretraining. Journal of Clinical Psychology, 1965, 21, 225-228.
- Truax, C. B., Schuldt, J., & Wargo, D. Self-ideal concept congruence and improvement in group psychotherapy. Journal of Consulting Psychology, 1968, 32, 47-53.
- Truax, C. B., & Wargo, D. G. Effects of vicarious therapy pretraining and alternate sessions on outcome in group psychotherapy with outpatients. Journal of Consulting and Clinical Psychology, 1969, 33, 440-447.
- Walters, R. H., & Amoroso, D. M. Cognitive and emotional determinants of the occurrence of imitative behaviors. British Journal of Social and Clinical Psychology, 1967, 6, 174-185.
- Warren, N. C., & Rice, L. N. Structuring and stabilizing of psychotherapy for low-prognosis clients. Journal of Consulting and Clinical Psychology, 1972, 39, 173-181.
- Whalen, C. Effects of a model and instructions on group verbal behaviors. Journal of Consulting and Clinical Psychology, 1969, 33, 509-521.
- Wheeler, L. Toward a theory of behavioral contagion. Psychological Review, 1966, 73, 179-192.

- Willis, R. H. Two dimensions of conformity-nonconformity. Sociometry, 1963, 26, 499-513.
- Wolberg, L. R. The technique of psychotherapy. Part two. New York: Grune & Stratton, 1967.
- Zerfas, P. G. Effects of induced expectancies and therapist activity upon patient behavior in group psychotherapy. Unpublished doctoral dissertation, Indiana University, 1965.

APPENDICES

APPENDIX A

TRANSCRIPT OF HIGH SELF-DISCLOSURE OF THE MODEL

APPENDIX A

TRANSCRIPT OF HIGH SELF-DISCLOSURE OF THE MODEL

Uh...as far as social gatherings are concerned...
uh...I guess when I think about myself in relationship to
...ah, you know, a lot of people I know, I guess I have to
say that uh...I don't feel that...uh...I'm a very sociable
person. Now, I enjoy, you know, being around people, but
at certain times uh...because I also enjoy my privacy. I
don't...uh...feel...uh...uh a need to have to be around
people all the time...uh so I'm not one that goes out...
uh to a lot of parties or...or gatherings or that sort of
thing. It's ah...ah...hard for me if it's a social
gathering, you know, where there is a lot of people...ah..
that I don't know...ah...where you know that people are
carrying on and that sort of thing. I find it really hard
to get into the thing...to get with what's going on...to
join in the discussion or anything that might be going on
...and ah I've noticed this about myself, and it's even
worse, you know, if it's a large party...uh...you know...
uh like a place where...a-ah...the band's blasting so
loud, for instance, that it's...ah...you can hardly hear
yourself think. Ahh...in a situation like that, you know,
I...I can...I really get lost...ah...I...I can just sort

of feel myself fade...but...uh...well, once, you know, once somebody will break the ice with me, or once, say, I finally work up enough nerve to break the ice myself, I can usually have a pretty good time and...uh, you know, things go pretty well.

I can remember a few parties I have gone to where uh...I just never really got that far into it. Ah...I sort of just, you know, sat outside of things so to speak. Uh...and I just really wasn't a part of what everyone else was doing...I just wasn't a part of anything that was going on and...uh...now, that was a pretty miserable feeling...uh...sort of depressing...and I can remember times when...uh...even though maybe I didn't want to admit it at the time, I was depressed uh...and...and you know in situations like that, sometimes I'll uh...try to force myself to socialize, depending on my mood...uh...but then again...sometimes I just...I just leave and I go home. To give you an example...uh...this was about two weeks ago...uh...I went to a party...uh...that was given for a new university professor...uh...and because of where I work...uh, you know, it was sort of expected that I go and uh...I knew a few people there...uh...at that party...uh, but most of them were strangers to me...uh sort of, you know, big shots...uh, and, you know, I really didn't know how to act...ahh...ahh...I kept, you know, I kept wanting to get lost...uh that...that's what was going on inside me. Uh...but probably on the outside, you know, I had this big grin

on my face...uh that I'm sure made other people think that I was having a good time. Uh...well, that...that plastered smile uh...really served me well because it kept people away from me. Uh...I really don't know...uh.. you know, what I would have done uh...if one of those people uh...had walked up to me. Ahh...I...I guess I must really feel self-conscious...uh...uh, you know, I really wouldn't know what to say to someone who's supposed to be, you know, that sophisticated and that full of prestige. Ah...you know, all that high society sophistication just feels too heavy in my gut and...and I can't relax with it.

Ahh...I really don't like feeling that...uh...I guess that's why I don't go to those things very often. Besides, you know, it just really is not that important to me uh...uh, you know, to be able to be a smoothy uh... in those kinds of gatherings. Ahh...but I ran into a couple there that I knew several years ago, and I spent most of the evening with them, and uh...you know with them I had a pretty good time...uh...because it, you know, it was as if uh...uh...the three of us, you know, had just sort of blocked everybody else out and...and like it was like there was just three of us in that room and not that big crowd.

Ahh...I guess there are times when I wish, you know that I could do something about myself in this regard... sometimes I really wish that it wasn't so doggone hard for me to meet strangers...for me to go up to people that I

don't know or I've never met before...uh...I...I feel like I...I want to be more outgoing and more outward toward people uh...but it's not something that, you know, that bothers me a whole lot...uh...it does once in a while but nothing to any great extent...uh...sometimes I think it...it bothers other people more uh...when they see that uh...I feel that I don't need that kind of thing all the time...uh...and you know, like I'd...I'd almost rather do things on the spur of the moment uh...when it comes to doing things with other people. You know, like sometimes when you say to somebody "Let's do this" or "Let's do that" and you know you don't make a big production out of the whole thing. You know, because like I said, I...I do enjoy being around people, but at certain times...uh.. and then at other times, and...and probably, you know, I guess I'd have to say the majority of the time...uh...I enjoy just being alone, or with one or two, or perhaps three other people.

This transcript is a modification of an audio recording received by personal communication from Joseph A. Doster, Department of Psychology, University of Georgia, Athens, Georgia, June, 1973.

APPENDIX B

TRANSCRIPT OF LOW SELF-DISCLOSURE OF THE MODEL

APPENDIX B

TRANSCRIPT OF LOW SELF-DISCLOSURE OF THE MODEL

Boy, that's...uh...that's sort of a broad topic...
ahh...let's see...hmm...social gatherings...hmm...uhhh...
social gatherings are pretty easy to find around here...
ahh...just about every day of the week, something is
going on...ahh...you can go to...ahh...a lot of people
getting together for one reason or another. Ah, my idea
of ah...a good social gathering uh...is a relaxed,
leisure situation uh...where...uh there are people...uh...
a guy can feel comfortable with. For most people ah...
what feels right one time ah...might not feel right another
...uh, that's why it's nice to...to have a lot of things
to choose from ah...uh...what I mean is ah...you don't
always feel like doing the same thing...uh, so it's nice
to have a lot of different things going on...uh...

Social gatherings are something ah...you have to
stay away from uh...uh...in order to appreciate...uh...
if you always go to them ah...they can become a drag...uh
something real dull...uh, I guess it's like anything ah...
you know, too much of it and you don't appreciate it
anymore...mmm...like going to bars...uh, the people who
really, uh...enjoy themselves the most are...are those

that uh...don't go to bars very often...ah...its sort of a break for them, something different uh...something enjoyable. Ah...some people go to bars..ah...like its part of their daily routine or... or something they do automatically several times a week ...uh, and you can sort of spot them...uh...uh, they know all the waitresses by name uh...and they're usually alone, uh...not uh... really doing anything, just being there. Ah...I guess they're probably lonely...ah... just killing time or ah... maybe hoping that ah...something good will come their way. Now they've overdone a good thing ah...going to the bars for them has become a...a...you know, a compulsion ah...they'd be better off ah...trying something different for a while, like ah...ah... going to a house party with some friends, if they have any.

Ahh...it can be fairly easy to get tired of social gatherings...uh...because there is this constant bombardment of people...you know, people all over the place ... ah...particularly if there's something good going on... ah...you...you begin to feel like sardines in a can, ah... and the noise can be unbearable ah...where there is a lot of people there's bound to be a lot of noise...uh, it sort of makes you realize the population problem is getting pretty serious...ah...

It's really hard to meet people in large crowds, uh it sort of makes me wonder how anybody ever meets anybody

else in those places. Ahh...a guy can really get lost. Uh...when it comes to being around other people ah...you sort of have to take a look at yourself and ...and decide ah...what's best for you as an individual. Ah...some people ah...sort of like the idea of being around a lot of people all the time, and ah...ah...you know, then on the other hand there's ah...people who are...well, you know, they're sort of like loners uh...they uh...uh, maybe go out once in a while and ah... spend most of their time ah...by themselves. So it's really kind of ah...ah.. ah...individualistic kind of thing and ah...the problem with that is ah...though that ah...depending on who your friends are and what...what kind of a crowd you run with, you can uh...uh...set some ah...pretty screwy feelings about yourself ah...you know, for instance, if you have some friends who really like ah...being around people all the time and you...you don't, then ah...sometimes they can give you a lot of grief ah...particularly if uh...their always doing something like ah...trying to get you to go to the places that ah...they like to go to ah... and ah... sometimes it's ah...pretty hard to ah...ah...to convince people that you kind of like being alone uh...but ah... ah...you don't want to be alone too often because ah... then ah...people can get the wrong idea about you.

Ahh...alcohol seems to really be a part of social gatherings, uh, you know, when you take a look at...at

ah...what goes on most of the time ah...when you get a large group of people together or even a small group of people ah...you know, there's always or usually it seems like there is some kind of drug involved and I guess the most popular one is alcohol...ah, sort of makes you realize that ah...somehow ah...unconsciously ah... ah people are really uptight ah...about being in...in large crowds with strangers and ah, you know, alcohol sort of becomes the ice breaker or it loosens you up a little bit to the point where you...you don't feel so inhibited or ah...sort of gives you some courage to somehow do things that ah...you might not have done before that you might have wanted to do like ah...going up to someone and trying to meet them for the first time.

APPENDIX C
SELF-DISCLOSURE RATING SCALE

APPENDIX C

SELF-DISCLOSURE RATING SCALE

RATING LEVEL

Absence of personal involvement. The topic has been explored in an impersonal manner. The subject made observations about others rather than himself. The focus is on other people, objects, events. Self-references are lacking or very few in number.	1
---	---

The subject has placed himself within the context of the topic, but talked predominantly about his ideas rather than his personal experiences. Self-references enhanced the picture of the subject, but there was little exploration or elaboration of personal thoughts feelings, behaviors. The subject talked about possible feelings, thoughts, behaviors, but did not attach personal meaning to the topic except in a general way.	2
--	---

The subject dealt with the topic predominantly on a personal level. He elaborated on his thoughts and feelings, giving some idea of how external events affect his thoughts and feelings, and how his thoughts and feelings affect his behavior.	3
--	---

The subject focused entirely or almost entirely on himself. He talked about his thoughts and feelings and how these affect his behavior. He used self-references entirely or almost entirely, and evaluated his thoughts, feelings, behaviors in terms of his like or dislike of them. He discussed the personal impact of feedback from others on his thoughts, feelings, behaviors. He provided an idea of how he regards himself.	4
--	---

The Self-Disclosure Rating Scale is a modification of the seven level Disclosure Rating Scale received by personal communication from Joseph A. Doster, Department of Psychology, The University of Georgia, Athens, Georgia, June, 1973.

APPENDIX D
AGREEMENT TO PARTICIPATE AS A SUBJECT

APPENDIX D

AGREEMENT TO PARTICIPATE AS A SUBJECT

RESEARCH PROJECT ON MEANINGFUL COMMUNICATION

I am requesting the assistance of a number of students for a research investigation. The general purpose of the study is to learn more about the process of meaningful communication.

Your participation in this study would entail approximately 1/2 hour of your time on Saturday, November 10, 1973, between 8:30 A.M. and 1:30 P.M. Although I am not able to set the precise time for your participation right now, you will be notified before the day of the study regarding the time you would participate for 1/2 hour. Consequently, you will not have to set aside the entire day in order to participate, but only enough time to allow for a 1/2 hour participation. You will receive notification, for example, that your participation is set for 11:00 A.M., or 1:30 P.M., etc..

If you feel you could participate, please sign your name below and complete the information. The information below is being requested for two reasons: 1) to know where and to whom to send the notification of the time for your participation; 2) to enable the experimenter to formulate a descriptive picture of the total group of participants. For purposes of the study itself, the identity of individuals is not relevant, and any single individual will not be able to be identified in the results of this study. To insure that strict confidentiality is maintained, you will be given a code number at the time of the study. This code number will appear on all materials given to you and received from you. The code number will be the means by which the experimenter will follow you through the study.

The results of this study will be available to you upon request after the study is completed. Around January, 1974, send your request to me at the address below.

Ted Stachowiak
230 Cedar Apt. 7
East Lansing, MI.

I AGREE TO PARTICIPATE IN THE RESEARCH STUDY ON MEANINGFUL COMMUNICATION. I WILL BE WILLING TO SET ASIDE 1/2 HOUR OF MY TIME FOR THIS STUDY ON SATURDAY, NOVEMBER 10, 1973, BETWEEN THE HOURS OF 8:30 A.M. AND 1:30 P.M. I WILL BE NOTIFIED BEFORE THE STUDY REGARDING THE EXACT TIME I WILL PARTICIPATE.

Signature of Participant

NAME _____ SEX: ___ FEMALE ___ MALE
(please print)

RES. HALL _____ AGE: _____

ROOM NO. _____

ACADEMIC STATUS: ___ FRESHMAN
___ SOPHOMORE
___ JUNIOR
___ SENIOR

APPENDIX E

MASTER SIGN-IN SCHEDULE FOR SUBJECTS

8:30

NAME	CODE	C*	T*
_____	001	2	2
_____	002	5	6
_____	003	4	8
_____	004	3	4
_____	005	1	5
_____	006	6	1
_____	007	7	3
_____	008	8	7

*C= cell number of Variable Matrix (Table 3.2)

*T= Therapist (numbered 1 through 8)

9:00

NAME	CODE	C	T
_____	009	3	7
_____	010	8	4
_____	011	6	6
_____	012	5	5
_____	013	2	3
_____	014	1	8
_____	015	7	1
_____	016	4	2

9:30

NAME	CODE	C	T
_____	017	5	6
_____	018	1	3
_____	019	4	5
_____	020	2	7
_____	021	6	2
_____	022	7	1
_____	023	8	8
_____	024	3	4

10:00

NAME	CODE	C	T
	025	8	1
	026	4	8
	027	3	4
	028	1	7
	029	7	2
	030	6	5
	031	2	6
	032	5	3

10:30

NAME	CODE	C	T
_____	033	1	2
_____	034	5	8
_____	035	4	5
_____	036	2	4
_____	037	3	7
_____	038	6	1
_____	039	8	3
_____	040	7	6

11:00

NAME	CODE	C	T
_____	041	3	6
_____	042	7	3
_____	043	8	5
_____	044	5	7
_____	045	6	4
_____	046	2	2
_____	047	4	1
_____	048	1	8

11:30

NAME	CODE	C	T
_____	049	2	8
_____	050	4	2
_____	051	1	5
_____	052	3	1
_____	053	8	3
_____	054	7	6
_____	055	6	4
_____	056	5	7

12:00

NAME	CODE	C	T
_____	057	7	1
_____	058	2	4
_____	059	6	7
_____	060	5	3
_____	061	3	2
_____	062	4	5
_____	063	8	8
_____	064	1	6

12:30

NAME	CODE	C	T
_____	065	6	8
_____	066	1	4
_____	067	8	3
_____	068	2	5
_____	069	3	6
_____	070	4	1
_____	071	5	2
_____	072	7	7

1:00

NAME	CODE	C	T
_____	073	1	5
_____	074	2	4
_____	075	4	1
_____	076	8	3
_____	077	3	6
_____	078	5	8
_____	079	6	7
_____	080	7	2

APPENDIX F

**AGREEMENT TO PARTICIPATE IN A RESEARCH STUDY ON
MEANINGFUL COMMUNICATION**

APPENDIX F

AGREEMENT TO PARTICIPATE IN A RESEARCH STUDY ON MEANINGFUL COMMUNICATION

I understand that this is a research study on some variables which are thought to be relevant to the process of meaningful communication. During this study, I will be given some information, and then will be asked to give some information about myself, verbally. I will also be asked to complete a one-item questionnaire.

I agree to allow my verbal responses during the interview to be recorded. I understand that these recordings are being made solely for the purposes of research for this study, and that my confidentiality will be strictly maintained.

I understand that at any time during this study I am free to discontinue my participation totally. I am also free to disallow recording of my responses, if I so desire.

I understand that this study is not a form of therapy or psychological treatment. Hence, I have no expectation of experiencing beneficial effects as a direct result of my participation in this study.

I understand that, upon request, I will receive a written summary of the results of this study. The summary of the results of this study will address itself to the participants as a group, and the performance of any single individual will not be provided, in accord with the ethics of confidentiality.

I voluntarily agree to participate in this study, and have not been offered nor expect any remuneration for my participation.

(Signature of Participant)

Date: _____

APPENDIX G

INTRODUCTION TO PARTICIPANTS

LOW STATUS MODEL

APPENDIX H

INTRODUCTION TO PARTICIPANTS

Thank you for agreeing to spend some of your time with us in this investigation. This is a study about the process of meaningful communication. Its general aim is to investigate some of the aspects of meaningful communication that might be relevant to the communication that occurs between a client and a therapist. With your cooperation, we hope to learn more about this important area.

Please be assured that all information gathered in this study is highly confidential. A coding system is being used to insure that this information remains confidential.

Your code number is _____. This number will appear on all instructions given to you, and all information received from you. It is the only means by which you are identified. Its basic purpose is to allow the main investigator to follow your participation in the study.

For approximately fifteen minutes, you will be in an interview situation with a therapist, similar to what would be encountered in an actual interview with a therapist. This interview situation will be somewhat structured in that the therapist will ask you to talk about yourself on three topics. These topics are common areas of experience and are familiar to you. What you say to the therapist is completely up to you. Only the broad, topical areas will be designated. You are free to respond to these areas as you choose.

Your response to the therapist will be recorded. These recordings are solely for the research purposes of this study. You and the therapist will be in a small, private room. Confidentiality will be strictly enforced by the use of the code number as the only means of identifying the recordings.

LOW STATUS MODEL

Code _____

INSTRUCTIONS TO PARTICIPANTS

To give you an idea of things to say to the therapist, you are asked to listen to a recording which was prepared for this study.

The tape you are about to hear gives one person's idea of how to talk about one's self in the first interview with a therapist. This recording was made by a graduate student who has recently begun studies related to the mental health profession. In making this recording, he was asked to talk about himself on the topic of "social gatherings."

You will not be asked to talk about yourself on the topic of "social gatherings," so you need not try to remember what he says.

APPENDIX I

LOW STATUS THERAPIST

INSTRUCTIONS FOR THE INTERVIEW

APPENDIX J

HIGH STATUS THERAPIST

Code _____

INSTRUCTIONS FOR THE INTERVIEW

In a short while you will have an individual interview with a therapist.

We ask that you not mention to the therapist any information you received in preparation for the interview.

The therapist will ask you to talk about yourself on three topics, approximately five minutes on each topic. The therapist will present these topics to you one at a time.

The therapist for your interview, whom you will meet shortly, is a professional therapist who has spent the past several years working in the mental health field, and is presently a practicing psychotherapist.

APPENDIX K

EXPERIMENTAL INSTRUCTIONS FOR THERAPISTS

APPENDIX K

EXPERIMENTAL INSTRUCTIONS FOR THERAPISTS

In this study, the therapist has two main functions: to interview the subject and to evaluate the subject by using the rating scale provided.

Therapist as Interviewer

As the interviewer, the primary task of the therapist is to facilitate the subject's participation in the interview. The interview is not intended to be a form of therapy for the subject.

Ideally, the subject would do all of the talking, and the therapist would serve as an attentive recipient of the subject's communications. As a facilitator, the therapist helps the subject to focus on whatever content the subject chooses. The therapist facilitates only when facilitation is necessary. The therapist may respond to the subject's request for help in making a point, or convey to the subject that the therapist understands what is being said.

In responding to the subject, the therapist must adhere to the following restrictions:

- 1) the therapist must not, in any way, self-disclose to the subject. The therapist may not offer personal thoughts, feelings, behaviors, events related to the topics of the interview.
- 2) the therapist must not offer interpretations to the subject. The therapist may verbally reflect on the ideas, feelings, behaviors, events which the subject discloses, but the therapist may not give meaning to these beyond the meaning attributed by the subject.
- 3) the therapist must not provide leading responses, that is, responses which are intended to lead the subject into areas which the subject has not initiated. The therapist must not introduce new content to the interview.
- 4) the therapist must not lead the subject into a response which would result in a change of the subject's immediate degree of self-disclosure.

If the subject is self-disclosing at level 2, the therapist may not entice the subject to self-disclose at level 3.

As a facilitator, the therapist's task is to help the subject, when necessary, to focus on the content the subject chooses.

Suggestions for Assisting the Subject If the subject has difficulty beginning, the therapist should say something similar to the following:

"What comes to mind when you think about _____?"

"Sometimes it's difficult to get started. Don't worry about being precise. Tell me whatever comes to mind when you think about _____, and I think you will find it will become easier as you begin to talk."

"Sometimes it's best to begin by just saying whatever comes to mind about _____. Even though you may feel that your words aren't on target at first, I think you'll find that things will come to you once you begin."

Brief Disclosures If the subject indicates that he is finished with the topic before the time is up, then consider that the interview on that particular topic is concluded.

Non-Disclosing Subjects It may happen that some subjects will choose not to talk on one or any of the topics. If, after trying to help the subject begin, it is clear that the subject chooses not to talk on the topic, move on to the next topic. If the subject again is reluctant to talk on the topic, move on to the third topic. Each subject must have an opportunity to talk on all three topics.

Overly Anxious Subjects If the process of self-disclosing generates an inordinate amount of anxiety in the subject which requires immediate and continued attention to the subject, notify the experimenter. Assistance will be available to subjects who require it.

Therapist as Rater

As the rater, the task of the therapist is to evaluate the extent to which the subject self-discloses on each topic. The subject's treatment of a particular topic

can range from an impersonal approach to an entirely personal approach. To assist the therapist in discriminating the meanings of impersonal and personal, these two concepts are defined as they relate to this study.

Definitions

Impersonal "...without connection or reference to any particular person..."¹ In this study, impersonal content is content which has no connection or reference to the subject providing the content. The subject's responses do not pertain to himself as an individual.

Examples: "Most people don't like to feel guilty."
 "It's nice to get a pat on the shoulder."
 "There's a lot of weird notions about sex and marriage."
 "I know some people who get depressed over nothing."

Personal "...of or peculiar to a certain person; private; individual...having to do with the character, personality, intimate affairs, conduct, etc. of a certain person..."² In this study, the "certain person" is the subject in the interview. The subject's responses refer to himself individually.

Examples: "I don't like to feel guilty."
 "I like to get a pat on the shoulder."
 "Sex and marriage really confuse me."
 "That makes me feel depressed."

Ratings

In the role as rater, the therapist must base the rating only on what the subject says. The therapist should avoid basing ratings on "latent" content, or basing ratings on assumptions of what the subject may have intended to say. Ratings should be based only on what the subject communicates verbally to the therapist.

¹Webster's New World Dictionary, College Edition
 (New York: World Publishing Co., 1955), p. 729.

²Ibid., p. 1092.

The therapist must base the rating on subject's entire treatment of the topic, not on segments of the interview. Individual expressions of impersonal or personal content should not be singled out and used as a basis to represent the entire topic.

The quantity of words used or the amount of time used should not bias the rating. The therapist should be concerned only with the content of the subject's remarks on the topic.

As the subject talks during the interview, the therapist has the difficult task of serving as a facilitator for the subject, and serving as a rater for the experimenter. During the interview, the therapist must make a continual effort to be aware of the extent to which the subject is providing impersonal vs. personal content. For this reason, it is imperative that each therapist have a clear understanding of the various levels of the rating scale. If the therapist can accurately conceptualize the degree of self-disclosure on each level of the rating scale, the therapist's rating task will be simplified, and the decision of self-disclosure level will flow smoothly from the subject's treatment of the topic.

INSTRUCTIONS FOR THERAPIST-INTERVIEWERS

Before the Study Begins

1. Check to be sure you are in the assigned room. Therapist numbers and room numbers are identical, e.g., therapist 1 should be in room 1.

2. Familiarize yourself with the recording equipment. If you are unclear about the operation of recorder you will be using, please check with the E as soon as possible.

3. Make sure that the recorder is functioning properly, and that the microphone is appropriately placed to adequately record the interview.

4. Perform a brief "Testing 1...2..." or whatever by using the "Test Tape" provided. Do not use any of the coded tapes for testing. With each recorder, a "testing tape" is provided for the purpose of making preliminary and as needed checks to make sure the recorder is functioning properly. Use only the "testing tape" for testing the equipment. If the recorder does not seem to be functioning properly, notify the E immediately.

5. Arrange the furniture as necessary to provide for a comfortable interview situation. Remove anything from the subject's potential vision that might be excessively distracting. Please remember that the office you are in belongs to someone else, so don't rearrange it in a wholesale fashion, but you may need to make some modifications.

6. Tape cassettes are pre-coded. Check each cassette with your master schedule to make sure you have all of the correct cassettes.

7. As time permits, review the procedures for the interview, and review the content of each of the levels of the rating scale.

8. I would like to reemphasize the extremely critical importance of the proper operation of the recording equipment. Please make sure you fully understand the operating procedures of the machine, and for each

recording, PLEASE REMEMBER TO ACTIVATE THE RECORDING MECHANISM.

Special Instructions For the Cassette Used For the First and Tenth Interviews

Interviews will be recorded on cassettes in the following manner:

<u>Cassette</u>	<u>Interview Number</u>
First	1 & 10
Second	2 & 3
Third	4 & 5
Fourth	6 & 7
Fifth	8 & 9

Interviews will normally be recorded by first using one side of the cassette, and then flipping the cassette over to the other side for the subsequent interview. As you see in the above listing, the exception to this is that the first and the tenth interviews will be recorded on the same cassette.

The following procedure should be used for the cassette which will record the first and tenth interviews.

After the first interview is completed (discussion on all three topics has occurred), the therapist inserts the cassette into the envelope marked for that cassette, and delivers it to the area which will be designated. Before the last interview, the therapist must pick up this cassette from the designated area and use this cassette (the unused side) for the final or tenth interview.

The following procedure should be used for the cassettes which will record interviews two through nine.

Record the second interview on the cassette side marked for the second interview. At the end of the second interview (subject has left), depress the fast-forward mechanism on the recorder and advance the tape all the way to the end. This should take about 30 seconds to do. After the tape is advanced all the way to the end, flip the cassette over to the side for the third interview. After the third interview is completed, remove the cassette, place it in the envelope marked for this cassette, and take the cassette (in the envelope) to the designated area. Repeat this procedure for the remaining

cassettes and interviews. The critical procedure is to advance the cassette tape all the way to the end before using the second side of the cassette. If this is not done there may not be sufficient tape on the second side to completely record the interview.

After the Subject Enters the Room

1. After the subject enters the room, check the 3 x 5 card (each subject will have one) to make sure that the subject is in the right room at the right time. Check to make sure that the code on the subject's card is identical to the code on the cassette tape which will record the interview.

2. After the above has been completed, and you and the subject are seated, engage the recording mechanism on the recorder, and start the recorder. ALLOW A 10 SECOND PAUSE.

3. After the 10 second pause, begin with the following instructions.

WE ARE GOING TO SPEND ABOUT 15 MINUTES TOGETHER. DURING THIS TIME I WILL GIVE YOU THREE TOPICS, ONE AT A TIME, AND I WANT YOU TO TALK ABOUT YOURSELF ON THESE TOPICS. I WANT YOU TO DO MOST OF THE TALKING, BUT I WILL HELP OUT WHEN I THINK I CAN. WE WILL SPEND ABOUT 5 MINUTES ON EACH TOPIC, AND I WILL LET YOU KNOW WHEN THE 5 MINUTES IS UP. AS YOU KNOW, THIS IS A CONFIDENTIAL INTERVIEW, SO I WANT YOU TO FEEL FREE TO SAY WHATEVER YOU LIKE.

BEFORE WE GET STARTED, I'D LIKE TO KNOW IF YOU ARE CLEAR ON WHAT I WOULD LIKE YOU TO DO.

Give limited, additional clarification if needed, holding to the substance of the above instructions. Do not introduce any new information into your instructions.

When the subject is ready, present the following instruction.

I WOULD LIKE YOU TO TALK ABOUT YOURSELF ON THE TOPIC OF ANGER.

4. The subject is free, of course, to use all or none of the time allotted for the topic. However, after 4 minutes has passed, the therapist should terminate the interview at the next appropriate time.

SELF-DISCLOSURE RATING SCALE

RATING LEVEL

Absence of personal involvement. The topic has been explored in an impersonal manner. The subject made observations about others rather than himself. The focus is on other people, objects, events. Self-references are lacking or very few in number. 1

The subject has placed himself within the context of the topic, but talked predominantly about his ideas rather than his personal experiences. Self-references enhanced the picture of the subject, but there was little exploration of elaboration of personal thoughts feelings, behaviors. The subject talked about possible feelings, thoughts, behaviors, but did not attach personal meaning to the topic except in a general way. 2

The subject dealt with the topic predominantly on a personal level. He elaborated on his thoughts and feelings, giving some idea of how external events affect his thoughts and feelings, and how his thoughts and feelings affect his behavior. 3

The subject focused entirely or almost entirely on himself. He talked about his thoughts and feelings and how these affect his behavior. He used self-references entirely or almost entirely, and evaluated his thoughts, feelings, behaviors in terms of his like or dislike of them. He discussed the personal impact of feedback from others on his thoughts, feelings, behaviors. He provided an idea of how he regards himself. 4

Therapist____ (Therapist's Name) Room____

TIME SUBJECT CODE

8:30 004

9:00 010

9:30 024

10:00 027

10:30 036

11:00 045

11:30 055

12:00 058

12:30 066

1:00 074

5. At the end of the first topic, stop the recorder, and say to the subject:

I AM GOING TO LEAVE THE ROOM FOR ABOUT A MINUTE. OUR NEXT TOPIC WILL BE EMBARRASSMENT. WHILE I'M GONE, I'D LIKE YOU TO THINK ABOUT YOURSELF ON THAT TOPIC.

6. Leave the room, go to the designated, and complete the rating scale score sheet. Make sure that the code on the rating scale score sheet corresponds to the code of the subject being rated.

From the time you leave the subject to the time you return, no more than one minute should elapse. This means you have about 35-40 seconds to make the rating.

7. When you return to the room, activate the recording mechanism, and start the recorder. Pause for 10 seconds, and say to the subject:

I WOULD LIKE YOU TO TALK ABOUT YOURSELF ON THE TOPIC OF EMBARRASSMENT.

8. When 4 minutes have passed, terminate the interview at the next appropriate time.

9. At the end of the second topic, stop the recorder, and say to the subject:

I'M GOING TO LEAVE THE ROOM AGAIN FOR ABOUT A MINUTE. WHILE I'M GONE I'D LIKE YOU TO THINK ABOUT YOURSELF ON OUR NEXT TOPIC, HURT.

10. Leave the room, go to the designated area, complete the rating scale score sheet. From the time you leave the room to the time you return, no more than one minute should elapse.

11. When you return to the room, activate the recording mechanism, and start the recorder. Pause for 10 seconds, and say to the subject:

I WOULD LIKE YOU TO TALK ABOUT YOURSELF ON THE TOPIC OF HURT.

12. When four minutes have passed, terminate the interview at the next appropriate time. Thank the subject for participating. Direct the subject to Room A, saying that there is one, final, brief part to the study.

13. Go to the designated area and complete the final rating on the rating scale score sheet.

14. Prepare the recorder for the next subject in the following way:

If this was the first interview, place the tape as is in the correct envelope and take it to the designated area. Insert the next cassette.

If this was the first side used on this cassette (excluding the first interview cassette), advance the tape forward all the way to the end, and flip it over to the unused side.

If this was the second side of the cassette, that is, both sides now have recordings, place the cassette in the appropriate envelope, and take it to the designated area. Insert the next cassette.

If, during the interview, or afterwards, you receive "how am I doing?" type inquiries, let the subject know that one of the constraints put on you is that you are not allowed to evaluate the subject's performance, only to facilitate their participation.

APPENDIX L

QUESTIONNAIRE FOR PARTICIPANTS

APPENDIX L

Code _____

QUESTIONNAIRE FOR PARTICIPANTS

Directions Check the item which best describes your feelings toward the interviewing therapist.

- _____ 1. I would attempt to avoid any kind of future interaction or relationship with this person.
- _____ 2. If no one else were available, I might consult this person for specific information of a factual, e.g., educational or vocational nature, but I would avoid talking about personal concerns.
- _____ 3. I would be willing to talk with this person about factual, e.g., educational or vocational concerns, and some of the personal meanings connected with these concerns.
- _____ 4. I would be willing to talk with this person about many of my personal concerns.
- _____ 5. I have the feeling that I could probably talk with this person about almost anything.

APPENDIX M

A FINAL NOTE TO PARTICIPANTS

APPENDIX M

A FINAL NOTE TO PARTICIPANTS

After you have completed the questionnaire, and handed it in along with your card which you received at the beginning of the study, your participation in this study is ended.

I would like to thank you for your willingness to be a part of this study. I sincerely wish that I could thank you individually, and I hope you understand this is not possible. Nevertheless, I am most appreciative of your cooperation.

As I mentioned before, I will be happy to provide you with a summary of the results of this study. The analysis and interpretation of the data will take some time. I am confident that I will be able to provide you with the results around the beginning of the Winter term. Consequently if, in January (1974), you send me a written request for the results of this study, along with your address, I will send you a report of the findings.

Thank you again, and I wish you a successful year at Michigan State University.

Sincerely,

Ted Stachowiak
230 Cedar Apt. 7
East Lansing, MI 48823

APPENDIX N

RATING SCALE SCORE SHEET

APPENDIX N

Code _____

RATING SCALE SCORE SHEET

Directions Using the Self-Disclosure Rating Scale,
circle the number which corresponds to your evaluation
of the subject's treatment of the topic.

ANGER

RATING LEVEL: 1 2 3 4

EMBARASSMENT

RATING LEVEL: 1 2 3 4

HURT

RATING LEVEL: 1 2 3 4

APPENDIX O
GUIDELINES FOR TRAINING THERAPISTS

APPENDIX O

GUIDELINES FOR TRAINING THERAPISTS

In this study, the therapist has two main functions:

1) to interview the subject; and 2) to evaluate the subject by using the Self-Disclosure Rating Scale.

Therapist as Interviewer

As the interviewer, the primary task of the therapist is to facilitate the subject's participation in the interview. The interview is not intended to be a form of therapy for the subject.

Ideally, the subject would do all of the talking, and the therapist would serve as an attentive recipient of the subject's communications. As a facilitator, the therapist helps the subject to focus on whatever content the subject chooses. The therapist facilitates only when facilitation is necessary. The therapist may respond to the subject's request for help in making a point, or convey to the subject that the therapist understands what is being said.

In responding to the subject, the therapist must adhere to the following restrictions.

1) The therapist must not, in any way, self-disclose to the subject. The therapist may not offer personal thoughts, feelings, behaviors, events related to the topics of the interview.

2) The therapist must not offer interpretations to the subject. The therapist may verbally reflect on the ideas, feelings, behaviors, events which the subject discloses, but the therapist may not give meaning to these beyond the meaning attributed by the subject.

3) The therapist must not provide leading responses, that is, responses which are intended to lead the subject into areas which the subject has not initiated. The

therapist must not introduce new content to the interview.

4) The therapist must not lead the subject into a response which would result in a change of the subject's immediate degree of self-disclosure. If the subject is self-disclosing at level 2, the therapist may not entice the subject to self-disclose at level 3.

As a facilitator, the therapist's task is to help the subject, when necessary, to focus on the content the subject chooses.

Suggestions for Assisting the Subject

If the subject has difficulty beginning, the therapist should say something similar to the following:

"What comes to mind when you think about _____?"

"Sometimes it's difficult to get started. Don't worry about being precise. Tell me whatever comes to mind when you think about _____, and I think you will find it will become easier as you begin to talk."

"Sometimes it's best to begin by just saying whatever comes to mind about _____. Even though you may feel that your words aren't on target at first, I think you'll find that things will come to you once you begin."

Brief Disclosures

If the subject indicates that he is finished with the topic before the time is up, then consider that the interview on that particular topic is concluded.

Non-Disclosing Subjects

It may happen that some subjects will choose not to talk on one or any of the topics. If, after trying to help the subject begin, it is clear that the subject chooses not to talk on the topic, move on to the next topic. If the subject again is reluctant to talk on the topic, move on to the third topic. Each subject must have an opportunity to talk on all three topics.

Overly Anxious Subjects

If the process of self-disclosing generates an inordinate amount of anxiety in the subject which requires

immediate and continued attention to the subject, notify the experimenter. Assistance will be available to subjects who require it.

Therapist as Rater

As the rater, the task of the therapist is to evaluate the extent to which the subject self-discloses on each topic. The subject's range of disclosure may vary from an impersonal approach to an entirely personal approach. To assist the therapist in discriminating the meanings of impersonal and personal, these two concepts are defined as they relate to this study.

Definition of Impersonal

"...without connection or reference to any particular person..."¹ In this study, impersonal content is content which has no connection or reference to the subject providing the content. The subject's responses may pertain to other people, but they do not pertain to himself as an individual.

Examples: "Most people don't like to feel guilty."
 "It's nice to get a pat on the shoulder."
 "There's a lot of weird notions about sex and marriage."
 "Some people get depressed over nothing."

Definition of Personal

"...of or peculiar to a certain person; private; individual...having to do with the character, personality, intimate affairs, conduct, etc. of a certain person..."² In this study, the "certain person" is the subject in the interview. The subject's responses refer to himself individually.

Examples: "I don't like to feel guilty."
 "I like to get a pat on the shoulder."
 "Sex and marriage really confuse me."
 "That makes me feel depressed."

¹Webster's New World Dictionary, College Edition
 (New York: World Publishing Co., 1955), p. 729.

²Ibid., p. 1092.

Ratings

In the role as rater, the therapist must base the rating only on what the subject says. The therapist should avoid basing ratings on latent content, or basing ratings on assumptions of what the subject may have intended to say. Ratings should be based only on what the subject communicates verbally to the therapist.

The therapist must base the rating on the subject's entire treatment of the topic, not on segments of the interview. Individual expressions of impersonal or personal content should not be singled out and used as a basis to represent the entire treatment of the topic..

The quantity of words used or the amount of time used should not bias the rating. The therapist should be concerned only with the content of the subject's remarks on the topic.

As the subject talks during the interview, the therapist has the difficult task of serving as a facilitator for the subject, and serving as a rater for the experimenter. During the interview, the therapist must make a continual effort to be aware of the extent to which the subject is providing impersonal and personal content. For this reason, it is imperative that each therapist have a clear understanding of the various levels of the rating scale. If the therapist can accurately conceptualize the degree of self-disclosure on each level of the rating scale, the therapist's rating task will be simplified, and the decision of self-disclosure level will flow smoothly from the subject's treatment of the topic.

SELF-DISCLOSURE RATING SCALE

The Self-Disclosure Rating Scale¹ is a modification of the 7-point Disclosure Rating Scale.¹ The four levels of the Self-Disclosure Rating Scale range from an impersonal to an entirely or almost entirely personal treatment of the topic.

Level 1 Absence of personal involvement. The topic has been explored in an impersonal manner. The subject made observations about others rather than himself. The focus is on other people, objects, events. Self-references are lacking or very few in number.

Level 2 The subject has placed himself within the context of the topic, but talked predominantly about his ideas rather than his personal experiences. Self-references enhanced the picture of the subject, but there was little exploration or elaboration of personal thoughts, feelings, behaviors. The subject talked about possible feelings, thoughts, behaviors, but did not attach personal meaning to the topic except in a general way.

Level 3 The subject dealt with the topic predominantly on a personal level. He elaborated on his thoughts and feelings, giving some idea of how external events affect his thoughts and feelings, and how his thoughts and feelings affect his behavior.

Level 4 The subject focused entirely or almost entirely on himself. He talked about his thoughts and feelings, and how these affect his behavior. He used self-references entirely or almost entirely, and evaluated his thoughts, feelings, behaviors in terms of his like or dislike of them. He discussed the personal impact of feedback from others on his thoughts, feelings, behaviors. He provided an idea of how he regards himself.

In L-1, the subject talks about the concept. He describes it, maintaining a general and broad treatment. The subject may not specifically claim that he is describing his concept, but only the concept in general. He detaches

¹Joseph A. Doster & Ann McAllister, "Effect of Modeling and Model Status on Verbal Behavior in an interview," Journal of Consulting and Clinical Psychology, Vol. 40, No. 2, 240-243.

himself from the topic, leaving the listener without specifically knowing how the topic applies to the subject.

In L-2, the subject is claiming his own ideas about the topic, but the content of the subject's responses rarely, if ever, touch on personal experiences. The listener may have an idea of the subject's concepts of the topic, but the subject does not disclose the experiences that led to the formation of the concept, or personal experiences that elaborate on his ideas. In L-1, the subject is saying, "This is the concept of shame." In L-2, the subject is saying, "This is my concept of shame."

In L-3, the subject talks about personal experiences related to the topic. He talks about ideas, feelings, behaviors, events which the listener would have no knowledge of without the subject's disclosures. The subject makes ties between his feelings and his behaviors. In L-3, there is a shift in emphasis to the self as opposed to the concept. The subject is talking about himself, and the topic provides a convenient focal point.

In L-4, there is even a greater self emphasis than in L-3, and in addition, the subject makes some judgments about his thoughts, feelings, behaviors. The listener has an idea of how the subject regards himself in relation to the topic, whether the subject likes or dislikes his thoughts, feelings, behaviors, is confused by them, would like to change them, sees them as functional or non-functional.

SELF-DISCLOSURE RATING SCALE

Directions Circle the number which corresponds to your evaluation of the subject's treatment of the topic.

RATING

Absence of personal involvement. The topic has been explored in an impersonal manner. The subject made observations about others rather than himself. The focus is on other people, objects, events. Self-references are lacking or very few in number. 1

The subject has placed himself within the context of the topic, but talked predominantly about his ideas rather than his personal experiences. Self-references enhanced the picture of the subject, but there was little exploration or elaboration of personal thoughts, feelings, behaviors. The subject talked about possible feelings, thoughts, behaviors, but did not attach personal meaning to the topic except in a general way. 2

The subject dealt with the topic predominantly on a personal level. He elaborated on his thoughts and feelings, giving some idea of how external events affect his thoughts and feelings, and how his thoughts and feelings affect his behavior. 3

The subject focused entirely or almost entirely on himself. He talked about his thoughts and feelings, and how these affect his behavior. He used self-references entirely or almost entirely, and evaluated his thoughts, feelings, behaviors in terms of his like or dislike of them. He discussed the personal impact of feedback from others on his thoughts, feelings, behaviors. He provided an idea of how he regards himself. 4

Code _____

ANGER

RATING: 1 2 3 4

Code _____

EMBARASSMENT

RATING: 1 2 3 4

Code _____

HURT

RATING: 1 2 3 4

EXCERPS* FOR RATER TRAINING

Disclosure Rating Scale

Interview Topic: Shame and Guilt. Ah...shame I think... shame is something which you feel...when...ah...somebody ...when you...when you...ah...kind of respect for not making...not respect but...ah...fear, a fear or respect for somebody who ah...shows his disapproval of something you do and then you...then you feel a shame and guilt. The only time...the only times are when they...are when they... make you feel this way is when you've done something wrong ...ah...maybe you've hurt somebody...ah...intentionally you hurt someone and...and ah...then some mood...you get in a mood that's shame and guilt. But I don't think...ah...you know...ah...actually the only basis that there should be... shame, guilt...is if you know...if you hurt yourself. That's something that should make you ashamed...when you haven't done the best you could. But...but you...if you're not bothered, then you shouldn't...I don't think you should feel guilty of your conduct.

Interview Topic: Sexual Relations. Well...I approve of sexual relations. Ah...I kinda wish sometimes our society didn't have a...the type restrictions it has on sexual relations. Ah...maybe there should be...I ah...tend to

*Taken from the Disclosure Rating Scale, Doster, 1973.

favor more freedom to do what...to do what your body tells you to do, than ah...go along with what somebody...some authority says is right for you to do like premarital sex. And ah...I sorta think now that...that maybe I kinda have inhibitions about having ah...sexual relations with somebody I really don't care anything about. Maybe this is because of my background, but ah...we were taught that ah...sex with somebody...before marriage was wrong. If...there were someone...someone...a girl I cared a lot about...and she wanted it too...then ah...then I think then things would be different.

Interview Topic: Self-esteem and Self-degradation. Ah... this is a topic I really don't think too much about...is myself. I ah...I ah...well ah...sometimes I have feelings of ah...of degradation. I think I have ah...I would...I would say...I have more feelings of...of...self-degradation than self-esteem. Now maybe it could be just because I... I remember the feelings of degradation more than I would esteem. Ah...I think ah...ah...in the field of achievements is where I have these...ah...these feelings. Things that I can do well...and I do do well...I ah...take them for granted...It doesn't mean ah...that much to me. I may be glad to be done but ah...I don't believe that I ah...I am... ah...boastful...or ah...or ah...I don't feel a lot of self-esteem about these things. I just do them...and ah...and if

I do them well I do them well but if I don't do them well I have feelings of ah...self-degradation. I feel let down because I put myself down. Ah...in my school work mainly ah...is where I feel ah...these types of feelings and mainly self-degradation. Because I don't consider...I don't think that I do as well as I should...in my school work. And ah...I don't think I ah...I don't think I have any real big accomplishments. The only time that I believe I ever feel self-esteem is ah...is when ah...someone... ah...gives me a compliment on my ah...on my...on what I've done or...The only time I really feel...self-esteem is when I catch a big fish I guess. And ah...which is not... I don't...I don't believe that's anything to feel self-esteem about. I believe I have more feelings of degradation than esteem. I guess that's all.

Interview Topic: Anxiety and Fear. Well ah...I guess...me ...I ah...feel anxious in personal contacts with other people. I find it extremely hard to make new acquaintances ...to open myself up to people. I am not ah...exactly certain about why I'm this way. I have been trying to find out...possibly to get some grasps of a fear I have...but ah ...so far it hasn't been any use. Seems like ah...whenever there is a person that I would like to meet...or if I am in a situation where I meet a person...I just clam...I almost start to shake. Even ah...let's say I'm walking down

the street and I see someone...a stranger...walking toward me...even at a distance it makes me feel anxious just thinking about passing him...and ah...if I don't...what I do is cross over to the other side just so I won't have to walk past him. If I don't...I just become more tense and shaky as ah...the closer we get and ah...then it bothers me that ah...maybe he can tell if I'm ah...shaking. I find that if I am in a situation where I meet people regularly... that same person...then I get to know them fairly well... I don't feel anxious...I can ah...enjoy myself and talk with them. But like going out and trying to meet people...I can't do that. Fears...let's see...I guess you could say again that I was probably afraid of people. Afraid that they will hurt me, afraid that they won't reciprocate when I like them. Ah...I find that in large groups instead of talking out...I just sit there and listen...whereas if I am talking to one or maybe two people it is easier to talk and express myself. In large groups ah...I can have things on my mind to say...but ah...I can't seem to force myself to say them...overcome my fears to interrupt and then it's too late...they're ah...off on another topic. Again I would like to find why I would be afraid or uneasy with people. I ah...am ah...seeing a counselor...but so far it hasn't ah...helped...I haven't seen any difference. I don't want to feel anxious around people and ah...not open up...but right now that's the way it is.

Verbal Excerpts

The second phase of rater training involves raters listening to a verbal presentation of selected excerpts, and noting the rating on the Record of Practice Ratings.

Following the ratings, a thorough discussion of each rating will take place. Confusion or misunderstanding of the rationale of the ratings should be dealt with meticulously. Raters are exhorted to be candid about any uncertainties regarding the ratings of these excerpts.

Inter-Rater Reliability

The final phase of the training involves the setting of the inter-rater reliability. Briefly, the inter-rater reliability provides a measure of the extent to which raters consistently agree with each other on the rating of content, using the rating scale provided.

The raters will listen to recordings of various levels of self-disclosures, and enter the ratings on the Record of Practice Ratings.

Acceptable Reliability

The acceptable rater reliability for the Self-Disclosure Rating Scale has been set at .90.

RECORD OF PRACTICE RATINGS

1. _____	11. _____
2. _____	12. _____
3. _____	13. _____
4. _____	14. _____
5. _____	15. _____
6. _____	16. _____
7. _____	17. _____
8. _____	18. _____
9. _____	19. _____
10. _____	20. _____

DO NOT ALTER RATINGS. IT IS VERY IMPORTANT THAT YOU DO NOT CHANGE A RATING AFTER YOU HAVE ENTERED IT. THE REASON THIS IS CRITICAL IS THAT THESE RATINGS PROVIDE THE EXPERIMENTER WITH THE PROGRESS OF THE TRAINING, AND MAY SUGGEST AREAS IN THE RATING SCALE OR THE TRAINING PROCEDURE THAT NEED SPECIAL ATTENTION OR MODIFICATION.

CLARIFICATION OF THE CONCEPT OF EVALUATION

Evaluations within the context of the rating scale are those considerations the subject gives in regard to his self-system. Evaluations involve comparisons, impressions, judgments about himself in relationship to some standard. The standard may be an ideal self, how others are, or how others want him to be. There is a "value" inherent in an evaluation, and this "value" may be reflected by the degree of satisfaction vs. dissatisfaction, comfort vs. discomfort, acceptance vs. nonacceptance that the subject has for a particular idea, belief, feeling, behavior that he has.

In reflecting on himself in an evaluative manner, the subject may offer a comparison of himself with others, give an impression of the difference between himself and others, make a judgment about himself in relation to others, or do any of the above against some standard, which may be an ideal-self standard. The subject may, in some way, express a desire to be like some other individual or group, or to be something or have a characteristic, idea, feeling, behavior different from what he perceives himself to have. He may offer where he wants to be (He may or may not be there). He may offer where he doesn't want to be (He may or may not be there). He presents some type of evaluation of himself. This may be in relation to his liking or not liking of the self, in relation to its adjustiveness, adequacy, feasibility, functionality, or the way he perceives that others regard his self.

The subject may raise doubts about the self, or raise a question about the self, and may attempt to provide an answer.

The subject may explore some things he has done in an attempt to understand himself or change himself.

The subject may comment on his lack of understanding of the self, of why he is the way he is. There is an indication of a desire to change. The subject may have undertaken steps to change.

There are numerous ways in which the subject can evaluate himself. Evaluations can be stated in many different ways, and the therapist must listen closely for the presence of an evaluation. This is not to say that the therapist should interpret, or assume what is not said. Rather it means the therapist must listen

closely to the evaluations that are inherent in many different kinds of statements.

In an evaluation, the subject is saying something about the quality. A statement of quality can be denoted, that is, the subject may address himself specifically in a qualifying manner. Denoted statements of quality are usually easy to spot, "I like, dislike, am comfortable, am uncomfortable, accept, don't accept, am pleased, am not pleased," etc... However, statements can also connote quality, or value, as "I resist, try to stay away from, wish, wonder, am confused, don't understand," etc... None of the above illustrations are indications ipso facto of evaluation, but evaluation can be expressed with such statements, depending upon the context in which they occur.

Change, in and of itself, connotes quality, a value judgment. It is a movement from one phase to another phase, an exchange of one point for another, a variation, a varying to something different.

Remember, however, that value judgments about others are not a level 4 response. The evaluation must always be about the self.

Statements of feeling may at times be confused with statements of evaluation. Example: "I feel bad," or "I feel guilty," are a description of a feeling state. They describe (not evaluate) some aspect of the self. The subject may evaluate this aspect of the self by: "I feel bad more often than I care to." "I wish I didn't feel guilty." The first two statements are simply a labeling of feelings. The latter two statements are statements of feelings and statements which give the listener an idea of how the subject regards those feelings. Both of the latter statements are statements of dissatisfaction.

It may be that none of your subjects will denote, that is, be explicit about, self evaluation. However, statements which connote evaluation are a legitimate method of evaluating the self.

The following are excerpts which I have taken from the topics we previously covered. Remember, it is possible that in another context some of these statements would not be considered statements of evaluation. They are presented here as statements which could, given the proper context, be considered statements of evaluation.

"Now I try to resist being guided by guilt..." (change)

"I've really tried to overcome my inhibitions..." (change)

"I decided that I felt shy around girls long enough..."
(dissatisfaction)

"I was going to try and go out and meet some more..." (change)

"...made me wonder what I was turning into..." (adequacy)

"I'm not exactly certain why I'm this way. I've been
trying to find out..." (dissatisfaction)

"I would like to find out why...(I am this way...)"
(discomfort-about inadequate self-
knowledge)

We need to discuss the concept of evaluation further at our next meeting. In the meantime, it might be helpful if you could muse over the considerations in this handout, and formulate specific questions for our next meeting.

APPENDIX P

**INTRACLASS CORRELATION COEFFICIENT
OF THERAPISTS AND RATERS FOLLOWING TRAINING
ON THE SELF-DISCLOSURE RATING SCALE**

APPENDIX P

INTRACLASS CORRELATION COEFFICIENT* OF THERAPISTS AND RATERS FOLLOWING TRAINING ON THE SELF-DISCLOSURE RATING SCALE

<u>Levels</u>	Therapists and Raters								κ	Σ	$\bar{x}$
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>			
1	1	1	1	1	1	1	1	1	8	8	1
2	2	2	2	2	2	3	1		7	14	2
3	3	3	3	3	3	4	2		7	21	3
4	4	4	4	4	4	4	4	4	8	32	4

Sum of squared ratings = 231
Sum of products = 227
Product of Sum and Mean = 187.5

Sum of Squares
For Total 231-187.5 = 43.5
For Tapes 227-187.5 = 39.5
For Error 43.5-39.5 = 4

Mean Squares
For Tapes 39.5 ÷ 3 = 13.1670
For Error 4 ÷ 26 = .1538

Average value of κ = 7.4889

$$\text{Reliability} = \frac{13.167 - .1538}{13.167 + (7.4889)(.1538)} = \frac{13.0132}{14.31879} = .9088$$

* Ebel, 1951.

APPENDIX Q

DATA AND COMPUTATION OF INTRACLASST CORRELATION COEFFICIENT FOR ANGER

APPENDIX Q

DATA AND COMPUTATION OF INTRACLASS CORRELATION COEFFICIENT FOR ANGER

Therapists	Independent Rater A	Independent Rater B
2	1	1
4	3	3
4	4	4
4	4	4
3	3	3
3	3	3
4	3	2
2	3	3
3	3	3
3	3	3
4	4	3
3	3	3
3	3	3
4	3	3
2	1	1
3	2	2
2	2	1
3	2	2

Sum of Squared Ratings = 473
Product of Sum and Mean= 433.4999

Sum of Squares
For Raters = 2.33343
For Subjects = 31.50010
For Total = 39.5
For Error = 5.6665

Mean Squares
For Subjects $31.5001 \div 17 = 1.8529$
For Error $5.6665 \div 34 = .1666$

ANOVA Table and Computation of
Reliability Coefficient for the
Self-Disclosure Rating Scale on Anger

Sources	Sums of Squares	<i>df</i>	Mean Squares
Raters	2.333	2	1.167
Tapes	31.500	17	1.853
Error	5.666	34	0.167
Total	39.500	53	

$$n = 54 \div 3 = 18$$

$$r = \frac{M_{\bar{x}} - M}{M_{\bar{x}} + (\kappa - 1) M} \quad (\text{Ebel, 1951})$$

M = mean square for error

$M_{\bar{x}}$ = mean square for tapes

κ = therapist and two independent raters

$$\text{reliability} = \frac{1.853 - 0.167}{1.853 + (3-1) \cdot 0.167} = .771$$

APPENDIX R

DATA AND COMPUTATION OF INTRACLASS CORRELATION COEFFICIENT FOR EMBARRASSMENT

APPENDIX R

DATA AND COMPUTATION OF INTRACLAS CORRELATION COEFFICIENT FOR EMBARRASSMENT

Therapists	Rater A	Rater B
3	2	2
3	3	3
4	4	4
3	3	3
3	2	2
3	3	3
2	2	2
2	3	3
3	3	3
3	2	2
4	3	3
3	3	3
4	3	3
4	3	4
2	1	1
3	2	2
1	2	2
3	2	2

Sum of squared ratings = 422

Product of Sum and Mean = 394.74074

Sum of Squares

For Raters = 1.59259

For Subjects = 23.9293

For Total = 27.2593

For Error = 1.74041

Mean Squares

For Subjects $23.9263 \div 17 = 1.407427$

For Error $1.74041 \div 34 = .0511885$

ANOVA Table and Computation of
Reliability Coefficient for the
Self-Disclosure Rating Scale
on Hurt

Sources	Sums of Squares	<i>df</i>	Mean Squares
Raters	2.481	2	1.241
Tapes	21.481	17	1.264
Error	10.185	34	0.299
Total	34.148	53	

$$n = 18$$

$$\text{Reliability} = \frac{1.264 - .299}{1.264 + (3-1).299} = .517$$

The computational formula for the Intraclass Correlation Coefficient is discussed by Ebel (1951). The formula also has been included in Appendix P.

APPENDIX S

DATA AND COMPUTATION
OF INTRAClass CORRELATION COEFFICIENT
FOR HURT

APPENDIX T

RESEARCH ASSISTANT INSTRUCTIONS

APPENDIX T

RESEARCH ASSISTANT INSTRUCTIONS

You will have large envelopes, each marked with a time for a specific group. Each envelope contains the written materials you will need to hand out to each group of subjects. The first envelope is marked for 8:30, the second for 9:00, etc...

Seating should be arranged so that it is not easy for one subject to have access to the materials given to another subject. The instructions look identical for the most part, so it is not necessary to have subjects sitting at an obvious distance from one another. However, care should be taken to avoid a situation in which subjects sit so close to one another that cross-reading of instructions is very likely to occur, or even invited. Ideally, subjects should not have access to the instructions of another or suspect that one set of instructions is different from another.

Your verbal instructions related to the study itself should be kept to a minimum, and not deviate from the substance of the instructions as given. There are some verbal, procedural instructions which you will give, but the treatment instructions will be accomplished primarily through the written instructions which you will give to each subject.

You may converse casually with subjects, if it seems appropriate. It is not expected that you be stilted, but you must avoid creating an overly casual atmosphere. You, through your attitude, can set the tone for the subjects. They can be set up to perceive this event as something insignificant, "just another study," or the event that determines whether or not they continue studies at MSU. Ideally, your attitude will be a happy medium. If you must err, err towards the serious side.

As the study continues, and you've done your routine several times, you may need to make a conscious effort to avoid communicating any boredom you might begin to experience from repeating the same thing over and over. Try to remember that each group of subjects is being exposed to the "routine" for the first time. If you

communicate boredom, you will be adding a variable to this study which may be stronger than any of the treatment variables.

TREATMENT PROCEDURES FOR ALL SUBJECTS

1. When subjects enter the room, each should have a 3 x 5 card on which is the following information: Time, Code, Room, C number. All subjects must have this card. Check to make sure that the time listed on each subject's card corresponds to the time of the treatment.
2. There may be up to 8 subjects for each treatment session.
3. As subjects come in, have them sit at the table in such a way that subjects with C numbers 1, 2, 3, or 4 have headsets which correspond to the junction box marked 1, 2, 3, 4. Subjects with C numbers 5, 6, 7, or 8 should be seated at the headsets which lead to the junction boxes marked 5, 6, 7, 8. THIS IS EXTREMELY CRITICAL.
4. After subjects are seated, open the envelope (marked for that session by time) and pass out the "AGREEMENT" to the subjects. Ask the subjects to read and sign the agreement. This should be done quickly, about two minutes. After each subject has signed, collect the "AGREEMENT"'s and set them aside.
5. Pull out the "INTRO"'s from the envelope, and pass them out according to code numbers. The "INTRO" given to a subject must have the same code number as the subject's card.
6. Allow about two minutes for the "INTRO" to be read. Instruct the subjects to put on the headsets. You may need to assist. Make sure each subject has the right headset.
7. Roll the tape (about 7 min. 45 sec. long). As soon as the tape is over, turn off the recorder. Assist subjects, if necessary, to take off the headsets.
8. Collect the "INTRO"'s and pass out the "INSTRUCTIONS"'s simultaneously, making sure that the code number on the "INSTRUCTIONS" is identical to the code

number on the "INTRO"'s which you are collecting.

9. Allow about 30-45 seconds for reading.
Direct subjects to the appropriate rooms for the interviews.
Subjects should leave the instructions on the table, or
you should collect them after they have read them.

APPENDIX U

RESEARCH ASSISTANT FOR COLLECTION OF DATA

APPENDIX U

RESEARCH ASSISTANT FOR COLLECTION OF DATA

Your task is twofold: 1) to organize and receive the Rating Scale Score Sheets which therapists will be completing on each subject, 2) to administer the one-item questionnaire to subjects, and serve as the final station for the study.

In #1 as mentioned above, your task is to have the Rating Scale Score Sheets available to therapists as they come in to make their ratings, and to keep these ratings organized according to treatment group times.

Rating Scale Score Sheets will be found in large envelopes marked on the outside for the appropriate time, e.g., 8:30, 9:00, etc... Within each envelope, there will be 8 Rating Scale Score Sheets. On each Rating Scale Score Sheet, there will be a code number (the subject's), and a T number (the therapist's). As each therapist is ready to make a rating, you will have the Rating Scale Score Sheet available for the therapist, making sure that each therapist makes the Rating on the appropriate Score Sheet. After all Ratings are completed, you will place these Ratings in the same envelope in which you received them, e.g., all Ratings from the 8:30 group are placed in the envelope marked 8:30.

In #2 as mentioned above, your task is to administer the Questionnaire to the subjects as they come to you. At the end of the interview, subjects will be instructed to go to your area. As subjects come in, you give each one of them a Questionnaire, making sure that the code number on the Questionnaire is identical to the code number on the subject's 3 x 5 card. After the subject completes the questionnaire, take the questionnaire from the subject, and also take the subject's 3 x 5 card, and give the subject a copy of "A FINAL NOTE TO PARTICIPANTS," thanking the subject for participating, and indicating that they are finished and may leave. You then place the questionnaires in the appropriate envelope.

PROCEDURES FOR COLLECTION OF DATA

Rating Scale Score Sheets

1. Remove the 8 Rating Scale Score Sheets from the envelope marked for the appropriate time.
2. Present the appropriate RSSS to the therapist.
3. Each therapist will make 3 ratings on each RSSS. When all ratings for that particular group of subjects is completed, put the 8 RSSSs into the envelope marked for that time.
4. Place this envelope aside, and prepare for the next group of ratings.

Questionnaire For Subjects

1. Remove the 8 Questionnaires from the envelope marked for the appropriate time.
2. As subjects present themselves, give each subject the Questionnaire that has the code number which is identical to the code number on the subject's 3 x 5 card. Ask the subject to complete the questionnaire.
3. As the questionnaires are completed, collect the questionnaires from the subjects, and collect the 3 x 5 card.
4. Give each subject a copy of "A FINAL NOTE TO PARTICIPANTS," thanking the subject for participating.
5. Place the completed questionnaires in the envelope marked for the appropriate time.
6. Prepare for the next group of subjects.

APPENDIX V

**TRANSCRIPTS OF LEVELS 2 AND 3
OF THE SELF-DISCLOSURE RATING SCALE**

APPENDIX V

TRANSCRIPTS OF LEVELS 2 AND 3 OF THE SELF-DISCLOSURE RATING SCALE

Level 2

Uh...social gatherings ah...well...ah...I've, I've been to some that were a lot of fun...ah...and I've been to others that just...weren't worth going to, I'd been better off doing something else. Ah...people have to be in the mood... for being sociable, for being around a lot of other people. Otherwise social things can really be hard to get into...ah ...and...that kind of thing can really wind up with a dead atmosphere. I suppose, it's a big help if you're the kind of person ah...who likes being around a lot of people. Ah, but not everybody's that way...ah, so I'd have to say that I don't think social gatherings are good for everybody...ah... even though I know there's a lot of people who would disagree with me about that. There's some people who think there's something wrong with you if, if you don't like, you know, to go to big parties and...ah...to be in big social gatherings all the time and, and if, you know, prefer ah...to be alone.

*This Appendix contains transcripts which represent Levels 2 and 3 of the Self-Disclosure Rating Scale. Appendices A and B contain Levels 1 and 4, respectively.

Ah, I know some people ah...who don't think much about privacy. Ah...and, and I know others who find it ah...very difficult...to live in a situation where, they can't get away from people. Ah...they feel that ah...that they just can't ah...keep being around people all the time.

I know some people, some friends of mine...ah...who, when it comes to social gatherings, ah...they're really something. They can walk right into a strange party, ah, you know, and get right into it. They don't need anybody to break the ice, and after a while...you'd never know that they met those people...for the very first time. Now I don't think that most people are like that...ah...but since I've been with those people sometimes...ah, you know you find yourself wishing sometimes that you could do that...ah...ah...they're, they're either full of self-confidence, or...or just not...uptight...about meeting strange people. I've thought about that sometimes ah...about why I'm that way...ah, I wonder, you know, if...ah...if the way a lot of us are brought up has something to do with that. You know, how you were taught, as a kid, to...stay away from strangers...ah because something bad might happen...ah...you kinda grow up with the feeling like ah...ah...you should never...ah...do something...ah...to be...ah...ah...good friends or...ah...to really get to know some stranger, which is really sort of stupid...ah...when you stop to think of it because how can,

you know, you ever ah...get to know more people unless you ...get to know strangers.

Sometimes if, you know, you take a close look at parties... ah, or social gatherings or whatever, you see that there, you know, there really isn't that much going on a lot of times. Ah...maybe the band or the stereo is blasting so loud that you can hardly hear yourself think and...that's no good if you're trying to be sociable. Ah...you know, or, or you look around and you see some guys trying to pick up some girls, or you know you see girls trying to get picked up, or...ah...somebody's trying to impress you about how intelligent they are, or...or how great they are, and so sometimes, you know, if you take a lot of that stuff seriously, you know you sort of wind up feeling like you just don't quite make it. There's just a lot of phonniness ...ah, going on. But...ah, some people think that's the way to have a really great time. But as far as I'm concerned, if that sort of thing doesn't click with you, or...if you go to something like that and you wind up being depressed...ah, you'd be better off staying home, being alone, or maybe just having, you know, one or two people over...some people that you already know.

Big groups...are really hard. Ah, I think small groups are better. There's a chance you can get to know somebody

...in a small group. You know you don't...you don't get so lost...when there's just a few people around. Ah...and from what I've seen ah...people...ah seem to enjoy themselves ...ah, much better in a small group. Ah...I guess the advantage of a, a large social gathering is that...ah, you can get lost if you want to be, you know you can, you can say avoid somebody that you don't like or, or avoid meeting somebody that you don't want to meet. Ah...but in a small group, ah that's almost impossible. And a lot a times ah... in, in social groups, you know you run into the social swinger, and ah...you know I've been to enough...parties to, you know, to be able to say that, for some reason or another it seems like every party has one or two...social swingers...ah...who, who want to control somebody else's good time. They, they can't stand it...when somebody is just being quiet, and ah...not mixing like they are.

Level 3

Ah...social gatherings...ah...as far as social gatherings are concerned, ah...I guess...when I think about myself in ah...relationship to...a lot of people I know, I guess I have to say that ah...I don't feel that ah...I'm a very sociable person. Now, I enjoy being around people, ah ...but at certain times...ah...because I also enjoy my privacy. Ah...I don't...ah feel...ah...a need to have to be around people all the time. Ah so I'm not one that goes out...ah... to a lot of parties or...ah...gatherings or that sort of thing. It...it's hard for me...if it's a social gathering ah...you know where there's a lot of people ah that I don't know. Ah...where, you know people are carrying on and that sort of thing. I find it really hard to...to get into the thing...ah to get...to get with what's going on, to...to join in the discussions or...anything that might be going on. And I've I've noticed this about myself that it's even worse...ah you know if it's a large party...ah, you know like a...a place where...ah...the band's blasting, you know, so loud for instance that a...you can hardly hear yourself think. Ah...in a situation like that, you know I, I can... ah...I really get lost...ah, I can just sort of feel myself fade...But ah...well, you know once somebody will break the ice with me or...or once say I finally...work up enough

nerve to break the ice myself, I can usually have a pretty good time...and ah...things go pretty well.

I can remember a few parties I've gone to...where...I just never really got that far into it...ah I sort of...Just...you know...sat outside of things so to speak...ah...and...I just really wasn't a part...of what everyone else was doing. I just...I just wasn't a part of, of anything that was going on. And ah...now that was a pretty miserable feeling...ah...sort of depressing...ah...and I can remember times when...ah even though maybe I didn't want to admit it at the time, I was depressed. Ah...and, and in situations like that sometimes I'll...ah...try to force myself to socialize, ah depending on my mood, but then again sometimes I just, I leave, and I go home.

Ah...one thing I sort of dread...a lot of times, is knowing that I have a party...or something that I feel I have to go to...You know, something that I have to get ready for and get all dressed up and that sort of thing. Ah...you know, what goes on inside of me is the feeling like...I'd really rather avoid this whole thing. But...ah, you know like I said sometimes I feel I have to go...ah because I think, you know, I...I enjoy more intimate sorts of groups, where I can feel like ah...I, I'm involved with the people who are there...ah places where I don't get that...ah, you know...anonymous

sort of feeling...ah like I notice I get when I'm at a party with ah...say, twenty or thirty people...ah...and some of my friends, and ah...you know, some in particular, ah...ah...I think that they think that I'm a real loner ...ah...ah...and, you know what they'll do is, is they'll try to get me to go to parties or, or gatherings...ah...ah... because like you know they have fun...ah...in those kinds of things, and ah...you know I guess they want me to have fun...ah, so they're, you know, always inviting me to something like that...ah, because I guess they want me to have the same kind of fun they're having...ah...sort of like, you know, I kinda get the feeling like they want me to be a social swinger, you know like some of them are. But I kinda resent that whole idea, ah...you know their trying to force me into something. Ah...but it's hard...er ...or at least it's not easy for me to...to say very much about it because, ah...well, they're my friends, I enjoy being with them, ah you know we have a lot of good times together. And ah...ah...I think that they think, you know, that they're doing me a favor.

Ah...I guess, you know, there are times when I wish...you know I could do something about myself in this regard. Sometimes I wish it wasn't so doggone hard...ah for me to meet strangers...ah, for me to go up to people that I don't know or I've never met before. Ah...I, I feel like I

...I want to be...ah...more outgoing, and more outwards towards people...ah, but you know it's not something that ah...bothers me a whole lot, it does once in a while, but nothing to any great extent. Sometimes I think it bothers other people more...ah, when they see that ah...I feel I don't need that kind of thing all the time. And, you know like I'd almost rather do things on the spur of the moment, when it comes to doing things with other people. You know, like sometimes when you say to somebody ah... "Let's do this," or "Let's do that", ah...and you don't make a big production out of the whole thing. Ah, you know because like I said I do enjoy being around other people, but at certain times, ah...and then at other times, and... and probably, I guess I'd have to say the majority of the time, ah...I enjoy just being alone, or...with one, or two, or perhaps three other people.

APPENDIX W

**SCHEDULE OF RANDOMN ASSIGNMENT
OF SUBJECTS TO THERAPISTS**

APPENDIX W
SCHEDULE OF RANDOM ASSIGNMENT
OF SUBJECTS TO THERAPISTS

<u>Time</u>	<u>T₁^{1M2}</u>	<u>T₂^M</u>	<u>T₃^{F3}</u>	<u>T₄^F</u>	<u>T₅^M</u>	<u>T₆^F</u>	<u>T₇^F</u>	<u>T₈^M</u>
8:30	006 ⁴	001	007	004	005	002	008	003
9:00	015	016	013	010	012	011	009	014
9:30	022	021	018	024	019	017	020	023
10:00	025	029	032	027	030	031	028	026
10:30	038	033	039	036	035	040	037	034
11:00	047	046	042	045	043	041	044	048
11:30	052	050	053	055	051	054	056	049
12:00	057	061	060	058	062	064	059	063
12:30	070	071	067	066	068	069	072	065
1:00	075	080	076	074	073	077	079	078

¹T=Therapist. Therapist names were omitted for purposes of confidentiality.

²M=Male ³F=Female

⁴Subject code number. Subjects were identified by code numbers only.

APPENDIX X

RAW SCORES

APPENDIX X

RAW SCORES

Code For Interpretation

- A = Subject code number.
- B = Level of model self-disclosure: 1 = high, 2 = low.
- C = Status of the model: 1 = high, 2 = low.
- D = Status of the therapist: 1 = high, 2 = low.
- E = Sex of the therapist: 1 = male, 2 = female.
- F = Cell number of the variable matrix.
- G = Therapist number.
- H = Therapist rating on Anger.
- I = Therapist rating on Embarrassment.
- J = Therapist rating on Hurt.
- K = Independent Rater's rating on Anger. (Rater A)
- L = Independent Rater's rating on Embarrassment. (Rater A)
- M = Independent Rater's rating on Embarrassment. (Rater A)
- N = Independent Rater's rating on Anger. (Rater B)
- O = Independent Rater's rating on Embarrassment. (Rater B)
- P = Independent Rater's rating on Hurt. (Rater B)
- Q = Subjects' responses to questionnaire.
- R = Therapist's re-rating on Anger.
- S = Therapist's re-rating on Embarrassment.
- T = Therapist's re-rating on Hurt.

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>I</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>	<u>N</u>	<u>O</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>
001	1	1	1	1	1	5	2	3	3	1	2	2	1	2	1	5	2	3	3
002	1	1	2	1	2	2	4	3	4	3	3	3	3	3	3	3	4	3	3
003	1	2	1	2	3	4	4	4	3	4	4	4	4	4	4	4	2	4	4
004	1	2	2	1	4	8	4	3	2	4	3	2	4	3	2	3	4	3	2
005	2	1	1	2	5	6	3	3	3	3	2	3	3	2	3	5	3	3	3
006	2	1	2	1	6	1	3	3	4	3	3	4	3	3	3	5			
007	2	2	1	2	7	3	4	2	4	3	2	2	2	2	2	4	4	3	3
010	2	2	2	2	8	4	3	3	3							5			
011	2	1	2	2	6	6	1	4	1							3			
012	2	1	1	1	5	5	2	4	3							3			
017	2	1	1	2	5	6	4	1	3							5			
018	1	1	1	2	1	3	2	3	3							2			
019	1	2	2	1	4	5	3	3	4							3			
020	1	1	2	2	2	7	2	3	3							5			
021	2	1	2	1	6	2	3	3	2							4			
022	2	2	1	1	7	1	2	4	3							5			
023	2	2	2	1	8	8	2	2	2							3			
025	2	2	2	1	8	1	2	2	2							3			
026	1	2	2	1	4	8	1	2	1							5			
027	1	2	1	2	3	4	3	3	3							5			
028	1	1	1	2	1	7	3	3	3							3			
029	2	2	1	1	7	2	4	2	2							3			
030	2	1	2	1	6	5	1	1	1							3			
031	1	1	2	2	2	6	3	2	2							3			
032	2	1	1	2	5	3	1	2	3							5			
033	1	1	1	1	1	2	2	2	2	3	3	3	3	3	3	4	2	2	2
034	2	1	1	1	5	8	3	3	3	3	3	3	3	3	3	4	3	4	3
035	1	2	2	1	4	5	3	3	3	3	2	3	3	2	2	3	3	3	3
036	1	1	2	2	2	4	3	4	3							4	3	3	3
037	1	2	1	2	3	7	4	4	4	4	3	2	3	3	2	4	4	4	4
038	2	1	2	1	6	1	1	1	3							4			
039	2	2	2	2	8	3	3	3	3	3	3	4	3	3	4	3	3	3	3
041	1	2	1	2	3	6	4	3	4							4			
042	2	2	1	2	7	3	3	3	4							3			
049	1	1	2	1	2	8	4	4	4							5			
050	1	2	2	1	4	2	4	4	3							4			
051	1	1	1	1	1	5	2	2	4							4			
052	1	2	1	1	3	1	4	1	2							2			
053	2	2	2	2	8	3	3	3	3							3			
054	2	2	1	2	7	6	3	3	4							3			
057	2	2	1	1	7	1	3	3	4							5			
058	1	1	2	2	2	4	3	4	3							4			
059	2	1	2	2	6	7	4	3	3							5			
060	2	1	1	2	5	3	3	3	3							4			
066	1	1	1	2	1	4	3	4	3							5			
067	2	2	2	2	8	3	3	3	4							4			
068	1	1	2	1	2	5	4	4	4							3			
069	1	2	1	2	3	6	4	4	3							5			
070	1	2	2	1	4	1	3	3	3							5			

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>I</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>	<u>N</u>	<u>O</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>
072	2	2	1	2	7	7	3	4	3							5			
073	1	1	1	1	1	5	3	4	4	3	3	3	3	3	3	5	4	4	4
075	1	2	2	1	4	1	4	4	3	3	3	3	3	4	3	5			
076	2	2	2	1	8	5	2	2	2	1	1	1	1	1	1	3			
077	1	2	1	2	3	6	3	3	4	2	2	3	2	2	3	4	3	3	3
078	2	1	1	1	5	8	2	1	2	2	2	2	1	2	3	5	3	3	3
079	2	1	2	2	6	7	3	3	3	2	2	2	2	2	2	5	3	2	4

Total N = 56

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 03177 6051