Fall 1976

SUBJECTS' PERCEPTIONS OF A THERAPIST WHO DISCLOSES ABOUT HIMSELF OR A FORMER PATIENT, ABOUT A RELEVANT OR IRRELEVANT PROBLEM, AND ABOUT TREATMENT SUCCESS OR FAILURE

WALTER ROBERT DZIOKONSKI

INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

University Microfilms International
300 North Zeeb Road
Ann Arbor, Michigan 48106 USA
St. John's Road, Tyler's Green
High Wycombe, Bucks, England HP10 8HR

SUBJECTS' PERCEPTIONS OF A THERAPIST WHO DISCLOSES ABOUT HIMSELF OR A FORMER PATIENT, ABOUT A RELEVANT OR IRRELEVANT PROBLEM, AND ABOUT TREATMENT SUCCESS OR FAILURE

by

WALTER R. DZIOKONSKI
B.A., College of the Holy Cross, 1970
M.A., University of New Hampshire, 1974

A THESIS

Submitted to the University of New Hampshire
In Partial Fulfillment of
The Requirements for the Degree of

Doctor of Philosophy
Graduate School
Department of Psychology
September, 1976

This thesis has been examined and approved.

Peter S. Fernald

Thesis director, Peter S. Fernald, Asso. Prof. of Psychology

Stephen J. Weber

Stephen J. Weber, Asst. Prof. of Psychology

Marty J. Schmidt

Marty J. Schmidt, Asst. Prof. of Psychology

Lance K. Canon

Lance K. Canon, Asso. Prof. of Psychology

Richard D. Halley

Richard D. Halley, Asst. Prof. of Speech and Drama

David M. J. Cross

David M. J. Cross, Adjunct, Asst. Prof. of Education

8-19-76

Date

ACKNOWLEDGEMENTS

In the past whenever I came across a dissertation that acknowledged a wife or a husband, I wondered how much a spouse could contribute to a doctoral thesis. Like many other things I've wondered about, I realize now that it has to be experienced to be appreciated. For the preceding six months my wife, Ann, has absolved me from the ordinary concerns and responsibilities of life so that I could devote my exclusive attention to this thesis. In doing so, she endured extraordinary pressures. This thesis is as much hers as it is mine.

I would also like to thank my chairman, Peter Fernald, for his guidance, encouragement and special efforts on my behalf. I am grateful as well to the members of my committee. In addition to content they communicated concern, which is just as valuable and necessary.

Also, in the past few years I have been especially enriched by my relationships with certain professors, students and friends who know who they are. Their contributions were less direct, but no less important.

Finally, I would like to extend special thanks to Evelyn Fillion who typed the manuscript. Coming to know her and her husband has been one of the most rewarding aspects of my dissertation experience.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

SUBJECTS' PERCEPTIONS OF A THERAPIST WHO DISCLOSES ABOUT HIMSELF OR A FORMER PATIENT, ABOUT A RELEVANT OR IRRELEVANT PROBLEM, AND ABOUT TREATMENT SUCCESS OR FAILURE

by

WALTER R. DZICKONSKI

In this study subjects listened to a simulated, taped conversation between a therapist and a patient. The study focused on subjects' evaluations of the therapist as a function of the therapist's disclosures. Disclosure about self vs. disclosure about a former patient, disclosure concerning a relevant vs. an irrelevant problem, and disclosure about successful vs. unsuccessful treatment were studied along with sex of subject to make a 2x2x2x2 factorial design.

These manipulations were expected to produce systematic differences in subjects' perceptions of the therapist's genuineness, warmth, and empathy, which are characteristics considered important in client-centered therapy, as well as in their perceptions of his expertise, trustworthiness, similarity to the patient, and intentions to help or persuade the patient, all of which are elements in the social psychological conception of the persuasive communicator. Measures

of attraction to the therapist and intentions regarding future interactions with him were also included, making a total of 24 dependent variables on which univariate analyses of variance were performed.

Significant effects for sex indicated that females were less willing to engage in future interactions with the therapist. Few other significant effects were obtained, but examination of the nonsignificant means for those ANOVA terms that produced effects on at least two variables revealed several consistent patterns across most of the 24 dependent measures. Interpretation and discussion of the findings were based principally on these systematic patterns of means.

All dependent items were scored such that lower values indicated more positive perceptions of the therapist. The chief feature of the patterns was that subjects' perceptions of the therapist consistently seemed to depend more on what he said about himself than on what he said about a former patient. For example, in the self vs. former patient disclosure X success vs. failure disclosure interaction the means corresponding to the conditions in which the therapist talked about succeeding with his own problem were lower for all 24 variables than the means corresponding to the conditions in which he talked about succeeding with a former patient's problem. Also, the means corresponding to the conditions in which the therapist talked about failing with his own problem were higher than those corresponding to the conditions in which he talked about failing with a former patient's problem in 17 of the 24 dependent

variables.

These patterns of means suggest the possibility that subjects' perceptions tended to be more positively affected by the therapist's personal success than his professional success and more negatively affected by his personal failure than his professional failure. The possibility that subjects' perceptions were generally affected more positively by personal disclosure was supported by the patterns of nonsignificant means for the self vs. former patient disclosure main effect. In this case self-disclosure yielded lower means than disclosure about a former patient in 16 of the 17 variables that asked for evaluations of the therapist. A tentative overall conclusion is that subjects in this study may have employed a criterion of evaluation of the therapist in which personal considerations took precedence over professional ones.

Other aspects of the discussion pertained to limitations to generalization of the present findings, possible implications for clinical practice, the trade-off that may have taken place between control over extraneous sources of variation and impactful manipulations, and directions for future research. Finally, the importance of considering individual differences in this type of research was discussed.

INTRODUCTION

The present study relates to self-disclosure and client-centered research in psychotherapy and persuasion research in social psychology, but does not fit neatly into either area. The basic premise is that the very act of the therapist's disclosing information has some sort of impact, either positive or negative, on how his clients perceive him.

One view of psychotherapy focuses on the therapist as a persuasive agent (Frank, 1961). According to this perspective, his counterpart in social psychology might be the persuasive communicator who attempts to change his listeners' attitudes. The present study applies the kinds of procedures and manipulations employed in persuasion research to a psychotherapy analogue situation involving manipulated therapist disclosure. Various communicator variables associated with attitude change like credibility, attraction, and similarity, along with certain therapist variables associated with outcome like genuineness, empathy, and warmth, are employed as dependent measures.

The independent variables involve three different types of disclosure by the therapist. The approach employed here is different from that utilized in most previous research on self-disclosure. Most previous studies measured the effect of therapist disclosure on client disclosure and assumed the latter would facilitate outcome. The focus here is directly

on therapist disclosure, and the purpose is to identify global dimensions of therapist disclosure that would increase subjects' perceptions of his credibility, genuineness, empathy, etc.

This is an exploratory study and the three therapist disclosure factors were employed largely on an intuitive basis. The first is personal vs. other disclosure in which the therapist reveals either a problem he had or a problem a former patient had. The second factor is relevant vs. irrelevant disclosure in which the therapist talks about either the same problem as the patient's or an irrelevant one. The third factor is success vs. failure in which the therapist discloses either that the problem was resolved or not resolved. A no-disclosure control group is included to determine whether or not disclosure per se has any effect on subjects' perceptions.

Self-Disclosure

Research on self-disclosure has proliferated since it was suggested that in order for psychotherapy to be helpful the client must disclose intimate aspects of his life and feelings (Jourard, 1964). Most of these studies have varied certain aspects of a therapist's disclosure in an effort to cause increases in client disclosure (Cozby, 1973).

There have been many revisions of the Jourard Self-Disclosure Questionnaire (JSDQ) (1964), and the forty item version (Drag, 1968) seems to be the best predictor of self-disclosing behavior (Cozby, 1973). Basically this questionnaire measures what an individual has disclosed in the past,

what he or she would be willing to disclose to a same-sex stranger, and also assigns an intimacy rating to the content of these disclosures. On this basis subjects are usually identified as high or low self-disclosers in psychological research.

Various studies have sought to establish self-disclosure as a personality variable. It has been associated with birth-order as a result of the finding that children born later showed higher levels of self-disclosure than first-borns (Dimond & Munz, 1967; Dimond & Hellkamp, 1969). Self-disclosure has also been associated with sex differences in that females exhibited higher levels of disclosure than males (Jourard, 1964).

Other studies have suggested that self-disclosure is situationally determined. Situational factors like classroom environment have been shown to override personality factors in determining subjects' self-disclosure (Himelstein & Kimbrough, 1963; Chiltick and Himelstein, 1967). Self-disclosure has also been related to home environment in that subjects from low nurturant homes disclosed more to friends than to parents while the reverse was true for subjects from high nurturant homes (Doster & Strickland, 1969). Physical proximity has been suggested as a determiner of self-disclosure on the basis of the finding that the duration of disclosure increased as physical distance between interviewer and subject decreased (Jourard & Friedman, 1970). Thus, it is unclear whether self-disclosure is primarily an individual difference variable or a situational variable. Despite this ambiguous status, self-

disclosure has received considerable attention in psychotherapy research.

Typical studies of self-disclosure in psychotherapy. The usual procedure in self-disclosure studies in the area of psychotherapy is to manipulate some quantitative dimension of therapist self-disclosure and assess the effect of this manipulation on subjects' self-disclosure. It is then assumed that increasing subjects' self-disclosure facilitates positive therapeutic outcome. The parameters that have received the most attention in this research have been the amount, intimacy, and duration of self-disclosure (Cozby, 1973), though style has recently been suggested as an important dimension (Brooks, 1974).

The usual finding of these studies is that self-disclosure breeds self-disclosure. For example, a significant relationship was found between the duration of the interviewer's disclosures and the duration of subjects' subsequent disclosures (Jourard & Jaffee, 1970). Likewise, personal topics elicited more personal disclosure than impersonal ones (Vondracek, 1970; Wilson & Rappaport, 1974). One explanation of these results is that the interviewer's disclosure is reinforcing for the subject (Powell, 1968). A similar explanation suggests that the reception of self-disclosing information is rewarding in that it can be viewed as a manifestation of trust (Worthy, Gary, & Kuhn, 1969). Other explanations include modeling (Drag, 1968) and reciprocity (Tognoli, 1969). An excellent summary of other directions being taken in self-disclosure

research is provided by Cozby (1973).

One research concern that is generally absent from investigations of self-disclosure in therapy involves direct efforts to relate this variable to outcome. Most researchers study how a therapist's behavior can be altered to cause increases in a client's self-disclosure and why these increases occur. Little is being done presently to relate the effects of either the therapist's or the client's disclosure to outcome.

Self-disclosure vs. self-exploration in psychotherapy outcome. Use of the JSDQ is based on Jourard's (1959, 1964) contention that the disclosure of intimate, personal details of his life by the client is a prerequisite to improvement in psychotherapy. However, as pointed out above, most subsequent research has been directed at increasing the client's disclosures rather than at verifying the premise that these disclosures are a prerequisite to improvement. However, considerable evidence that a similar construct is important to improvement has grown out of research on the client-centered approach to psychotherapy.

Several early studies suggested a positive relationship between various measures of clients' tendencies to speak about themselves and various criteria of success (Steele, 1948; Wolfson, 1949; Blau, 1953). In one study, for example, successful patients in group psychotherapy made significantly more personal references over the course of therapy than did unsuccessful patients (Peres, 1947). Another study compared early

and late interviews from successful and unsuccessful cases in individual therapy, and more successful cases showed a greater increase in the amount of self-references, particularly those that revealed private or personal facts (Braaten, 1958). Successful patients were also shown to undertake more self-exploration during psychotherapy than less successful patients (Truax, Tomlinson, & van der Veen, 1961). Thus, when self-disclosure is defined in this less precise way (i.e., number of personal references or self-exploration), the client-centered approach has provided a considerable number of correlational studies linking this more general construct with various measures of success in psychotherapy.

The Depth of Self-Exploration (DX) scale, a ten-point rating scale that measures the degree of transparency exhibited by clients, was devised to more clearly define and quantify this construct (Truax, 1962c). At the lowest value the client actively evades any personally relevant material, while at the highest value he volunteers intimate details of his life. This scale has been rather widely employed in client-centered research (Truax & Carkhuff, 1967). Most of these investigations have replicated the findings of the earlier studies. For example, greater transparency was associated with constructive personality change for hospitalized psychoneurotic patients (Truax & Carkhuff, 1965). Within the client-centered approach, transparency or self-exploration as measured by the DX scale is considered to be a sufficient (although not necessary) antecedent of constructive personality change.

Presently the majority of research on self-disclosure is based on the Jourard (1954, 1964) version of this construct and employs the JSDQ. According to this version, self-disclosure is a prerequisite to positive outcome in psychotherapy, but very little research evidence is offered to support this contention. A comparatively large amount of evidence has been offered relating the Truax version of self-disclosure to outcome using the DX scale. According to this version, self-exploration can bring about success in therapy but is not a requisite to success. Consequently self-disclosure and self-exploration have different theoretical statuses regarding their importance to outcome. In addition, from the descriptions of each scale there is no reason to assume that both measure the same construct.

In view of these circumstances it appears that studies directed at increasing self-disclosure as measured by the JSDQ may be premature in terms of their importance for outcome research. Establishing the comparability of the JSDQ and DX scales would seem to be a first priority since the former is more widely used but the latter has been more satisfactorily related to outcome. An additional fact about both client self-disclosure and client self-exploration is that research is restricted to establishing correlational links to outcome. Such client variables would be difficult to manipulate directly because inducing different groups of subjects to disclose differing amounts of personal information in therapy would violate the non-manipulative nature of the

therapeutic encounter and the spontaneity inherent in the concept of self-disclosure.

Focusing directly on therapist disclosure as an alternative. The present study focuses directly on therapist self-disclosure and so adopts a different strategy for assessing the importance of this variable in psychotherapy outcome. Previously therapist disclosure was studied exclusively as a means of increasing patient disclosure. Then level of patient disclosure was correlated with outcome. The present study assumes a certain amount of validity to the suggestion that the therapist can be viewed as a persuasive agent (Frank, 1961). Specifically, the very act of the therapist's disclosing information about himself is expected to have impact on how he is perceived by his patients and consequently on how effective he would be. This approach also gets around the question of deciding between the two versions of self-disclosure described above since the disclosure in the present study is operationalized in the manipulations.

If the therapist is conceived of as having certain aspects in common with the persuasive communicator, there are two separate areas of research in which to look for variables that have been associated with effectiveness. Certain therapist variables have been associated with successful therapy (e.g., Truax & Carkhuff, 1967) and certain communicator variables have been associated with effective persuasion (e.g., Jones & Gerard, 1967). Also there are variables that have been applied to both therapists and communicators and so

do not fall neatly into either category of research. The approach used here is to identify some global dimensions of therapist disclosure that might affect subjects' perceptions of these therapist and communicator variables. In effect, this study attempts to determine what sorts of things a therapist can disclose in order to be perceived by his patients in ways that have been associated with enhancing his effectiveness.

Therapist Variables

Certain therapist variables that have received wide research attention are based on the accepting climate created by the client-centered approach of Carl Rogers. The three necessary conditions for the creation of this climate are accurate empathy, nonpossessive warmth, and genuineness or congruence (Rogers, 1957). The conceptualizations and definitions of these variables suggest that they might be sensitive to the kinds of disclosures that will be made by the therapist in this study.

Definitions: genuineness, nonpossessive warmth, and accurate empathy. In a theoretical sense, genuineness is a prerequisite to the other two ingredients because warmth and empathy could not be conveyed by someone who is phony or defensive (Truax & Mitchell, 1971). The genuine therapist is simply himself without professional facades or roles. He is in touch with his own feelings and rather than hide them he communicates these feelings to his client. Genuineness is measured along a continuum (Truax, 1962b); at lower values

there are marked discrepancies between the therapist's experiencing and the content of his verbalization. At higher values he is perceived as open to both positive and negative experiences without traces of defensiveness or retreating into professionalism. In relating genuineness to outcome the key words lie at the negative end of the continuum (Truax & Mitchell, 1971). Thus, when the therapist is perceived as phony or defensive he inhibits positive change on the client's part.

Nonpossessive warmth has to do with the intensity and intimacy of a relationship. It is more than passive acceptance in that it involves the therapist's commitment to another person, his effort to understand, and his spontaneity (Raush & Bordin, 1957). Another essential aspect of this concept is that it is non-judgmental. The basic worth of a person is never confused with the goodness or badness of his actions. In measuring nonpossessive warmth a continuum is employed that emphasizes the kind and extent of directive intervention on the part of the therapist (Truax, 1962a). At the lower end he acts as though he is the locus of evaluation by trying to control the patient's behavior or telling the patient what's best for him. At the higher end of the continuum the therapist communicates nondirective interest and concern.

Accurate empathy involves a balance between identification and objectivity with the client. It is seeing the world from the client's emotional and perceptual standpoint, without being overwhelmed by the problems that may be un-

covered (Truax & Mitchell, 1971). Measurement of accurate empathy is also done along a continuum (Truax, 1961). At lower levels the therapist appears totally unaware of even the most obvious feelings of the client and his responses are inappropriate or inaccurate in relation to the content and mood of the client's verbalizations. At higher levels he becomes aware of the precise intensity of the most basic emotions and accurately interprets all of the client's acknowledged feelings.

In summary, genuineness provides the honesty and non-defensiveness that permits the development of the other two ingredients. Nonpossessive warmth then creates a trusting and safe atmosphere that fosters the client's self-respect. Accurate empathy can be viewed as the actual process of the therapeutic relationship in which the therapist assists the client's self-understanding by serving as a mirror of his innermost feelings and experiences. Together these three ingredients constitute a climate that has been shown to be effective in fostering positive outcome in psychotherapy. Some of the research supporting the relationship of these three therapist ingredients to outcome follows.

Outcome research and the three ingredients. The most consistent evidence that genuineness, warmth, and empathy are positively related to various improvement criteria like judges' ratings, self-report, and test measures have come primarily from research programs at three universities: Wisconsin (Rogers, Gendlin, Kiesler, & Truax, 1967; Truax

& Carkhuff, 1967; van der Veen, 1967; Truax, 1970, Kiesler, 1971), John Hopkins (Truax, Wargo, Frank, Imber, Battle, Hoehn-Saric, Nash, & Stone, 1966a, 1966b), and Kentucky (Truax, Wargo, & Silber, 1966; Truax, Wargo, & Volksdorf, 1970). The results of these investigations have been cited as forming a necessary, more definitive basis upon which to establish a clear effect of psychotherapy than has been provided by earlier attempts to assess psychotherapeutic outcome (Bordin, 1974).

Studies successfully relating the three ingredients to outcome have been done with a wide variety of therapists differing in training and theoretical orientation. These results have also been obtained across a variety of clients and patients; e.g., juvenile delinquents, hospitalized schizophrenics, college underachievers, college counselees, mild to severe outpatient neurotics, and a variety of hospitalized patients. These findings also seem to hold across different therapeutic contexts and in both individual and group psychotherapy.

An exhaustive summary of the pertinent studies is provided by Truax and Mitchell (1971). In this review a tabular summary is provided for each ingredient that includes type of treatment, type and number of patients, number of outcome measures employed as well as positive and negative results. The vast majority of these studies compared outcome for clients receiving high levels of the three ingredients with those receiving low levels of the three ingredients. The

levels of genuineness, warmth, and empathy were determined by trained judges using the scales described earlier to rate taped interviews between therapists and patients. Several of the studies yielding significant results employed no treatment control groups.

More recently, in a review of the status of psychotherapy, the last few years of outcome research on genuineness, warmth and empathy was summarized. This review reaffirmed the relationship of these three variables to outcome and suggested that they even play a role in facilitating outcome in the behavior therapies (Bergin & Suinn, 1975). These reviewers also point out that some recent studies have shown no relationship between judges' ratings of the levels of these ingredients and outcome, but that in many of these studies quite significant correlations were obtained between clients' ratings of the levels of these three ingredients and positive outcome. This finding seems to suggest that clients' perceptions of the degree of therapist genuineness, warmth and empathy may be more important to outcome than judges' ratings.

Communicator Variables

Research on attitude change in social psychology is often divided into the study of communicator variables, message variables, and audience variables in an effort to learn about the process of effective communication (Jones & Gerard, 1967). Variables of interest in psychotherapy research can be categorized along similar lines: research can be directed at differences due to therapists, kinds of treatment,

and patients. Since the same kinds of elements appear to constitute both the process of interpersonal influence and that of psychotherapy, the findings in one area might have implications for the other.

Efforts to apply social psychological findings to psychotherapy. The first systematic effort to view the therapist as a persuasive agent was made by Frank (1961). To date this view has not stimulated as much research interest as might have been expected, though the number of individual experiments utilizing social psychological constructs in general to explain psychotherapeutic effects is increasing.

In addition, some programmatic efforts have been mounted to break down traditional research boundaries between social psychology and psychotherapy (Goldstein, Heller, & Sechrest, 1966). Some of these approaches have produced inconsistent results (Goldstein & Simonson, 1971). A possible reason for equivocal findings might be that many of these research efforts begin with specific, intact social psychological phenomena and attempt to replicate these effects in psychotherapy situations. It may be that there is very limited comparability between situations created in social psychological laboratories and those involved in the psychotherapeutic encounter. Aside from the usual objection of artificiality in the laboratory, the psychotherapeutic relationship with its mixture of dependency and mutual respect may not fall neatly into any usual social psychological category of dyadic interaction. The present study

does not begin with a specific phenomenon abstracted from social psychology. Instead, it begins with an analogue of the psychotherapy situation and seeks to determine if certain social psychological and psychotherapeutic variables are affected by the interaction. Thus, the only comparability assumed here is between certain aspects that the therapist and persuasive communicator might share in common.

Research on communicator effectiveness. The classic program of attitude change research in social psychology was conducted at Yale and its beginning was marked by the publication of the book, Communication and Persuasion (Hovland, Janis, & Kelley, 1953). In this research, communicator credibility was identified as an important factor contributing to attitude change. Trustworthiness and expertise were studied as the two main components of credibility. Expertise refers to the extent to which a communicator is perceived as the source of valid or correct assertions. Trustworthiness refers to the degree of confidence in the communicator's intent to communicate the assertions he considers most valid.

The trustworthiness component implies the importance of the motives that underlie the communicator's persuasive attempt. Thus, in a study assessing the persuasive impact of the film "The Battle of Britain," subjects' interpretation of the film's purpose was extremely important. The persuasive impact of the film was less for those who judged its intent to be manipulative rather than informative.

The Yale group was never able to disentangle the

effects of expertise and trustworthiness, though the research clearly indicated that both were important in determining credibility (Kresler, Collins, & Miller, 1969). Therefore, in the present study, separate measures of both components are included in the assessment of the therapist's credibility.

Subsequent research has elaborated on early investigations of communicator effectiveness essentially by adding the dimension of similarity or co-orientation and studying perceived intent as a separate variable (Jones & Gerard, 1967). There is considerable evidence that the greater a communicator's degree of similarity to his audience, the greater the amount of attitude change that occurs (e.g., Berscheid, 1966; Simons, Berkowitz, & Moyer, 1970). Perceived intent of the communicator has been studied as the "overhearing" effect (Walster & Festinger, 1962; Brock & Becker, 1965). Basically, such studies point out the importance of the communicator's perceived intent by demonstrating that overheard information produces more attitude change than direct attempts to influence. Measures of similarity and perceived intent of the communicator are also employed as dependent measures in the present study.

The descriptions of the variables and procedures employed in the above research offer some support for one of the assumptions of the present study; namely, that the persuasive communicator and the therapist share several important variables in common. The description of the effective therapist given earlier seems to overlap to a considerable extent with

that provided above for the persuasive communicator. For example, the effective therapist is perceived as genuine rather than phony and as seeking to help the patient by being what he is and not hiding behind a professional veneer. In regard to persuasion, the effective communicator is perceived as straightforward rather than manipulative and as seeking to convince his audience with facts and not subterfuge. It seems that patients and audiences may have similar perceptions of effective therapists and effective communicators.

Another possible category of perceptions that patients in psychotherapy might share with the receivers of persuasive messages concerns the attractiveness of the therapist or communicator. Trustworthiness and expertise were discussed under the heading of communicator variables because most research treats them as social psychological phenomena, although they have been studied in psychotherapy situations (e.g., Strong & Schmidt, 1970a & 1970b; Beutler, Johnson, & Neville, 1975). In the case of attraction, however, both areas of research have devoted considerable study to its importance.

Social psychology has studied attraction within a variety of interpersonal contexts including compliance, conformity and attitude change. With respect to the area of attitude change, there seems to be a relationship between similarity and attraction (Newcomb, 1961). Communicators with similar attitudes are often found to be more attractive to subjects than communicators who have dissimilar attitudes (Baron, Byrne, & Griffith, 1974). Attraction has also been

associated with various psychotherapeutic variables, like self-disclosure (Simonson & Bahr, 1974) and influence attempts (Schmidt & Strong, 1970). Since attraction seems to be an important quality for both the persuasive communicator and the therapist, measures of attraction to the therapist are included in the present study.

The ultimate importance of subjects' perceptions of either a therapist or a persuasive communicator lies in how subjects' behavior is affected by these perceptions. The analogue nature of the present study does not lend itself to the use of actual behavioral measures as dependent variables. Instead, several measures of how subjects would behave toward the therapist in the future are included as dependent variables in this study.

The Independent Variables and Predictions

A basic premise of this study is that the therapist's disclosing information about himself has some sort of impact, either positive or negative, on how his clients perceive him. The problem to be solved is the identification of global dimensions of therapist disclosure that will cause him to be perceived in ways that research has shown to be associated with facilitating positive outcome.

Three kinds of therapist disclosure. As mentioned earlier, most previous efforts at varying therapist self-disclosure have been directed at confirming the finding that self-disclosure breeds self-disclosure. Consequently, past research provides no clues as to what are potent kinds of

disclosures in terms of creating an optimum therapeutic relationship or in terms of increasing the therapist's effectiveness as a persuasive agent.

Assuming that a therapist's disclosures do affect the therapeutic relationship and his persuasive credibility, several basic questions as to why arise. One such question would be: Is it because the therapist is relating a clinical problem of his own or simply because he is relating professional experience he may have had with a clinical problem? To answer this question self-disclosure vs. disclosure about a former patient is employed as one factor in the present study. The therapist either discloses about himself or he conveys the same information but ascribes it to a patient he has treated in the past.

A second basic question concerns whether or not it is important that the therapist discloses about the same problem as the client. This question suggests the second factor that is manipulated in this study—relevant vs. irrelevant disclosure. The therapist either discloses about the same problem as the client or about an entirely different problem.

A third question that may hold important implications for the nature of the impact of the therapist's disclosures can be stated as: Is it important that the therapist's disclosure suggests success or failure in overcoming the problem he discloses? To answer this question, the third factor employed here is success vs. failure. Regarding the problem

he discloses, the therapist states either that it was successfully resolved or that it failed to be resolved.

In addition, an important question in the present study is whether or not the basic assumption holds. To determine if therapist self-disclosure has any impact on how he is perceived, a no-disclosure control group is employed as well.

Both voices on the stimulus tapes employed in this study are male. Since this fact might be expected to affect subjects' perceptions of the therapist, sex of subject is included as an additional, internal factor.

Predictions. Due to its exploratory nature specific predictions for each of the dependent measures are not an important part of this study. Many measures are included in an effort to determine as many effects as possible.

However, past research and the nature of the independent variables suggest that certain general predictions can be made. For each independent variable a main effect is expected for many of the dependent measures. For example, assuming that speaking about oneself generally elicits more positive perceptions than speaking about another, results for disclosure about self vs. a former patient would be expected to show self-disclosure to be superior in causing the therapist to be perceived more positively across most of the dependent measures. However, there is some past research upon which to base reservations for such an effect, at least in the case of attraction measures.

Clients have implicit and explicit expectations about what are desirable qualities in their counselors (Rosen, 1967). Status of the counselor may be a salient determinant of patient preferences and expectations (Simon, 1973), and one study has shown that clients are less attracted to professional therapists who make personal disclosures, possibly because clients consider such disclosures to be professionally inappropriate (Simonson & Bahr, 1974). Since the purpose of the present investigation is to establish effects for global dimensions of disclosure rather than for specific situational characteristics like status, an attempt is made to neutralize status as a factor in this study. However, the above finding highlights the problems associated with predicting main effects in one direction for all the dependent measures being employed.

The relevant vs. irrelevant factor may be the most likely one to produce consistent main effects across the various dependent measures. In the relevant condition the therapist discloses about the same problem that the patient has, while in the irrelevant condition the therapist talks about a completely different problem. As mentioned earlier, similarity is well documented as a determinant of attraction (Newcomb, 1961). Consequently, the therapist who discloses about the same problem might be perceived as warmer and more empathic, attractive, expert and similar and subjects might express more favorable intentions for future interaction with him. However, even with this factor caution should be exercised in making the same prediction across all variables.

If subjects construed the therapist's disclosure about having the same problem as an attempt to manipulate or influence, their perceptions of the therapist for variables like genuineness, trustworthiness, and intention might be affected in a negative way.

Similar reservations probably should be exercised in making predictions for the success vs. failure factor. The therapist who discloses about success would be expected to be perceived as more expert and subjects would be expected to express greater willingness to interact with him in the future. However, it seems possible that the therapist who admits failure may come across as more human and therefore more genuine, trustworthy, similar, empathic, and perhaps even more warm and attractive. Finally, since predictions for main effects are so tentative and ill-defined, no predictions for interactions will be attempted.

METHOD

A 2x2x2 completely crossed, factorial design was employed. Equal numbers of males and females were included in each cell so that sex represented an additional, internal factor. The 16 cell design is presented in Table 1. Each manipulated factor represented a different two-level dimension of therapist self-disclosure: personal vs. about a former patient, relevant vs. irrelevant, and success vs. failure. A control group that listened to a basic dialogue without any therapist disclosure manipulations was included to assess the impact of self-disclosure vs. no self-disclosure.

Subjects

The subjects were 180 undergraduates from the University of New Hampshire. Approximately 115 were recruited from spring semester introductory psychology courses where participation in experiments constitutes part of the laboratory requirement. An additional 55 subjects were obtained from two summer session introductory psychology courses. In one of these courses participation in this experiment was required, and in the other it was strongly encouraged by the instructor. Finally, approximately ten subjects were volunteers from a summer session, introductory-level course in the Speech and Drama Department of the University of New Hampshire. The composition of the summer session courses tended to be more heterogeneous with respect to age and related demo-

TABLE 1

EXPERIMENTAL DESIGN

	SELF				OTHER				
	Relevant		Irrelevant		Relevant		Irrelevant		
	Female	Male	Female	Male	Female	Male	Female	Male	
Success	Cell 1 N=10	Cell 2 N=10	Cell 3 N=10	Cell 4 N=10	Cell 5 N=10	Cell 6 N=10	Cell 7 N=10	Cell 8 N=10	CONTROL N=20
Failure	Cell 9 N=10	Cell 10 N=10	Cell 11 N=10	Cell 12 N=10	Cell 13 N=10	Cell 14 N=10	Cell 15 N=10	Cell 16 N=10	

graphic characteristics than that of the spring semester courses. An attempt was made to insure random assignment of all subjects across cells.

No special clinical requirement (e.g., that they suffered from the main problem featured in the manipulations, namely fear of public speaking) was put on subjects participating in this study. Instead, subjects were asked to listen to an audio tape and to evaluate the therapist's verbal behavior as if they were the patient on the tape and suffered from the same problem he did.

Treatments

The three independent variables were manipulated within the context of eight audio tapes, each tape being approximately 15 minutes in duration. Each tape contained the same basic dialogue between a therapist and patient, except that manipulations appropriate to each cell were inserted at three pre-arranged points in the basic dialogue. Control subjects listened to the basic dialogue only.

Preparation of tapes. The role of the therapist on the nine tapes was played by an associate professor in the Psychology Department at the University of New Hampshire who had experience in counseling and therapy. The role of the patient was played by a graduate student who had a counseling internship at the University's counseling center.

All the taping required for the construction of the treatments was done at the same time and with the same tape recorder in order to insure consistent quality of sound when

different segments were put together. The basic dialogue was taped first with breaks in the three places where the manipulations were to be inserted. The eight manipulations were then recorded on separate tapes. Each manipulation was composed of three separate segments of conversation that were then inserted in the basic dialogue at the appropriate breaks.

Content of tapes. The chief content of each tape was a dialogue represented as a first meeting between a therapist and a patient who had a problem speaking in public. The therapist and patient on the tape attempted to make their dialogue sound spontaneous by conveying appropriate affect and by including the stammers, stutters, pauses and rephrasings that characterize every-day conversation. The basic dialogue appears in APPENDIX A.

The manipulations appropriate to each cell were repeated essentially three times: once as an introduction, once as a reminder, and finally in a form that constituted approximately two minutes of dialogue. The manipulations for the eight cells are included in APPENDIX B.

As much standardization of dialogue as possible was included even across the manipulations. With the exception of necessary grammatical differences in tense, word order, etc., only three sets of key words constituted the manipulation of the independent variables. In this respect the manipulations had the "neatness" often found in persuasion research where an independent variable might be operationalized simply by ascribing one communication to two different sources (e.g., Hovland & Weiss, 1951).

In the present study the personal vs. former patient factor was operationalized simply by the word "I" for personal disclosure and "he" (a former patient) for other disclosure. The relevant vs. irrelevant factor involved the expression "fear of public speaking" for the relevant condition and "overeating" for the irrelevant condition. Fear of public speaking was chosen as the patient's problem because it is a relevant and rather widespread complaint (Devine, 1974) that lends itself to experimental manipulation without ethical complications. Overeating was chosen as the irrelevant problem because on most dimensions it seemed qualitatively dissimilar to fear of public speaking; e.g., it is not a phobia, it is not directly an interpersonal problem, etc. Finally, the success failure factor was operationalized by the words "success" and "failure" respectively.

Insuring such standardization of content in the dialogues, even across conditions, may have resulted in less impactful manipulations. For example, maximum control over unwanted sources of variance like differential semantic content and duration may have been achieved at the expense of more powerful treatments. However, any effects obtained could be more confidently attributed to the therapist's responding to the patient's verbalizations by disclosing about himself or a former patient, about the same or an irrelevant problem, and about success or failure.

Procedure

Subjects were run either individually or in groups of

two to five at a time. Upon entering the experimental area, they were seated and given instructions by the experimenter. Subjects were told they were participating in a psychotherapy analogue study, and the nature of an analogue study was explained to them. They were told that the purpose of the study was to evaluate many different counselors and therapists, both professional and nonprofessional, by having them rate taped excerpts of psychotherapeutic interviews. Subjects were told that the identities of the therapist and patient were edited out of each excerpt to insure the anonymity of the participants. These last features of the instructions were intended to control for the possible status effects described earlier. Subjects were then told that they would be asked to respond to a questionnaire that would assess their perceptions of certain aspects of the therapist's personality after they listened to the tape. Two times during the instructions it was stressed that subjects were to respond to the questionnaire as if they were the patient on the tape and they had the same problem as the patient on the tape. After stressing that they were to pay close attention to the kinds of things the therapist said and to imagine he was saying those things to them, subjects were told that the tape they were about to listen to was a 15 minute excerpt from a first meeting between a therapist and a patient who had a fear of public speaking.

Subjects were then brought into a room with six chairs and a tape recorder. The experimenter asked if there were any questions, after which subjects listened to the tape recording.

Immediately after the recording ended, subjects responded to the dependent measure. A debriefing resume was then handed out and subjects were given the option of leaving or reading it over and discussing it further with the experimenter.

Dependent Measures

A variety of dependent measures, scaled on seven-point continua were employed. Some were drawn from persuasion research, others from psychotherapy research. Another group of items employed included subjects' intentions regarding future interactions with the therapist. Also a series of items served as manipulation checks for the three independent variables. Finally, one item asked subjects to estimate the amount of fear they experience when speaking in public for use as a possible basis for an internal analysis of the data.

With the exception of manipulation check items, instructions preceding each of the various sections of dependent measures stressed that subjects assume the perspective of the patient on the tape when responding. Pilot work indicated that bipolar scaling of items was more sensitive to the treatments than Likert scaling, and therefore all the seven-point scales employed were bounded by bipolar terms with the midpoint defined as neutral.

Items from persuasion research. This section of the questionnaire was composed of six items designed to assess the various communicator variables discussed earlier. For each item a statement was made about the therapist with a blank included. Subjects indicated with a check mark which of the

seven blocks on the bipolar continua corresponded most closely to how they perceived the therapist in relation to each variable. Separate statements about his trustworthiness and expertise assessed the social psychological notion of credibility. Similarity was measured by separate statements regarding the therapist's similarity to the patient and the extent to which they shared the same attitudes. Pilot work had indicated that these two statements might be interpreted differently by subjects. Finally, two items measured the therapist's intentions. One measured his intention to help and the other his intention to persuade.

Items from psychotherapy research. Genuineness, warmth and empathy are typically rated by trained judges using well-defined scales that were described in the preceding section of this paper. However, according to the traditional view of client-centered therapy, the client's perception of the level of the three therapist ingredients is the most important factor in producing positive outcome (Rogers, 1957). The use of seven-point rating scales for this purpose as proposed here is supported by a study that compared the ratings of trained judges using the well-defined scales mentioned above with those of neophytes using modified semantic-differential scales (Shapiro, 1968). The results revealed high intercorrelations between the two kinds of ratings, and it was concluded that clients know what the concepts mean and that this procedure is a valid measure of the levels of these ingredients.

In the present study eight items measured the three

ingredients of client-centered therapy. The adjectives employed in these items were drawn from the Relationship Questionnaire (Truax & Carkhuff, 1967). This is a 141 item true-false scale that measures six elements in the therapeutic relationship, including the three of interest in this study. It is typically given to patients after the initial sessions of therapy and provides a measure of the quality of the relationship from the patient's perspective. Each item involves an adjectival description of some aspect of the therapist's behavior in relation to the patient. The items used to measure genuineness, warmth and empathy in the present study were constructed using adjectives drawn from the context of these descriptions. These items, along with three similarly scaled items measuring attraction, were presented to subjects simply as 11 bipolar scales, each with seven boxes. Once again they indicated their choice with a check mark in the appropriate box. Two items measured genuineness; they employed the terms genuine/not genuine and open/defensive. Three items measured warmth and employed the terms warm/cold, accepting/rejecting, and patient/impatient. Three items measured empathy using the bipolar terms understanding/not understanding, caring/uncaring, and interested/disinterested. Finally, the items assessing attraction employed the terms likeable/unlikeable, pleasant/unpleasant, and friendly/unfriendly.

Within the above two categories of items (those from persuasion research and those from psychotherapy research), the direction of the bipolar scales were alternated. Thus

for some items the positive pole appeared on the left of the scale, and for others it appeared on the right. This was done to avoid any systematic bias subjects might have had in responding to these items.

Behavioral intentions. The concern of the present study with subjects' global perceptions of the therapist does not lend itself to the use of behavioral measures. Yet subjects' perceptions only take on importance to the extent that they are reflected in behavior change. For this reason several items were included to assess the possible future behavior of the subjects in relation to the therapist, if they were the patient on the tape. These items were also scaled on seven-point continua. These items measured subjects' intentions with regard to seeing the therapist, recommending him to others, and following his advice. They also measured subjects' expectations as to whether the therapist would be able to help them with a public speaking problem and with other kinds of problems. Finally, subjects were also asked if they would feel better about themselves after speaking with the therapist and if they would share their innermost thoughts with him.

Manipulation checks. An additional three items served as manipulation checks. These items asked the subjects to choose one of three alternatives in response to what kinds of disclosures the therapist made on the tape. Each item served as a check for one of the three manipulated factors. Thus, the three alteratives in the first item regarding what the therapist spoke about were: "himself," "unsure," or "a former patient." The three alternatives for the second item were:

"not successfully treated," "unsure," "successfully treated." The three alternatives for the third item were: "public speaking," "unsure," "overeating."

One item asked subjects to rate the amount of fear they experienced when speaking in public. This item was scaled on a seven-point scale bounded by "very low" and "very high," with the midpoint defined as "moderate." Finally, an open-ended question invited subjects to give their subjective reaction to the experiment if they wished. The entire questionnaire is included in APPENDIX C. When the data was collected, all items employing seven-point scales were scored so that lower values indicated more positive evaluations or intentions towards the therapist. This was done simply by treating all these items as though the positive pole appeared on the left side of the scale and scoring the seven boxes from 1 to 7.

Data Analysis. Univariate analyses of variance were computed from the 24 items that constituted the three groups of dependent measures. Intercorrelations among the 24 dependent variables were also computed for all 180 subjects to assess the internal consistency within the three categories of measures. T-tests were done comparing each of the eight manipulated conditions with the control condition for all 24 dependent variables to assess the impact of disclosure vs. no disclosure. Finally, percentage scores were computed for the three manipulation check items to determine if the manipulations were perceived by the subjects.

RESULTS

For convenience in presenting and discussing results, self-disclosure vs. disclosure about a former patient is referred to as the self/other factor, disclosure about public speaking fear vs. disclosure about overeating is referred to as the relevant/irrelevant factor and disclosure about treatment success vs. disclosure about treatment failure is referred to as the success/failure factor. Checks on experimental manipulations indicated that the vast majority of subjects perceived the manipulations appropriate to their experimental condition. For the self/other factor one per cent of the subjects indicated that they perceived the wrong alternative. One per cent of the subjects also indicated the wrong alternative for the relevant/irrelevant factor. However, ten per cent indicated the wrong alternative for the success/failure factor. Post-experimental questioning indicated that most of these subjects perceived this item as ambiguous. The item read, "The problem described by the therapist was...," and the three possibilities were: "not successfully treated," "unsure," and "successfully treated." Most of the subjects questioned stated that they were unsure as to whether the item referred to the problem the therapist was actually dealing with in the basic dialogue or the problem he disclosed about during the course of therapy.

Important findings among the various dependent measures are discussed by variable description and variable number. For

convenience, a list of each dependent variable according to group (persuasion, psychotherapy, or intention) and number is provided in Appendix D.

Differences Between Conditions

The means of all 24 dependent measures for the 16-cell design are presented in Table 2. In this and in all succeeding tables of means, lower values indicate more positive perceptions of and intentions towards the therapist. The principal analyses were four-way ANOVAs for each of these dependent variables: self/other X relevant/irrelevant X success/failure X female/male. Consistent patterns among several dependent variables resulted for 5 of the 15 ANOVA terms: the self/other X relevant/irrelevant X success/failure interaction; the self/other X success/failure interaction; the female/male main effect; the success/failure main effect; and the self/other main effect.

A criterion was established for determining which ANOVA tests would be reported. Only those tests were selected for presentation that produced at least two significant effects ($p < .05$) in the same direction and patterns of means that supported certain aspects of these effects in the remaining dependent variables. Analyses of variance summary tables for all dependent measures appear in Appendix E.

The significant self/other X relevant/irrelevant X success/failure interactions. Significant effects were obtained for variable 8 (understanding, $p < .03$) and variable 20 (would follow therapist's advice, $p < .05$) for this three-way interaction. These effects are graphed in Figure

TABLE 2

MEANS OF ALL DEPENDENT MEASURES FOR THE 16-CELL DESIGN*

Variable #	Cell Number 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2.9	2.9	2.6	3.0	4.2	4.3	4.4	4.6	2.3	2.6	3.5	2.7	4.0	3.4	3.5	4.4
2	4.2	2.9	3.4	2.6	3.8	3.9	2.4	4.3	3.3	2.8	3.5	3.6	3.2	2.8	3.9	3.9
3	2.4	1.6	1.7	2.3	1.9	2.8	2.7	1.8	1.7	2.6	3.1	2.4	2.2	2.3	2.2	2.5
4	3.2	3.4	2.3	2.7	3.3	3.5	3.4	3.0	2.4	2.6	3.8	2.9	3.4	3.3	2.6	3.4
5	5.5	3.7	5.5	4.8	5.7	4.9	5.9	5.5	6.2	4.9	5.6	5.3	5.8	5.1	5.0	4.6
6	2.9	4.1	3.2	4.2	4.6	4.8	3.9	3.2	4.8	4.0	5.2	5.1	4.2	3.9	4.3	3.9
7	4.3	3.8	4.5	3.2	5.0	4.7	5.3	4.7	4.3	4.1	4.6	4.3	4.6	4.5	3.3	4.1
8	3.2	3.1	3.0	3.4	3.9	3.7	5.2	3.6	3.2	3.3	4.7	4.1	4.0	3.3	2.8	3.3
9	4.2	3.3	3.4	3.2	4.2	4.4	4.7	3.6	3.4	3.8	4.3	3.4	3 8	4.4	3.9	3.2
10	4.6	3.8	3.6	3.6	4.6	4.3	4.6	3.7	3.4	4.2	4.5	3.9	4.5	4.1	3.2	3.4
11	3.7	2.7	3.2	2.9	3.9	3.4	4.5	3.0	3.8	3.2	4.0	3.9	3.2	3.7	3.1	3.7
12	3.1	2.9	2.9	2.7	4.0	3.6	3.7	4.1	3.3	3.3	4.1	3.3	3.7	3.7	2.8	2.8
13	3.2	3.3	3.3	3.1	3.6	3.9	3.5	3.4	3.0	3.3	4.1	3.5	3.1	4.1	3.1	2.9
14	2.8	3.0	1.6	3.1	3.6	2.8	2.5	2.2	2.2	2.4	3.3	3.2	2.5	3.4	2.4	3.1
15	3.1	2.8	2.6	3.2	3.5	3.4	3.1	3.1	2.8	2.8	3.9	3.3	3.6	3.7	3.1	3.1
16	3.6	3.0	2.0	3.6	4.4	4.0	4.4	3.4	3.3	2.9	3.5	3.5	3.3	3.6	3.1	3.5
17	4.1	3.0	3.7	3.0	3.6	4.1	3.8	3.2	3.2	3.3	3.6	3.0	3.4	3.6	3.2	2.8
18	4.6	4.4	3.5	3.7	5.5	4.6	4.7	3.4	4.0	5.0	5.5	4.6	4.3	4.4	3.9	4.3
19	4.7	4.5	4.3	3.8	5.7	4.9	5.7	3.5	4.7	4.2	5.6	4.8	4.9	4.6	4.5	4.6
20	3.4	3.3	2.3	2.9	3.5	3.4	3.5	2.5	3.7	3.1	4.6	3.9	4.2	3.2	3.0	3.0
21	4.8	3.7	3.2	3.8	4.7	3.8	3.9	3.9	5.5	4.1	5.0	4.2	4.5	4.2	4.7	3.8
22	4.6	3.6	3.0	3.6	4.6	3.9	4.2	3.2	4.9	3.6	4.3	4.1	5.1	3.7	3.4	3.6
23	4.1	4.0	3.4	3.5	4.1	4.1	4.3	3.6	4.1	3.5	4.4	3.8	4.6	3.8	3.3	3.4
24	5.9	4.6	4.7	4.7	5.9	4.9	5.3	4.7	5.4	4.2	5.2	4.7	5.6	4.8	4.3	4.5

*NOTE: Experimental conditions associated with each cell number can be determined by consulting Table 1; dependent variables corresponding to variable numbers can be found in Appendix D.

1. Simple effects tests on the self/other and success/failure

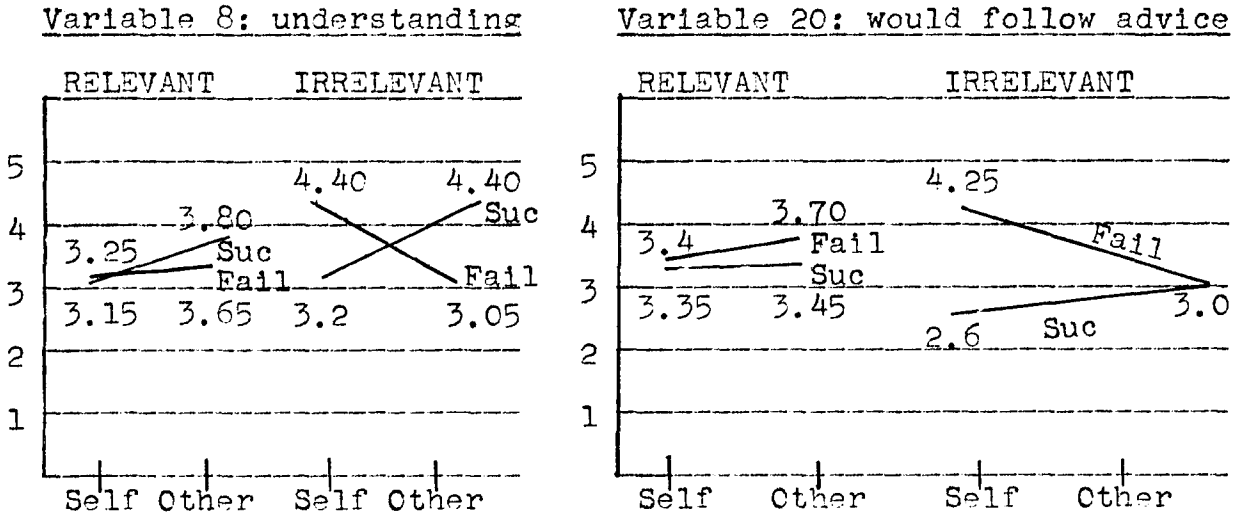


Fig. 1. Significant self/other X relevant/irrelevant X success/failure interactions.

main effects and the self/other X success/failure interactions under both levels of the relevant/irrelevant factor were calculated for these two variables.

Simple effects tests on variable 8 (understanding) revealed that significance (F = 11.93; df = 1,144; $p < .001$) was located in the simple self/other X success/failure interaction under irrelevant disclosure. Significant simple, simple main effects were obtained for four combinations of means involved in the simple interaction: success/failure at self; self/other at success; success/failure at other; and self/other at failure. The first two simple, simple effects had F's of 5.28 and the latter two simple, simple effects had F's of 6.68. In all four cases, p was less than .05 and df's were 1, 144. Thus, when the therapist disclosed about an irrelevant

problem self-disclosure about success caused him to be perceived as more understanding than self-disclosure about failure or other-disclosure about success, and other-disclosure about failure caused him to be perceived as more understanding than other-disclosure about success or self-disclosure about failure.

Simple effects tests on variable 20 (would follow therapist's advice) revealed that again significance ($F = 5.96$; $df = 1,144$; $p < .05$) was located in the simple self/other X success/failure interaction under irrelevant disclosure. Significant simple, simple main effects were obtained for two combinations of means involved in the interaction: success/failure at self ($F = 11.92$; $df = 1,144$, $p < .001$); and self/other at failure ($F = 6.84$; $df = 1,144$; $p < .01$). Thus, when the therapist talked about the irrelevant problem, subjects expressed more definite intentions to follow his advice when he made a self-disclosure about success than when he made a self-disclosure about failure, and subjects were also more willing to follow his advice when he made an other-disclosure about failure than when he made a self-disclosure about failure.

Consistencies among the significant and nonsignificant self/other X relevant/irrelevant X success/failure interactions. The nonsignificant means involved in the self/other X relevant/irrelevant X success/failure interaction were examined for all 24 dependent variables. Certain aspects of the nonsignificant effects were consistent with the two significant effects described above, and these aspects proved to be consistent across most of the 24 dependent variables. Table 3 presents the means

TABLE 3

MEANS OF ALL DEPENDENT MEASURES FOR THE SELF/OTHER X RELEVANT/IRRELEVANT X SUCCESS/FAILURE INTERACTIONS

Variable #	Self				Other			
	Relevant		Irrelevant		Relevant		Irrelevant	
	Success	Failure	Success	Failure	Success	Failure	Success	Failure
1	2.90	2.45	2.80	3.10	4.25	3.70	4.50	3.95
2	3.55	3.05	3.00	3.55	3.85	3.00	3.35	3.90
3	2.00	2.15	2.00	2.75	2.35	2.25	2.25	2.35
4	3.30	2.50	2.50	3.35	3.40	3.35	3.20	3.00
5	4.60	5.55	5.15	5.45	5.30	5.45	5.70	4.80
6	3.50	4.40	3.70	5.15	4.70	4.05	3.55	4.10
7	4.05	4.20	3.85	4.45	4.85	4.55	5.00	3.70
8	3.15	3.25	3.20	4.40	3.80	3.65	4.40	3.05
9	3.75	3.60	3.30	3.85	4.30	4.10	4.15	3.55
10	4.20	3.80	3.60	4.20	4.45	4.30	4.15	3.30
11	3.20	3.50	3.05	3.95	3.65	3.45	3.75	3.40
12	3.00	3.30	2.80	3.70	3.80	3.70	3.90	2.80
13	3.25	3.15	3.20	3.80	3.75	3.60	3.45	3.00
14	2.90	2.30	2.35	3.25	3.20	2.95	2.35	2.75
15	2.95	2.80	2.90	3.60	3.45	3.65	3.10	3.10
16	3.30	3.10	2.80	3.50	4.20	3.45	3.90	3.30
17	3.55	3.25	3.35	3.30	3.85	3.50	3.50	3.00
18	4.50	4.50	3.60	5.05	5.05	4.35	4.05	4.10
19	4.60	4.45	4.05	5.20	5.30	4.75	4.60	4.55
20	3.35	3.40	2.60	4.25	3.45	3.70	3.00	3.00
21	4.25	4.80	3.50	4.60	4.25	4.35	3.90	4.25
22	4.10	4.25	3.30	4.20	4.25	4.40	3.70	3.50
23	4.05	3.80	3.45	4.10	4.10	4.20	3.95	3.35
24	5.25	4.80	4.70	4.95	5.40	5.20	5.00	4.40

of all the dependent variables for this interaction.

Recalling that lower values indicate more positive perceptions, Table 3 shows that the directions of the non-significant effects generally upheld the directions of the four significant simple, simple main effects obtained for variable 8 (understanding) under irrelevant disclosure. For the simple, simple effect of success/failure at self, the mean for success was lower than the mean for failure in 23 of the 24 dependent variables. The exception was variable 17 (friendly). For the simple, simple effect of self/other at success, the mean for self was lower than the mean for other in 23 of the 24 dependent variables. In this case the exception was variable 14 (patient) for which the means were equal. For the simple, simple effect of success/failure at other, the mean for failure was lower than the mean for success in 16 of the 24 variables. For variables 15 (interested) and 20 (would follow therapist's advice) these means were equal, while the directions were reversed for variables 2 (intention to persuade), 3 (intention to help), 6 (expert), 14 (patient), 18 (would want to see therapist again) and 21 (therapist would be able to help with a public speaking problem). For the simple, simple main effect of self/other at failure the mean for other was lower than the mean for self in 22 of the 24 variables. The exceptions were variable 1 (similar) and variable 2 (intention to persuade).

One other very consistent feature of the self/other X relevant/irrelevant X success/failure interaction across most of the dependent measures resulted from examining the nonsignif-

icant means. Under relevant disclosure, the directions of the nonsignificant effects suggested a simple main effect for the self/other factor. Specifically, under the relevant condition, the sum of the success and failure means under self was lower than the sum of the success and failure means under other for all dependent measures except variable 21 (therapist would be able to help with a public speaking problem). Thus, there was a nonsignificant effect for 23 variables such that when the therapist disclosed about the relevant problem, he was perceived more positively when he spoke about himself than when he spoke about a former patient.

The significant self/other X success/failure interactions. Significant effects were obtained for variable 5 (similar attitudes, $p < .04$), variable 6 (expert, $p < .04$), variable 7 (warm, $p < .01$), variable 8 (understanding, $p < .01$), and variable 12 (caring, $p < .01$). In all cases certain aspects of the ordering of the four means relative to each other were consistent. The effect for variable 7 (warm) is graphed in Figure 2 to exemplify how the means were ordered in these

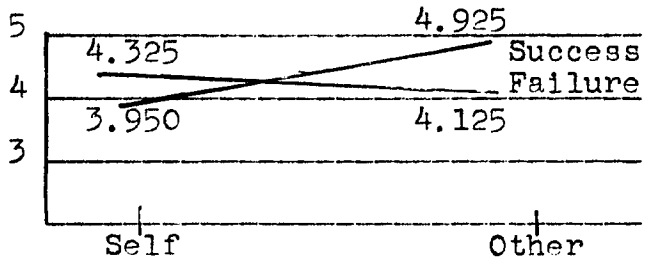


Figure 2. Significant self/other X success/failure interaction for variable 7 (warm).

five significant interactions.

Simple main effects tests were computed for success/failure at self, self/other at success, success/failure at other, and self/other at failure for all five significant interactions. These four simple main effects tests corresponded to the four simple, simple main effects tests done on the two significant self/other X relevant/irrelevant X success/failure interactions described in the preceding section.

Simple effects tests on variable 5 (similar attitudes) revealed that none of the 4 simple main effects were significant. The simple effect of success/failure at self was the only significant ($F = 7.81$; $df = 1,144$; $p < .01$) simple main effect for variable 6 (expert). Thus, subjects perceived the therapist as more of an expert when he made a self-disclosure about success than a self-disclosure about failure. Two of the simple main effects were significant for variable 7 (warm): success/failure at other ($F = 5.96$; $df = 1,144$, $p < .05$) and self/other at success ($F = 8.85$; $df = 1,144$; $p < .01$). For this variable the therapist was perceived as warmer when he made an other-disclosure about failure than when he made an other-disclosure about success, and he was also seen as warmer when he made a self-disclosure about success than when he made an other-disclosure about success. The same two simple main effects were significant, ($F = 4.13$; $df = 1,144$; $p < .05$ and $F = 6.28$; $df = 1,144$; $p < .05$, respectively), for variable 8 (understanding). Thus, the therapist was perceived as more understanding when he made an other-disclosure about failure

than when he made an other-disclosure about success, and he was also seen as more understanding when he made a self-disclosure about success than when he made an other-disclosure about success. This last simple main effect was also the only significant (F = 9.00; df = 1,144; $p < .01$) one found for variable 12 (caring). Here the therapist was perceived as more caring when he made a self-disclosure about success than when he made an other-disclosure about success.

Consistencies among the significant and nonsignificant self/other X success/failure interactions. Overall, the same simple main effects tests were not significant across all five of these dependent measures. However, the ordering of the four means indicated that the significant and nonsignificant simple main effects were in the same direction for all five of these variables. Table 4 presents the means of all the dependent measures for the self/other X success/failure interaction. Recalling that lower values indicate more positive perceptions, Table 4 shows that for most of the 24 dependent variables the significant and nonsignificant simple main effects go in the same direction.

For the simple main effect of success/failure at self, the mean for success was lower than the mean for failure in 21 of the 24 dependent variables. The exceptions were variable 1 (similar), variable 17 (friendly), and variable 24 (would share innermost thoughts with therapist). For the simple main effect of self/other at success, the mean for self was lower than the mean for other in all 24 dependent variables. For

TABLE 4

MEANS OF ALL DEPENDENT MEASURES FOR THE SELF/OTHER X SUCCESS/FAILURE INTERACTIONS

Variable #	Self		Other	
	Success	Failure	Success	Failure
1	2.850	2.775	4.375	3.825
2	3.275	3.300	3.600	3.450
3	2.000	2.450	2.300	2.300
4	2.900	2.925	3.300	3.175
5	4.875	5.500	5.500	5.125
6	3.600	4.775	4.125	4.075
7	3.950	4.325	4.925	4.125
8	3.175	3.825	4.100	3.350
9	3.525	3.725	4.225	3.825
10	3.900	4.000	4.300	3.800
11	3.125	3.725	3.700	3.425
12	2.900	3.500	3.850	3.250
13	3.225	3.475	3.600	3.300
14	2.625	2.775	2.775	2.850
15	2.925	3.200	3.275	3.375
16	3.050	3.300	4.050	3.375
17	3.450	3.275	3.675	3.250
18	4.050	4.775	4.550	4.225
19	4.325	4.825	4.950	4.650
20	2.975	3.825	3.225	3.350
21	3.875	4.700	4.075	4.300
22	3.700	4.225	3.975	3.950
23	3.750	3.950	4.025	3.775
24	4.975	4.875	5.200	4.800

the simple main effect of success/failure at other, the mean for failure was lower than the mean for success in 19 of the 24 dependent variables. The means were equal for variable 3 (intention to help), and the direction was reversed in variable 14 (patient), variable 15 (interested), variable 20 (would follow therapist's advice), and variable 21 (therapist would be able to help with a public speaking problem). For the simple main effect of self/other at failure, the mean for other was lower than the mean for self in 17 of the 24 variables. The exceptions were variables 1 (similar), 2 (intention to persuade), 4 (trustworthy), 9 (likeable), 14 (patient), 15 (interested) and 16 (open).

Consistencies between the three-way interactions and the two-way interactions. An obvious aspect of both the significant and nonsignificant self/other X success/failure interactions is that for the most part the directions of the four simple main effects are the same as the directions of the corresponding significant and nonsignificant simple, simple main effects under irrelevant disclosure in the self/other X relevant/irrelevant X success/failure interactions. In summary, for the four simple main effects in the two-way interaction and the four corresponding simple, simple main effects in the three-way interaction, most of the 24 dependent variables yielded means in the same direction: the self-success and the other-failure means were lower than the self-failure and the other-success means.

It seemed possible that the two-way effects may have

depended on the three-way interactions. To determine if this was the case, separate F-tests were computed for the simple self/other X success/failure interaction for all the dependent variables under both relevant and irrelevant disclosure. It was expected that relevant disclosure had been masking many significant self/other X success/failure effects under irrelevant disclosure in the three-way interaction. However, the simple self/other X success/failure tests under irrelevant disclosure yielded only four significant effects. Variable 8 (understanding, $F = 11.93$; $df = 1,144$; $p < .001$) and variable 20 (would follow therapist's advice, $F = 5.96$; $df = 1,144$; $p < .05$) had also shown significant effects in the three-way interaction. Variable 7 (warm, $F = 8.40$; $df = 1,144$; $p < .01$) and variable 12 (caring, $F = 9.97$; $df = 1,144$; $p < .01$) had approached significance in the three-way test with p values of .12 and .07, respectively.

If in the three-way interaction relevant disclosure had been masking the interaction under irrelevant disclosure, the means for the self/other X success/failure interactions under relevant disclosure should have generally gone in the opposite directions from those under irrelevant disclosure. The graphs for variables 8 and 20 have already been presented in Figure 1. The graphs for variables 7 and 12 are presented in Figure 3.

These graphs reveal that for all four variables the slopes of the success lines under relevant disclosure would actually have contributed to the self/other X success/failure

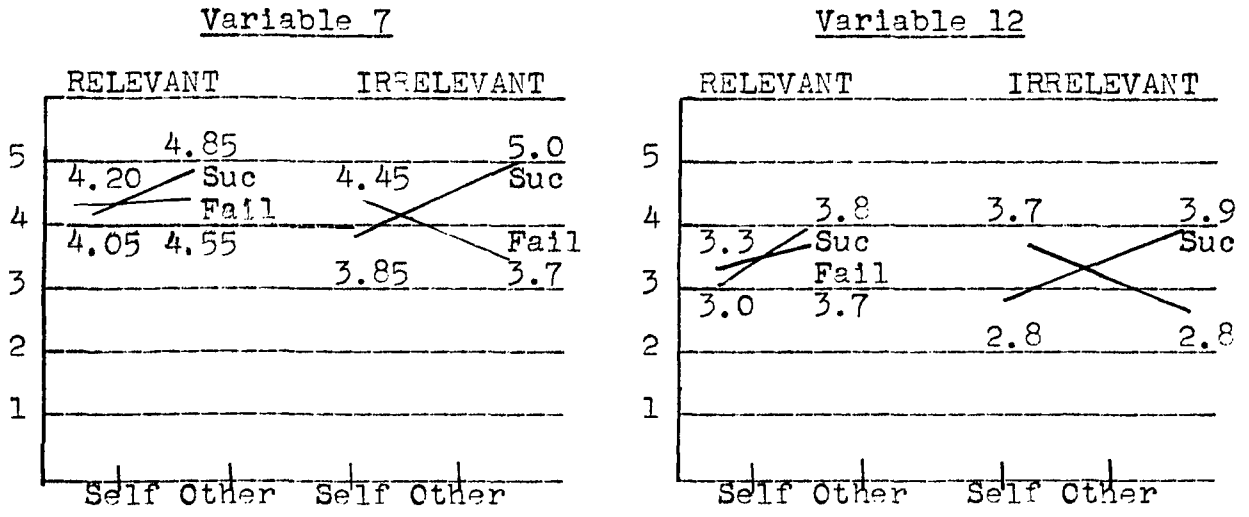


Fig. 3. Self/other X relevant/irrelevant X success/failure for variables 7 (warm) and 12 (caring).

interaction under irrelevant disclosure. By contrast the failure lines under relevant disclosure would have generally masked the self/other X success/failure interaction under irrelevant disclosure. Consequently, it remains unclear as to what extent the two-way (self/other X success/failure) interactions obtained in this study were a function of the three-way interactions.

Female/male main effects. Significant effects were obtained for variable 5 (similar attitudes, $p < .001$), variable 19 (would recommend therapist, $p < .02$), variable 21 (therapist would be able to help with a public speaking problem, $p < .03$), variable 22 (therapist would be able to help with other problems, $p < .01$), and variable 24 (would share innermost thoughts with the therapist, $p < .02$).

For each of these variables males expressed more positive perceptions of and intentions towards the therapist than females.

An examination of the means for the remaining items revealed no consistencies among the nonsignificant effects.

Success/failure main effects. This test did not quite reach the criterion of at least two significant effects in the same direction. However, variable 20 (would follow therapist's advice) was significant at the .04 level, and variables 6 (expert) and 21 (therapist would be able to help with a public speaking problem) had p values of .06.

For these variables disclosure about success caused the therapist to be perceived more positively than disclosure about failure. Examination of the means for the remaining items revealed no consistent support for the superiority of success over failure. These effects were included among the results because it was predicted that this factor would affect different dependent variables in opposite ways. The variables for which the means went in the opposite direction (i.e., failure disclosure superior to success disclosure) were: 1 (similar), 2 (intention to persuade), 4 (trustworthy), 7 (warm), 8 (understanding), 9 (likeable), 10 (genuine), 13 (pleasant), 16 (open), 17 (friendly), 23 (would feel better after consulting with therapist), and 24 (would share innermost thoughts with therapist). The means of all the dependent measures for this main effect are presented in Table 5.

Self/other main effects. A significant effect was obtained for variable 1 (similar, $p < .001$). A significant effect was also obtained for variable 16 (open, $p < .04$).

TABLE 5

MEANS OF ALL DEPENDENT MEASURES FOR THE SUCCESS/FAILURE MAIN EFFECTS

Variable #	Success	Failure
1	3.613	3.300
2	3.438	3.375
3	2.150	2.375
4	3.100	3.050
5	5.188	5.313
6	3.863	4.425
7	4.438	4.225
8	3.637	3.588
9	3.875	3.775
10	4.100	3.900
11	3.412	3.575
12	3.375	3.375

Variable #	Success	Failure
13	3.412	3.387
14	2.700	2.813
15	3.100	3.287
16	3.550	3.338
17	3.563	3.262
18	4.300	4.500
19	4.637	4.738
20	3.100	3.588
21	3.975	4.500
22	3.838	4.087
23	3.887	3.863
24	5.087	4.837

For these two variables self-disclosure was superior to disclosure about a former patient. An examination of the means for the remaining 22 items revealed a consistent pattern among the nonsignificant effects. The means of all the dependent measures for this main effect are presented in Table 6. As can be seen from the table, with the exception of variable 6 (expert), the means for all the remaining persuasion variables and psychotherapy variables supported this pattern. Overall, 16 out of 17 pairs of means (two of which were significant) went in the same direction of superiority for self-disclosure. However, this pattern did not obtain among the seven behavioral intention items where there was no consistent pattern in either direction.

Subjects' fear of public speaking. The question that asked subjects to rate the amount of fear they experienced when speaking in public was added as a 25th dependent measure in the overall four-way analysis of variance. This was included on the questionnaire as a possible source for an internal analysis of the data. However, the results of the four-way ANOVA revealed that it was affected by the treatments. Specifically, this item yielded a significant effect ($F = 4.42$; $df = 1,144$; $p < .04$) for the relevant/irrelevant factor. In addition it yielded marginal significance ($F = 3.599$; $df = 1,144$; $p < .06$) for the four-way interaction. Since it was affected by the treatments its use as an internal factor could not be justified.

Disclosure vs. no disclosure. T-tests comparing each of the eight manipulated conditions with the control condition for

TABLE 6

MEANS OF ALL DEPENDENT MEASURES FOR THE SELF/OTHER MAIN EFFECTS

Variable #	Success	Failure
1	2.813	4.100
2	3.287	3.525
3	2.225	2.300
4	2.912	3.238
5	5.188	5.313
6	4.188	4.100
7	4.137	4.525
8	3.500	3.725
9	3.625	4.025
10	3.950	4.050
11	3.425	3.563
12	3.200	3.550

Variable #	Success	Failure
13	3.350	3.450
14	2.700	2.813
15	3.063	3.325
16	3.175	3.713
17	3.363	3.463
18	4.413	4.387
19	4.575	4.800
20	3.400	3.287
21	4.288	4.188
22	3.963	3.963
23	3.850	3.900
24	4.925	5.000

all 25 dependent measures (including subjects' estimates of their own fear of public speaking) failed to yield any interpretable results: 11 significant differences were scattered among the 200 tests.

Correlational Analysis

Variables 1 through 6 were employed as measures of a persuasive communicator's characteristics, while variables 7 through 17 were employed as measures of a psychotherapist's characteristics. Both categories of variables asked for subjects' evaluative perceptions of the therapist's verbal behavior. Variables 18 through 24 constituted a different group of variables in that it asked subjects about their intentions for future interaction with the therapist. Intercorrelations among all 25 variables (including subjects' estimations of their own fear of speaking in public) were performed.

Measures from persuasion research. Within this group intercorrelations were low. The mean of the resulting 15 correlation coefficients was .18 and values ranged from -.18 to .58. Six of these values failed to reach significance at the .05 level. The highest value occurred between variable 4 (trustworthy) and variable 6 (expert).

On the average, the persuasion variables as a group correlated more highly with the group of psychotherapy measures ($\bar{r}$ = .31) and with the group of behavioral intention measures ($\bar{r}$ = .31) than they did among themselves ($\bar{r}$ = .18). Coefficients of .31 are significant beyond the .001 level. A closer examination of the correlational relationship between

the six persuasion items and the items in the other two groups revealed two interesting features. Variable 4 (trustworthy) correlated very highly across all items in the other two groups with a range between .43 and .66 and a mean of .55. Variable 6 (expert) also correlated very highly across all items in the other two groups with a range between .30 and .63 and a mean of .48. Each of the 18 individual correlation coefficients for both variables were significant beyond the .001 level.

Measures from psychotherapy research. These 11 items correlated highly among themselves. The values ranged between .36 and .70 with a mean correlation coefficient of .53 for the 55 tests. None of the values were negative and all were significant beyond the .001 level.

These 11 items were intended to measure four qualities of the therapist—genuineness, warmth, and empathy from client-centered research and attraction. Variables 10 (genuine) and 16 (open) were intended to measure genuineness. Variables 7 (warm), 11 (accepting) and 14 (patient) were intended to measure warmth. Variables 8 (understanding), 12 (caring) and 15 (interested) were designed to assess empathy, while variables 9 (likeable), 13 (pleasant) and 17 (friendly) were employed to measure attraction.

It was expected that intercorrelations within these four subcategories would produce the highest values among the 55 tests of correlation. For the variables intended to measure genuineness and warmth, however, this did not prove to be the case. The correlation coefficient for the two variables

measuring genuineness was .47 while the mean intercorrelation for the three variables measuring warmth was .48. Both of these values were below the mean for the 55 tests. The mean intercorrelations for the three variables measuring empathy and for the three variables measuring attraction were both .67. This value was significantly higher than the mean for the 55 tests ($p < .05$) and in fact this value was exceeded by only one of the 55 individual comparisons.

The category of psychotherapy measures also intercorrelated moderately with the category of behavioral intention items. The mean value between these two categories was .46; there were no instances of negative correlations and all values were significant beyond the .001 level.

Measures of intentions towards the therapist. These seven items proved to be the most internally consistent of the three categories. The correlation coefficients ranged from .47 to .80 with a mean value of .65.

Subjects' estimates of their own level of fear. This item was included as an additional variable in the correlational analysis. It proved to be unrelated to the items in all three categories of dependent measures. Mean correlations of -.04, -.08, and -.04 were obtained for the first, second, and third categories, respectively.

DISCUSSION

The first part of this discussion deals with interpretations of the findings: interactions, main effects, and correlations among the dependent variables, in that order. The second part, which is more speculative, suggests implications for therapy and research and considers the importance of individual differences.

Interactions

No specific predictions were made for interactions. It seemed unlikely that the three independent factors, which had been selected largely on an intuitive basis, would produce consistent interactions across the many dependent measures. Only those tests that produced at least two significant effects in the same direction and consistent patterns among the remaining dependent measures were selected for presentation. The two interaction tests that met this criterion were the self/other X relevant/irrelevant X success/failure three-way interaction and the self/other X success/failure two-way interaction.

Consistent significant and nonsignificant simple effects. The significant and nonsignificant effects for the four simple, simple main effects under irrelevant disclosure in the three-way interaction were found to be consistent for most of the 24 dependent variables. Additionally, the significant and nonsignificant effects for the four corresponding simple main effects in the two-way interaction were found to be consistently in these

same directions for most of the 24 dependent measures. Recognizing that in most instances these effects failed to reach significance, under irrelevant disclosure in the three-way interactions and in the two-way interactions the therapist was generally perceived more positively under the following four conditions: when he disclosed about success with self than failure with self; when he disclosed about success with self than success with a former patient; when he disclosed about failure with a former patient than success with a former patient; and when he disclosed about failure with a former patient than failure with self.

An additional consistent, nonsignificant effect showed up in the three-way interaction. Under relevant disclosure there was a consistent, nonsignificant simple main effect for the self/other factor in 23 of the 24 dependent variables. Though none of the effects were significant, for 23 variables when the therapist disclosed about the relevant problem (public speaking fear) he was perceived more positively when he disclosed about himself than when he disclosed about a former patient.

Though the consistencies across dependent measures described above are based chiefly on nonsignificant effects, the number of consistencies across measures was quite large for each effect. For this reason, these effects require interpretation. The problem of statistical significance could probably be resolved by increasing the power of the experimental design. This problem is addressed in a succeeding section

of this discussion.

A possible interpretation: subjects' criterion for evaluating the therapist. Subjects might have employed a personal frame of reference rather than a professional one in evaluating the therapist in this study. Generally, they seem to have responded as though personal considerations took precedence over professional ones in determining positive evaluations. For example, subjects were reminded several times to imagine that they had the same fear of public speaking evidenced by the patient on the tape. Thus, in the three-way interactions relevant disclosure may have been easier to identify with from the subjects' personal points of view. As a result, the personal experience of the therapist (i.e., self-disclosure) may have been more salient than his professional experience (i.e., disclosure about a former patient) regardless of whether it involved success or failure. This would account for the consistent nonsignificant simple main effect of self-disclosure eliciting more positive evaluations than disclosure about a former patient under the relevant side of the three-way interaction.

Extending this reasoning, under irrelevant disclosure the instructional set might have prevented subjects from being "personally" involved because here the therapist talked about overeating. However, if they had retained the general priority of personal experience over professional experience, they would have had only the therapist's personal (self-disclosure about success or failure) and professional (other-disclosure about

success or failure) experiences to figure into their evaluations. In effect then, under irrelevant disclosure subjects would have been employing a criterion of evaluation in which personal experiences were viewed more positively than professional ones and success was viewed more positively than failure.

This possibility would account for three out of four of the consistent directions found in the significant and nonsignificant simple, simple main effects. Self-disclosure about success would have been perceived more positively than self-disclosure about failure if subjects valued success more highly than failure. Self-disclosure about success would have been perceived more positively than disclosure about success with a former patient if subjects valued personal experiences more highly than professional ones. Disclosure about failure with a former patient would have been perceived more positively than self-disclosure about failure if again subjects valued personal considerations more highly than professional ones, thus viewing personal failure more negatively than professional failure.

The fourth consistent direction was found in the significant and nonsignificant simple, simple main effects for success/failure at other. In this case, the therapist was generally perceived more positively when he disclosed about failure with a former patient than success with a former patient. The general interpretation offered above regarding subjects' criterion of evaluation does not immediately account for these effects since success disclosure would be expected to be perceived more positively than failure disclosure. However, if

subjects' criterion of evaluation included not only that the therapist's personal disclosures were viewed more positively than his professional ones, but also that his professional disclosures were actually viewed negatively or as inappropriate, these effects could be accounted for. If disclosures about a former patient were generally regarded negatively or as inappropriate, subjects might have displayed a "boomerang" effect by rating failure more positively than success. Admitting the complexity and tentativeness of this interpretation, of the four simple, simple main effects, this one showed the least consistency across dependent measures—the failure mean was lower (lower values indicating more positive perceptions) than the success mean under other in only 16 of the 24 variables.

The same general interpretation offered for the four simple, simple effects under irrelevant disclosure could be applied to the four corresponding simple main effects in the two-way self/other X success/failure interactions. In the two-way analysis, the relevance of the disclosure is not taken into account in the data analysis. When the appropriate means for relevant and irrelevant disclosure were combined, the four relationships described by the significant and nonsignificant simple, simple main effects under irrelevant disclosure were retained across most of the 24 dependent variables. This would suggest that the trend towards a simple main effect under relevant disclosure in the three-way interaction was weak, despite its consistency across dependent measures.

Once again all of the preceding interpretations must be offered very tentatively. They are based on relatively few sig-

nificant effects that were supported by consistent nonsignificant effects across most of the dependent measures. This same qualification extends to the self/other and success/failure main effects discussed below.

Main Effects

Only very global predictions were offered for main effects at the outset of the study, and due to the lack of previous research most of these were made on an intuitive basis. The analyses of variance revealed far fewer significant effects than were expected, yet the patterns of means for the insignificant effects tended to confirm many of the general predictions.

Self vs. other disclosure. It was predicted that self-disclosure would be superior to disclosure about a former patient across many of the dependent variables. Though this factor produced only two significant effects, the patterns of means in 16 out of 17 items in the two categories that requested evaluation of the therapist were in the expected direction. It can be argued that the behavioral intention items (where the direction of the means was inconsistent across the seven items) represented a separate class of variables involving functionally different responses—intentions and expectations vs. evaluations.

The explanation offered previously for interaction effects is also consistent with this main effect. If subjects employed a criterion of evaluation that emphasized personal considerations over professional ones, they would have viewed self-disclosure more positively than disclosure about a former patient. The single exception among the 17 evaluative di-

mensions was variable 6 (expert). It can be argued that by reversing the pattern, this variable actually supported the explanation. Expertise would seem to be the one dimension out of the 17 that by its very definition would require subjects to shift from a personal to a professional basis for evaluation. The quality of being expert in effect implies some sort of professional or at least extra-personal activity.

Success vs. failure disclosure. It was suggested in the predictions that for some dependent measures success would be superior to failure and that for others the opposite relationship would hold. Examples of variables for which success was expected to be superior to failure were those dealing with competence, such as perception of the therapist as expert and intentions to interact with him in the future. The variables for which failure was expected to be superior to success were those having to do with "humanness," like perceptions of the therapist as genuine and trustworthy.

Only one significant and two marginally significant effects were produced by this factor and in all three cases success was superior to failure. The three variables clearly involved competence: expert, intention to follow his advice, and expectations that he could help with a public speaking problem.

Among the nonsignificant effects, the variables for which failure disclosure produced more positive perceptions than success disclosure were: perceptions of the therapist as similar, intending to persuade, trustworthy, warm, understand-

ing, likeable, genuine, pleasant, open, and friendly, as well as the expectations that subjects would feel better after speaking to him and would share their innermost thoughts with him. With the possible exception of perceiving the therapist as intending to persuade, all of these variables seem to be assessing very "human" qualities.

The nonsignificant effects for which success disclosure produced more positive perceptions of the therapist than failure disclosure seemed to occur among the variables for which competence or the possibility of helping was involved. These variables included: perceiving the therapist as intending to help, having similar attitudes, being accepting, patient, and interested, intending to see the therapist again and recommending him to others, and expecting that the therapist could help with other kinds of problems. However, which variables pertain to competence and which pertain to humanness is largely a subjective and semantic matter. In addition, most of this argument is based on nonsignificant effects. For these reasons these findings are offered as very tentative support for the predicted main effects.

Female vs. male. No specific predictions were offered for this internal factor; it was included because sex effects seemed especially likely when it was considered that both voices on the stimulus tapes were male. With the exception of variable 5 (similar attitudes) this factor produced no significant effects among the 17 evaluative dimensions. Furthermore, there was no clearly consistent pattern among the nonsignificant

means for these items. Yet four out of seven intention items yielded significant effects in the same direction. Males stated that they believed the therapist was more likely to help them with public speaking problems and other kinds of problems, and that they were more likely to share their innermost thoughts with the therapist. For the evaluative dimension of having similar attitudes, males also rated the therapist better than females. The fact that with this single exception there was no difference between the sexes in how the therapist was evaluated but there were significant differences regarding intentions and expectations offers some intriguing possibilities. In terms of the kind of explanation that has been carried through thus far, males may have found it easier to identify with the male patient while listening to the tape. If in fact they did "get into the role" more than females did, then the prospect of future interactions with the therapist may have been more meaningful to them. However, if males had indeed found it easier to get into the patient's role, one might have expected significant differences among the evaluative dimensions as well.

Another way of accounting for these findings focuses on the fact that the therapist on the tapes was a male. The key to this explanation is that despite the fact that they generally did not differ from males in their evaluations of the therapist, females expressed less definite intentions about recommending him and sharing their thoughts with him and less definite expectations that he could help them with their problems. It may be that the females in this study felt un-

comfortable at the prospect of transacting the intimate business of therapy with a male. For example, perhaps they doubted the ability of a male therapist to understand or appreciate a female's "innermost thoughts." Likewise, perhaps they were reluctant to share feminine problems with a male therapist. Such explanations suggest interesting possibilities for clinical applications which will be discussed in a succeeding section dealing with the implications of the present findings for therapy and research.

The Correlational Analysis

The results of the intercorrelations directly bear on two assumptions that figured in the selection of dependent measures in this study. The first was that the qualities of the persuasive communicator that mediate attitude change are related to the qualities of the successful therapist, as defined by the Rogerian approach. The second was that subjects could discriminate among items measuring genuineness, warmth, empathy and attraction on the basis of seven-point, bipolar scales (Shapiro, 1968).

The relationship among the three groups of dependent measures. For the correlational analysis to have supported the first assumption the group of persuasion items and the group of psychotherapy items should have correlated highly with each other. In point of fact, this did not happen. The persuasion variables had a low within group correlation of .18. As a group they correlated moderately with the psychotherapy group and with the intention group (.31 in each case). The psycho-

therapy variables had a moderately high within group correlation of .53, and as a group they produced a .46 correlation with the intention group, which suggests a stronger relationship ($p < .05$) with the intention items than with the persuasion items. On the basis of this evidence, the assumption that the qualities of the persuasive communicator that mediate attitide change are related to the qualities of the successful therarist is not supported. However, a closer examination of the content and correlations of specific items within the category of persuasion variables suggested that this conclusion may be premature.

The .18 mean correlation within the six persuasion items is misleading. One item in particular, variable 2 (intention to persuade), was expected to correlate negatively with the other five items since perceived intention to persuade has been associated with reduced attitude change (Hovland, Janis & Kelley, 1953). This variable produced one negative correlation, -.18 with variable 5 (similar attitudes). In all other cases it produced very low positive correlations. Variable 1 (similar), variable 3 (intention to help), and variable 5 (similar attitudes) also produced very low correlations, many of which were below .10. These items were included in the persuasion group in an effort to be comprehensive in employing as many variables that had been associated with effectiveness in a persuasive communicator as possible. However, the communicator's trustworthiness and expertise have been recognized as the principal components of attitude change in a persuasive appeal (Kiesler,

Collins & Miller, 1969).

Thus, in the present study, variables 4 (trustworthy) and 6 (expert) represented the classic social psychological conception of the qualities of the persuasive communicator that mediate attitude change. They correlated rather highly with one another (.58). Moreover, these two variables consistently correlated rather highly with both the group of psychotherapy variables and the group of intention variables. Across the 18 items in the other two groups, variable 4 (trustworthy) produced a mean correlation of .55, and variable 6 (expert) produced a mean correlation of .48. These values are comparable to the within group correlations of the psychotherapy items, though they are generally slightly lower than the within group correlations of the intention items.

With regard to similarity and intention to help or persuade, these variables not only seem relatively unrelated to therapist variables but also to themselves. This finding may be due to differences inherent in psychotherapy situations as opposed to persuasion situations. It might be possible, for example, that these variables are relatively orthogonal components of a persuasive communicator's effectiveness (in addition to trustworthiness and expertise) that do not relate appreciably to perceptions of a therapist in a psychotherapeutic setting.

When the qualities of the persuasive communicator that mediate attitude change are defined exclusively as trustworthiness and expertise, the first assumption mentioned earlier was

supported by the correlational analysis. These two variables produced relationships with the psychotherapy variables that were comparable in magnitude with the relationships among the psychotherapy variables themselves.

The three ingredients of client-centered therapy and attraction. According to the second assumption, subjects were expected to be able to discriminate among items measuring genuineness, warmth, empathy and attraction using seven-point, bipolar scales. One way of operationalizing this assumption would be to determine if the correlations obtained within each subgroup of psychotherapy items were higher than the mean value of .53 obtained for the entire group. The correlation between the two items intended to measure genuineness (.47) and the mean correlation among the three items intended to measure warmth (.48) did not indicate that subjects were able to discriminate these two ingredients of client-centered therapy from among the other two qualities (empathy and attraction) that were represented in the group of psychotherapy items.

The mean correlation for the three items intended to measure empathy and the mean correlation for the three items intended to measure attraction were both .67. This value is higher ($p < .01$) than the values obtained for genuineness and warmth, and also higher ($p < .05$) than the mean value of .53 for the entire group of psychotherapy items. It seems then that subjects were able to discriminate the qualities of empathy and attraction from among the other psychotherapeutic qualities using these seven-point, bipolar scales.

These results provide only partial support for the contention that subjects can discriminate between the three ingredients of client-centered therapy using bipolar scales (Shapiro, 1968). The fact that subjects in this study seemed unable to discriminate very well between items intended to measure genuineness and warmth may have been a function of the particular bipolar adjectives employed here. As mentioned in the method, the adjectives selected to measure each of the three ingredients of client-centered therapy were based on some of the adjectives that appeared in the Relationship Questionnaire (Truax & Carkhuff, 1967). This questionnaire is composed of true/false statements that involve adjectival descriptions of the therapist's behavior and are coded for scoring according to which of the three ingredients each statement measures. It is possible that subjects are less able to discriminate among the adjectives when the adjectives are presented in a bipolar format, apart from the context of the statements in which they occur in the Relationship Questionnaire. More correlational work is required to determine which of the many possible pairs of bipolar adjectives are perceived as measuring the same qualities. Once this is done the next step would be to determine the validity of the use of bipolar scales with patients by comparing their ratings of the therapist with those of trained judges using the established scales.

In concluding the discussion of the correlational analysis, one general observation is that interpretation of results based on 24 dependent measures is necessarily complex and

difficult to organize. A factor analytic approach might possibly have reduced these variables to several factors that could have facilitated the organization and presentation of results. In addition to organizing the results into basic factors, it is possible that such an analysis might also have been more sensitive to differential magnitudes of effects due to the manipulations. For example, if three principal factors had been produced, it might have been found that the manipulations had a strong effect on one factor, a weak effect on another, and no effect on the third. Thus, in presenting results, instead of global statements regarding how many variables out of 24 were affected in the same way, more specific statements could have been made about how each factor was affected. However, each of the individual items employed in this study was included for the theoretical purposes described in the introduction and method sections of this paper. A presentation of results based on a factor analytic approach would not have been consistent with the purposes for which this study was originally designed.

Implications for Therapy and Research

The present findings have implications for both clinical practice and research. However, generalizations based on an analogue study such as this one must be offered tentatively. The fact that much of the interpretation was based on consistent nonsignificant effects rather than significant ones increases the need for caution in generalizing the findings.

Limitations to generalization. There are many obvious

features of the present study that limit generalization to clinical practice. Since it was a laboratory analogue, the subjects were not actual patients; i.e., they were not seeking therapy and were in most cases fulfilling a laboratory requirement. Furthermore, the use of taped manipulations within the context of a role playing situation prevented "patients" from affecting the process of "therapy." In short, subjects were not interactive and no actual intervention took place.

The above limitations derive principally from the analogue nature of the study. Other obstacles to generalization that pertain to most research were also present; e.g., the sample did not represent a cross-section of psychotherapy patients and only a very particular problem and a very brief time period were involved. In addition, the usual problems associated with laboratory research may have been operative such as artificiality, expectation of deception, etc. Bearing these considerations in mind, and the consistent, but nonsignificant nature of some of the findings, only very tentative suggestions can be made for clinical practice.

Clinical applications. Though the various combinations of manipulated disclosures in this study produced relatively few significant effects, the supportive trends among the nonsignificant means suggest some consistent phenomena associated with certain kinds of disclosure. One such consistency seems to be the greater importance of disclosure about personal experiences over disclosure about professional experiences with a former patient in determining positive evaluations. In the

three-way interaction, the slight trend toward a simple main effect of self-disclosure over other-disclosure when the therapist spoke about a relevant problem appeared in 23 of the 24 dependent measures. In the same interaction under irrelevant disclosure and in the two-way interaction, four consistent, but generally nonsignificant, trends were found across most of the dependent measures. Two of these trends were that subjects were more positively impressed with personal success than success with a former patient and more negatively affected by personal failure than failure with a former patient. Finally, self-disclosure was superior to other-disclosure in 16 out of the 17 main effects for variables that dealt with evaluation of the therapist.

The above findings tend to suggest that self-references may generally be more potent or salient in clinical practice than disclosures about professional experiences. Subjects may attach more importance to what the therapist says about his personal problems. Thus, they may respond generally more favorably when he talks about himself, but when failure is involved, subjects may be more critical of personal failure than professional failure because they attach more importance to personal problems. In clinical practice if the therapist wants to be perceived positively (perceptions that have been associated with positive outcome) this research tentatively suggests that he might disclose about personal experiences rather than professional ones, unless the personal experiences involve failure.

The findings associated with a main effect for sex also seem to have implications for clinical practice. In the present study there was generally no difference between the sexes in how the therapist was perceived, but females were significantly more reluctant about possible future interactions with him. Some therapists espouse the notion that patients should see a therapist of a particular sex so as to work through a mother problem, father problem, sex problem, etc. This hypothesis may or may not be true, but the findings in the present study seem to indicate that females might derive more benefit from a female therapist under certain circumstances. It should also be mentioned that since these interpretations are based on significant findings rather than nonsignificant trends, they are offered with more confidence than the previous suggestions.

Females in this study had lower intentions for future interaction and lower expectations for success with the therapist they heard on the tape. The nature of the intention and expectation items involved suggests the hypothesis that females may have felt uncomfortable with the prospect of sharing their innermost thoughts with a male therapist or that a male therapist might not be able to understand or deal with feminine problems. If this or a similar phenomenon was actually taking place, these findings have important implications for outcome.

The importance of patient's expectations in psychotherapy has been well documented (Frank, 1961). Patients tend to profit most from the therapeutic approach for which they

hold the highest expectations (Devine & Fernald, 1973). Patients have similar expectations for what are desirable qualities in a therapist (Rosen, 1967). The present findings may indicate that under certain circumstances female patients may have low expectations for success with male therapists. In view of the research mentioned above, such patients would probably derive little benefit from seeing a male therapist. On the basis of the present findings it might be important in clinical practice to deal with any misgivings or reservations a female patient may have about a male therapist at the outset of therapy. In some cases a female therapist might be suggested to optimize the possibility of positive outcome.

A final implication for clinical practice will be raised with extreme caution due to the tentativeness of the findings and the explanation offered to account for them. It was hypothesized that disclosure about success might produce more positive perceptions of the therapist along dimensions associated with competence and that disclosure about failure might produce more positive perceptions of the therapist along dimensions associated with humanness. The present results for the success/failure manipulation were chiefly nonsignificant, but it was argued that the variables for which the success mean was lower (again lower values indicating more positive perceptions) than the failure mean seemed to be those that had to do with competence, and it was also argued that those variables for which the failure mean was lower than the success mean seemed to involve qualities of humanness. Considering once

again the importance of expectations in therapy, it seems that some patients would expect better results from a therapist they perceived as competent and professional, while others would expect better results from someone they perceived as human and fallible. In actual practice, if a therapist felt that one or the other of these expectations was operating in a particular patient, he might alter his disclosures about success or failure accordingly.

The above implications for clinical practice could have been offered less hesitantly if the findings in this study involved more significant effects rather than consistent, but nonsignificant effects. There is at least one possible explanation for why many of the consistent effects failed to reach significance.

Control over extraneous variation vs. impactful manipulations. Statistically, the fact that so many means went in the same direction for several of the ANOVA tests suggests that genuine phenomena might have been occurring but that the design lacked the power to bring these effects to significance. This possibility was anticipated in the method section of this paper. At that time it was suggested that maximum control over extraneous sources of variance like differential semantic content and duration of dialogue had been achieved by using very discrete manipulations within an otherwise standardized basic dialogue. It was suspected that this "neatness" may have been achieved at the expense of more impactful treatments. This issue has implications for analogue research in general.

Two alternatives seem to be available for dealing with this problem in research of this kind. The manipulations could be elaborated and made more impactful by having the dialogue proceed more naturally. The present study can be used as an example. As the manipulations are constructed here, at several points the patient responds with the same comments regardless of whether the therapist has disclosed about failure or about success. Insuring this degree of control necessarily prohibits an extended discussion between the therapist and the patient about the therapist's disclosure. The result is relatively unobtrusive manipulations. By elaborating and extending the verbal interchange surrounding the therapist's disclosure, control would be lost as the therapist adds more details that would differ across conditions. The consequence would be that any effects obtained might be the artifactual result of the differential content of the basic dialogue across conditions. It would seem to be very difficult to construct manipulations of this kind that included natural-sounding elaborations of the therapist's disclosures without building in many unwanted sources of variance.

The other alternative would be to increase the statistical power by using larger numbers of subjects. Choosing between these alternatives would depend upon the purposes of the study. In the present study, for example, the preferable alternative would probably be to use more subjects. The factors employed here are exploratory, and though the purpose of science may not be to search for effects in artificial laboratory sit-

uations, a phenomenon has to be established before its parameters can be measured. Consequently it would seem that the factors should be manipulated with as much control over extraneous sources of variance as possible.

Directions for future research. Several interesting questions could be explored using essentially the same materials and procedures employed in this study. An attempt was made to control for status of the therapist because previous research has shown that clients are less attracted to professional therapists who make personal disclosures than to paraprofessionals who make personal disclosures (Simonson & Bahr, 1974). These researchers suggested that clients might consider personal disclosures to be professionally inappropriate. If the control for status in the present study was effective, then these results suggest a possible confirmation of this hypothesis. Specifically, when the status of the therapist is ambiguous, clients might revert to the paraprofessional criterion of viewing personal disclosure more favorably, as they tended to do in this study.

A more direct test of this hypothesis could be accomplished by simply running the present study using the Simonson and Bahr manipulations. Half the subjects would be told the therapist on the tape was a professional therapist with a clinical Ph.D. and seven years experience. The other half would be told that he had a B.A. in English and seven years experience as a community health volunteer. If the hypothesis about professional appropriateness is correct, subjects who were told the therapist

was a professional would be expected to attach more importance to disclosure about a former patient than to self-disclosure by the therapist. They might also be expected to view success with a former patient more positively than personal success and failure with a former patient more negatively than personal failure. Subjects who were told the therapist was a para-professional would be expected to respond similarly to the way subjects responded in the present study.

Another interesting question that could be explored with the same design is the issue of sex effects. Each manipulation could be recorded twice—once with a male therapist and once with a female therapist. If the results indicated that females expressed more positive intentions towards the female therapist than the male therapist, then the explanation that was offered for the present findings (that females were reluctant to share feminine problems with a male therapist) would gain some support.

Another hypothesis was offered to explain the sex effects in the present study. Male subjects may have found it easier to identify with the patient on the tape and so were better able to appreciate the therapist's efforts. This possibility could be tested by again recording each tape twice—this time once with a male patient and once with a female patient. In fact, the most comprehensive way to get at sex effects probably would be to run the study essentially four times—once with each possible combination of sex of therapist and sex of patient.

Other minor changes in procedure would make the present findings more generalizable. Introducing other problems in the irrelevant condition and varying the subject populations sampled are some possibilities. For example, overeating might have special meaning for subjects that other problems do not. Also, individuals with previous experience in therapy might respond quite differently than naive subjects. In fact, there is evidence that an individual differences variable of this type was an important source of variance in this study.

The Importance of Individual Differences in This Study

The value of an interactionist approach to psychological research has been recognized for many years (Cronbach, 1957). Manipulated treatments are tempered by individual differences. Recently this approach has been advocated across a variety of fields within psychology, and many psychologists today study Aptitude X Treatment interactions (ATI's) (Cronbach, 1975). For example, ATI studies are being conducted in the areas of social behavior (McGuire, 1969, 1972) and psychopharmacology (Lasagna, 1972). In the area of personality, situationism is also giving way to interactionism. It has been pointed out that when a manipulated environmental factor and a measured individual differences factor are included as independent variables in an experimental design, the ATI term is usually greater than either of the main effect terms (Bower, 1973). Though no individual difference premeasures were taken, it appears that this situation may have obtained in the present study.

Subjects' chronic levels of public speaking fear. In

designing this study it was assumed that individual differences in subjects' fears of public speaking would exert little influence due to the analogue nature of the situation. As a check, however, an item asking for subjects' estimates of their level of public speaking fear was included as the last item on the questionnaire. The intention was to use this item as a possible basis for an internal analysis of the data. Before including it as an internal factor, however, it was treated as an additional dependent measure in the four-way ANCVA. The results indicated that the relevant/irrelevant factor exerted a significant effect on subjects' perceptions of their own fear and that the four-way interaction test also approached significance on this variable.

Since this variable was affected by the treatments, results obtained from its inclusion as a factor would be of questionable validity. Nevertheless the analysis with this variable included as a fifth factor was carried out in an effort to obtain some idea as to whether premeasures of public speaking fear would be important in future research. Due to confounding with treatments the results of this analysis will be summarized only briefly. The purpose here is only to point out the importance of ATI's for future research of this kind.

Subjects' scores on the fear item were dichotomized into low and high fear scores and this item was added to the original design in a five-way analysis of variance. The results revealed that fear produced consistent interactions with some of the other factors across many of the dependent variables. Most

notably, it produced a significant two-way interaction with the self/other factor in five of the 24 dependent variables. Though simple effects tests were not computed, in all cases the directions of the means in the interactions were consistent: high fear subjects perceived the therapist more positively when he disclosed about himself than when he disclosed about a former patient, and low fear subjects perceived him more positively when he disclosed about a former patient than when he disclosed about himself. In addition, fear, sex and success/failure produced consistent interactions in six of the 24 variables. Again, simple effects tests were not computed but the directions of the means involved in the interactions were consistent in all cases: success produced more positive perceptions than failure in low fear females and in high fear males, while failure produced more positive perceptions than success in high fear females and in low fear males.

The results of the five-way ANOVA seem to point out the importance of obtaining premeasures of subjects' chronic level of public speaking fear in future studies. Despite the confounding with treatments these ATI's suggest that an analogue study of this kind is not immune to individual differences. This type of research should contain provisions for obtaining premeasures of potentially important sources of individual differences.

The value of post-experimental interviewing. Research in psychotherapy is usually conceptualized in terms of process or outcome. The latter generally deals with the end product of

therapy—success or failure, while the former deals with how the success or failure came about. Much like the old either-or approach to individual differences and environment, most research concentrates on one of these aspects of therapy to the exclusion of the other. In this sense one unfortunate aspect of the present study is that the emphasis was on outcome; i.e., how the subjects evaluated the therapist, rather than on process, which is how they arrived at their evaluations. Although subjects were invited to volunteer their personal responses, there was no provision in the experimental procedure for investigating what cognitive processes were involved in their evaluations of the therapist.

Given a single manipulation, subjects could be expected to differ on a variety of individual dimensions such as cognitive style, predispositional factors, past experience, etc. The fact that the present study involved the manipulation of three factors each of which had two levels provided eight different combinations of disclosure and thus some very rich possibilities for individual differences in cognitive processing. Valuable information about individual differences could have been gained from informal post-experimental interviews organized about specific questions. These questions would have been aimed at what sort of processing occurred when subjects heard the manipulations. Consistencies of response across subjects could have resulted in a very general taxonomy of response styles to self-disclosure manipulations. These response styles could then have served as the basis for future experimentation.

A Final Note

Perhaps the most intriguing opportunity for speculation in this study was provided by the fact that subjects' post-experimental estimates of their own fear were confounded with treatments. This measure was originally intended as a potential internal factor. However, it was first treated as a dependent variable to determine if it could be validly used as a factor. The resulting confounding indicated that future research should obtain premeasures of fear to insure its use as a valid internal factor. Yet if future research also took postmeasures of fear, treating them first as dependent variables and finding that they were positively affected by the treatments (i.e., subjects were significantly less fearful than on premeasures), what had been confounding in the present study would have become cure.

BIBLIOGRAPHY

Baron, R. A., Byrne, D., and Griffith, W. Social psychology: Understanding human interaction. Boston: Allyn and Bacon, Inc., 1974.

Bergin, A. E., and Suinn, R. M. Individual psychotherapy and behavior therapy. In M. R. Rosenzweig and L. W. Porter, (Eds.), Annual review of psychology. Palo Alto, Calif.: Annual Reviews, Inc., 1975, 26, 509-556.

Berscheid, E. Opinion change and communicator—communicatee similarity and dissimilarity. Journal of Personality and Social Psychology, 1966, 4, 670-680.

Beutler, E., Johnson, D. T., Neville, C. W. (Jr.), Elkins, D., and Jobe, A. M. Attitude similarity and therapist credibility as predictors of attitude change and improvement in psychotherapy. Journal of Consulting and Clinical Psychology, 1975, 43, 90-91.

Blau, B. A. A comparison of more improved with less improved clients treated by client-centered methods. In W. U. Snyder, (Ed.), Group report of a program of research in psychotherapy. State College, Pa.: Pennsylvania State College, Psychotherapy Research Group, 1953.

Bordin, E. S. Research strategies in psychotherapy. New York: John Wiley and Sons, 1974.

Bowers, K. S. Situationism in psychology: An analysis and a critique. Psychological Review, 1973, 80, 307-336.

Braaten, L. J. The movement from non-self to self in client-centered psychotherapy. Unpublished doctoral dissertation, University of Chicago, 1958.

Brock, T. C., and Becker, L. A. Ineffectiveness of "overheard" propaganda. Journal of Personality and Social Psychology, 1965, 2, 654-660.

Brooks, L. Interactive effects of sex and status on self-disclosure. Journal of Counseling Psychology, 1974, 21, 469-474.

Chiltick, E. V., and Himelstein, P. The manipulation of self-disclosure. Journal of Psychology, 1967, 65, 117-121.

Cozby, P. C. Self disclosure: A literature review. Psychological Bulletin, 1973, 79, 73-91.

Cronbach, L. J. The two disciplines of scientific psychology. American Psychologist, 1957, 12, 671-684.

Cronbach, L. J. Beyond the two disciplines of scientific psychology. American Psychologist, 1975, 30, 116-127.

Devine, D. A. Effects of clients' commitment to change, preference for treatment, and expectation of success on group psychotherapeutic outcome. Unpublished doctoral dissertation, University of New Hampshire, 1974.

Devine, D. A., and Fernald, P. S. Outcome effects of receiving preferred, randomly assigned, or nonpreferred therapy. Journal of Consulting and Clinical Psychology, 1973, 41, 1, 104-107.

Dimond, R. E., and Hellkamp, D. T. Race, sex, ordinal position of birth, and self-disclosure in high school students. Psychological Reports, 1969, 25, 235-238.

Dimond, R. E., and Munz, D. C. Ordinal position of birth and self-disclosure in high school students. Psychological Reports, 1967, 21, 829-833.

Doster, J. A., and Strickland, B. R. Perceived child-rearing practices and self-disclosure patterns. Journal of Consulting and Clinical Psychology, 1969, 33, 382.

Drag, R. M. Self-disclosure as a function of group size and experimenter behavior. Dissertation Abstracts International, 1969, 30 (5-B), 2416.

Frank, J. D. Persuasion and healing: A comparative study of psychotherapy. Baltimore: John Hopkins Press, 1961.

Goldstein, A. P., Heller, K., and Sechrest, L. B. Psychotherapy and the psychology of behavior change. New York: Wiley, 1966.

Goldstein, A. P., and Simonson, N. R. Social psychological approaches to psychotherapy research. In A. E. Bergin and S. L. Garfield,(Eds.), Handbook of psychotherapy and behavior change. New York: John Wiley and Sons, 1971.

Himelstein, P., and Kimbrough, W. W., Jr. A study of self-disclosure in the classrcom. Journal of Psychology, 1963, 55, 437-440.

Hovland, C. I., Janis, I. L., and Kelley, H. H. Communication and persuasion. New Haven, Conn.: Yale University Press, 1953.

Hovland, C. I., and Weiss, W. The influence of source credibility on communication effectiveness. Public Opinion Quarterly, 1951, 15, 635-650.

Jones, E., and Gerard, H. Foundations of Social Psychology. New York: John Wiley and Sons, 1967.

Jourard, S. M. Self-disclosure and other-cathexis. Journal of Abnormal and Social Psychology, 1959, 59, 428-431.

Jourard, S. M. The transparent self. Princeton: Van Nostrand, 1964.

Jourard, S. M., and Friedman, R. Experimenter-subject "distance" and self-disclosure. Journal of Personality and Social Psychology, 1970, 15, 278-282.

Jourard, S. M., and Jaffee, P. E. Influence of an interviewer's disclosure on the self-disclosing behavior of interviewees. Journal of Counseling Psychology, 1970, 17, 252.

Kiesler, D. J. Patient experiencing and successful outcome in individual psychotherapy of schizophrenics and neurotics. Journal of Consulting and Clinical Psychology, 1971, 37, 370-385.

Kiesler, C. A., Collins, B. E., and Miller, N. Attitude change. New York: John Wiley and Sons, 1969.

McGuire, W. J. The nature of attitudes and attitude change. In G. Lindzey and E. Aronson, (Eds.), Handbook of Social Psychology (Vol. 3, 2nd ed.). Reading, Mass.: Addison-Wesley, 1969.

McGuire, W. J. Attitude change: the information processing paradigm. In C. G. McClintoch (Ed) Experimental Social Psychology. New York: Holt, Rinehart & Winston, 1972.

Newcomb, T. M. The acquaintance process. New York: Holt Rinehart & Winston, 1961.

Peres, H. An investigation of nondirective group therapy. Journal of Consulting Psychology, 1947, 11, 159-172.

Powell, W. J. Differential effectiveness of interviewer interventions in an experimenter interview. Journal of Consulting and Clinical Psychology, 1968, 32, 210-215.

Rausch, H. L., and Bordin, E. S. Warmth in personality development and in psychotherapy. Psychiatry, 1957, 20, 351-363.

Rogers, C. R. The necessary and sufficient conditions of therapeutic personality change. Journal of Consulting Psychology, 1957, 21, 95-103.

Rogers, C. R., Gendlin, C. T., Kiesler, D. V., and Truax, C. B. The therapeutic relationship and its impact: A study of psychotherapy with schizophrenics. Madison: University of Wisconsin Press, 1967.

Rosen, A. Client preferences: An overview of the literature. Personnel and Guidance Journal, 1967, 45, 785-789.

Shapiro, J. G. Relationship between expert and neophyte ratings of therapeutic conditions. Journal of Consulting and Clinical Psychology, 1968, 32, 87-89.

Schmidt, L. D., and Strong, S. R. "Expert" and "inexpert" counselors. Journal of Counseling Psychology, 1970, 17, 115-118.

Simon, W. E. Age, sex and title of therapist as determinants of patient's preferences. Journal of Psychology, 1973, 83, 145-149.

Simons, H. W., Berkowitz, N. N., and Moyer, R. J. Similarity, credibility, and attitude change: A review and theory. Psychological Bulletin, 1970, 73, 1-16.

Simonson, N. R., and Bahr, Susan. Self-disclosure by the professional and paraprofessional therapist. Journal of Consulting and Clinical Psychology, 1974, 42, 359-363.

Steele, B. L. The amount of exploration into causes, means, goals, and agent: a comparison of successful and unsuccessful cases in client-centered therapy. Unpublished master's thesis. University of Chicago, 1948.

Strong, S. R., and Schmidt, L. D. Trustworthiness and influence in counseling. Journal of Counseling Psychology, 1970, 17, 197-204. (a)

Strong, S. R., and Schmidt, L. D. Expertness and influence in counseling. Journal of Counseling Psychology, 1970, 17, 81-87. (b)

Tognoli, J. Response matching in interpersonal information exchange. British Journal of Social and Clinical Psychology, 1969, 8, 116-123.

Truax, C. B. A scale for the measurement of accurate empathy. Discussion papers, Wisconsin Psychiatric Institute, University of Wisconsin, 1961, No. 20.

Truax, C. B. A tentative scale for the measurement of unconditional positive regard. Psychiatric Institute

Bulletin, Wisconsin Psychiatric Institute, University of Wisconsin, 1962, 2, 1. (a)

Truax, C. B. A tentative scale for the measurement of therapist genuineness of self-congruence: Discussion Papers. Wisconsin Psychiatric Institute, University of Wisconsin, 1962, 35. (b)

Truax, C. B. A tentative scale for the measurement of depth of intrapersonal exploration (DX). Discussion Papers. Wisconsin Psychiatric Institute, University of Wisconsin, 1962, 29. (c)

Truax, C. B. Effects of client-centered psychotherapy with schizophrenic patients: nine-year pretherapy and nine-year post-therapy hospitalization. Journal of Consulting and Clinical Psychology, 1970, 35, 417-422.

Truax, C. B., and Carkhuff, R. R. Client and therapist transparency in the psychotherapeutic encounter. Journal of Counseling Psychology, 1965, 12, 3-9.

Truax, C. B., and Carkhuff, R. R. Toward effective counseling and psychotherapy: Training and practice. Chicago: Aldine, 1967.

Truax, C. B., and Mitchell, K. M. Research on certain therapist interpersonal skills in relation to process and outcome. In A. E. Bergin and S. L. Garfield, (Eds.), Handbook of psychotherapy and behavior change. New York: John Wiley & Sons, 1971.

Truax, C. B., Tomlinson, T., and van der Veen, F. Symposium: a program in psychotherapy and psychotherapy research (Chrmn: C. R. Rogers) American Psychological Association, September, 1961.

Truax, C. B., Wargo, D. G., Frank, J. D., Imber, S. D., Battle, C. C., Hoehn-Saric, R., Nash, E. H., and Stone, A. R. Therapist empathy, genuineness, and warmth and patient therapeutic outcome. Journal of Consulting Psychology, 1966, 30, 395-401. (a)

Truax, C. B., Wargo, D. G., Frank, J. D., Imber, S. D., Battle, C. C., Hoehn-Saric, R., Nash, E. H., and Stone, A. R. Therapists' contribution to assurate empathy, non-possessive warmth and genuineness in psychotherapy. Journal of Clinical Psychology, 1966, 22, 331-334. (b)

Truax, C. B. Wargo, D. G., and Silber, L. D. Effects of group psychotherapy with high accurate empathy and

non-possessive warmth with female institutionalized delinquents. Journal of Abnormal Psychology, 1966, 71, 267-274.

Truax, C. B., Wargo, D. G., and Volksdorf, N. R. Antecedents to outcome in group counseling with institutionalized juvenile delinquents: Effects of therapeutic conditions, patient self-exploration, alternate sessions and vicarious therapy pretraining. Journal of Abnormal Psychology, 1970, 76, 235-242.

van der Veen, F. Basic elements in process of psychotherapy: A research study. Journal of Consulting and Clinical Psychology, 1967, 31, 295-303.

Vondracek, S. T. The measurement and correlation of self-disclosure in preadolescents. Dissertation Abstracts International, 1970, 30 (11-B), 5230.

Walster, E., and Festinger, L. The effectiveness of "overheard" persuasive communications. Journal of Abnormal and Social Psychology, 1962, 65, 395-402.

Wilson, M. N., and Rappaport, J. Personal self-disclosure and situational effects. Journal of Consulting and Clinical Psychology, 1974, 42, 901-908.

Wolfson, K. S. Client's exploration of their problems during client-centered therapy. Unpublished master's thesis, University of Chicago, 1949.

Worthy, M., Gary, A. L., and Kuhn, G. M. Self-disclosure as an exchange process. Journal of Personality and Social Psychology, 1969, 13, 59-63.

APPENDIX A

BASIC DIALOGUE

T: ...You look to me like there's something you want to talk about, but that you're having a difficult time getting started.

(5 second pause)

P: I, uh,...yes, uh, in a way that's my whole problem.

(5-7 second pause)

T: Hhumm, I'm not sure I understand. Could you explain what you mean?

(5 second pause)

P: W-well, uh, I find it hard to, to speak in front of people...even in front of you. Only it's different with a lot of people—an audience. It's even worse. I-I can't seem to talk in public at all.

T: Is it important for you to be a good public speaker?

P: Well, uh, no, not in the way you might think. I mean like I don't want to be a lawyer or politician or anything like that; it's just that, well even in class if I'm called upon to talk I begin to tremble and, and look up at the ceiling; my palms sweat and my face, uh, seems to, uh, freeze. E-even j-just thinking about the possibility of being called upsets my stomach. I-I can't even

sleep much because I worry about even the possibility of having to talk in class the next day. It's really getting out of hand.

T: So, not only speaking in public, but just thinking about it makes you upset.

P: Y-yeah...that's what happens. I can't help it.

T: I see...What do you think stops you from being able to speak in public...and makes it difficult and upsetting just to think about speaking in public?

P: I-I guess it's, it's just plain f-fear...or panic.

T: Just what is it that you're afraid of?

(slight pause)

P: I-I don't really know. I...I...I don't know.

T: You say you don't know.

(15 second pause)

P: Well, it's just that I guess deep down I've always kinda suspected, b-but wasn't sure, that I was, well, inferior ...that other people were better than me—in, in just about everything. When I see how confident some people are when they speak, it makes me feel that maybe my suspicions are true—that I am inferior.

T: "Inferior" is a very general word for me. It really doesn't tell me much when used alone, without any

elaborations.

(short pause)

P: What do you mean?

T: Just that there are always people who are better than we are in some things; and we, of course, are better than them in others.

P: I-I know that, of course, b-but somehow seeing how confidently others speak and, and act in public...and comparing it with my feelings I just wonder if there's something very wrong with me when I try to speak in front of other people.

INSERT INTRODUCTION TO MANIPULATIONS

P: Yeah, but this is different—you're not waiting for me to make a mistake. And I don't have to worry about getting across to you what I want to the first time. I can always explain, and mistakes don't count. You're trying to help me.

T: You feel like the other students in class are waiting for you to make a mistake when you present something?

P: I don't know. I, uh, guess I do, and besides it's just as bad if I don't get my point across and—and everyone thinks I'm talking a lot of nonsense.

T: I think you might be over-generalizing when you say EVERYONE, don't you?

P: I suppose so, but I-I really worry about what I'm trying to say almost as much as I worry about being up in front of people...I don't know how to express myself and people probably get bored or think I'm dumb.

T: I'm sure part of what you say is right. Everyone in your audience probably will not get the point you want to get across, but that's because of the wide variety of individuals and kinds of motivation that you get in any group of people—especially in a college classroom. Why not just try to reach the majority?

P: O.K., but it's the minority that are waiting to laugh and smirk that I'm worried about.

T: You know, you really don't have to concern yourself with people who laugh at you. You don't really know what they mean by it; most people don't really enjoy seeing someone else suffering or having a difficult time.

P: I don't understand...Why shouldn't they laugh? I mean how many people can't overcome a problem like mine by the time they're sophomores in college?

INSERT REMINDER

P: Well, I think I can appreciate what you're saying...but it's not just those who make fun of me that bother me. E-even those who don't upset me because even if no one laughs, I just feel so bad when the next person gets up with such confidence that he can even crack a joke.

T: Jim, you know you might be misinterpreting the apparent confidence of these people who are so at ease that they can joke in front of the class.

P: What do you mean? For some it's very obvious that they never worried about being in front of other people in their lives.

(slight pause)

T: Well, from my experience, I've observed that sometimes the kind of individual you're talking about doesn't do a very good job of speaking in public.

(very brief pause)

P: I'm still not sure what you're getting at.

T: Well, let's see if I can be more explicit. (slight pause) What I'm, uh, trying to say is that it seems to me that you have your assumptions about speaking in public mixed-up. A couple of times you've either said or implied that you feel abnormal and inferior because you're afraid to speak in public. What I'm trying to say is that sometimes it's the guy who doesn't get tense or nervous at all who may not do his best when he is in front

of people.

P: I don't understand. Are you saying I'm O.K. and everyone else is messed up?

T: Not really. I'm saying that someone who doesn't experience any sort of aroused state at all at the prospect of speaking in public might be under-reacting to the situation and for this reason may not take the matter seriously enough to do a good job. It's natural to be nervous about public speaking. After all, to some extent you will be evaluated; you are making demands on your audience's time and attention. To put it simply, you're on display.

P: In other words, I shouldn't be here at all because I really don't have a problem.

T: No, I don't wish to imply that you don't have a problem; it's just that it's common for many, if not most, people to experience nervousness at the prospect of speaking in public.

P: Logically, I guess what you're saying makes sense. But somehow it doesn't really make me feel a whole lot better. Can you really understand what I'm trying to say about my feelings?

INSERT MANIPULATIONS HERE

P: Well, then I wonder how you'll know what treatment is best for me?

T: Actually, today relatively few therapists and counselors rely on a single method. Most are eclectic in that they freely borrow aspects of lots of different therapies to meet the special needs of each client. I'm very willing to follow this sort of procedure in trying to help you. I'm hopeful that together we can work towards a solution and I'm willing to help you as much as I can.

P: Well, I guess it's better than just suffering without doing anything about it. I'll take a chance and see what can be done to get rid of my problem.

APPENDIX B

MANIPULATIONS

Cell #1 (Personal/Relevant/Success)

Introduction to manipulations.

T: You know, Jim, self-doubts are pretty natural and happen to just about everyone for lots of different reasons. Back in graduate school I had a problem very much like yours—I'd dread having to speak in front of groups. I wondered if there was something wrong with me, too, but I got over my fear of speaking in public. So it's not unusual to question yourself—and, (slight hesitation) I think it's interesting that right now you're speaking as easily to me as I am to you.

Reminder.

T: In answer to that I can only remind you that I had a problem speaking in front of groups until the time I was a graduate student. You see there's no time limit beyond which feelings of insecurity become abnormal. Besides, anyone who'd laugh at your inability to speak in class sounds like they might not be very secure themselves.

Manipulations.

T: I'm trying to understand, and I think I can to some extent. I think I understand that you're being unnecessarily hard on yourself. I was trying to get that across when I

mentioned my own problem earlier.

P: I remember you mentioned it, but you didn't give any details.

T: Well, there aren't many details to give. I was very insecure as a graduate student about not being able to speak in front of groups of people. I felt different and wondered if I could make it in any kind of job after I got out of school.

P: Well, you got over your problem, didn't you?

T: Yes, but I still think I can understand how you feel now.

P: Well, did you do anything special to try and get rid of your problem?

T: Actually, I tried many different therapies over the course of a couple of years.

P: Which one worked?

T: I feel that it would be inaccurate to say that any one approach in particular got rid of my fear of public speaking. I think I got some benefit from each one...

P: Does that mean that we can expect the same result with me?

T: Jim, that's a difficult question for me to answer; what helps one person may not help another, even if they both have the same problem. We really can't predict how things

will work for you on the basis of what happened to me. A lot depends on you and your willingness to work at a resolution.

Cell #2 (Personal/Irrelevant/Success)

Introduction to manipulations.

T: You know, Jim, self-doubts are pretty natural and happen to just about everyone for lots of different reasons. Back in graduate school I had real problems with over-eating. I wondered if there was something wrong with me, too, but I got over my problem of eating too much. So it's not unusual to question yourself—and, (slight hesitation) I think it's interesting that right now you're speaking as easily to me as I am to you.

Reminder.

T: In answer to that I can only remind you that I had a problem with overeating up until the time I was a graduate student. You see there's no time limit beyond which feelings of insecurity become abnormal. Besides, anyone who'd laugh at your inability to speak in class sounds like they might not be very secure themselves.

Manipulations.

T: I'm trying to understand, and I think I can to some extent. I think I understand that you're being unnecessarily hard on yourself. I was trying to get that across when I mentioned my own problem earlier.

P: I remember you mentioned it, but you didn't give any details.

T: Well, there aren't many details to give. I was very insecure as a graduate student. I was even afraid to be in front of groups of people because of how I looked from overeating. I felt different and even wondered if I could make it in any kind of job after I got out of school.

P: Well, you got over your problem, didn't you?

T: Yes, but I still think I can understand how you feel now.

P: Well, did you do anything special to try and get rid of your problem?

T: Actually, I tried many different therapies over the course of a couple of years.

P: Which one worked?

T: I feel that it would be inaccurate to say that any one approach in particular got rid of my overeating. I think that I got some benefit from each one...

P: Does that mean that we can expect the same result with me?

T: Jim, that's a difficult question for me to answer; what helps one person may not help another, even if they both have the same problem. We really can't predict how things will work for you on the basis of what happened to me. A lot depends on you and your willingness to work at a

resolution.

Cell #3 (Vacarious/Relevant/Success)

Introduction to manipulations.

T: You know, Jim, self-doubts are pretty natural and happen to just about everyone for lots of different reasons. I once had a graduate student patient who, like you, dreaded having to speak in front of groups. He wondered if there was something wrong with him, too, but he got over his fear of speaking in public. So it's not unusual to question yourself—and, (slight hesitation) I think it's interesting that right now you're speaking as easily to me as I am to you.

Reminder.

T: In answer to that, I can only remind you that I had a patient who had a problem speaking in front of groups up until the time he was a graduate student. You see there's no time limit beyond which feelings of insecurity become abnormal. Besides, anyone who'd laugh at your inability to speak in class sounds like they might not be very secure themselves.

Manipulations.

T: I'm trying to understand, and I think I can to some extent. I think I understand that you're being unnecessarily hard on yourself. I was trying to get that across when I mentioned my other patient's problem earlier.

P: I remember you mentioned it, but you didn't give any de-

tails.

T: Well, there aren't many details to give. He was very insecure as a graduate student about not being able to speak in front of groups of people. He felt different and wondered if he could make it in any kind of job after he got out of school.

P: Well, he got over his problem, didn't he?

T: Yes, but I still think I can understand how you feel now.

P: Well, did you do anything special to try and get rid of his problem?

T: Actually, we tried many different therapies over the course of a couple of years.

P: Which one worked?

T: I feel that it would be inaccurate to say that any one approach in particular got rid of his fear of public speaking. I think that he got some benefit from each one...

P: Does that mean that we can expect the same result with me?

T: Jim, that's a difficult question for me to answer; what helps one person may not help another, even if they both have the same problem. We really can't predict how things will work for you on the basis of what happened to another patient. A lot depends on you and your willingness to work

at a resolution.

Cell #4 (Vicarious/Irrelevant/Success)

Introduction to manipulations.

T: You know, Jim, self-doubts are pretty natural and happen to just about everyone for lots of different reasons. I once had a graduate student patient who had a real problem with overeating. He wondered if there was something wrong with him, too, but he got over his problem of eating too much. So it's not unusual to question yourself—and, (slight hesitation) I think it's interesting that right now you're speaking as easily to me as I am to you.

Reminder.

T: In answer to that, I can only remind you that I had a patient who had a problem with overeating up until the time he was a graduate student. You see there's no time limit beyond which feelings of insecurity become abnormal. Besides, anyone who'd laugh at your inability to speak in class sounds like they might not be very secure themselves.

Manipulations.

T: I'm trying to understand, and I think I can to some extent. I think I understand that you're being unnecessarily hard on yourself. I was trying to get that across when I mentioned my other patient's problem earlier.

P: I remember you mentioned it, but you didn't give any details.

T: Well, there aren't many details to give. He was very insecure as a graduate student. He was even afraid to be in front of groups of people because of how he looked from overeating. He felt different and wondered if he could make it in any kind of job after he got out of school.

P: Well, he got over his problem, didn't he?

T: Yes, but I still think that I can understand how you feel now.

P: Well, did you do anything special to try and get rid of his problem?

T: Actually, we tried many different therapies over the course of a couple of years.

P: Which one worked?

T: I feel that it would be inaccurate to say that any one approach in particular got rid of his overeating. I think he got some benefit from each one...

P: Does that mean that we can expect the same result with me?

T: Jim, that's a difficult question for me to answer; what helps one person may not help another, even if they both have the same problem. We really can't predict how things will work for you on the basis of what happened to another patient. A lot depends on you and your

willingness to work at a resolution.

Cell #5 (Personal/Relevant/Failure)

Introduction to manipulations.

T: You know, Jim, self-doubts are pretty natural and happen to just about everyone for lots of different reasons. Back in graduate school I had a problem very much like yours—I'd dread having to speak in front of groups. I wondered if there was something wrong with me, too. In fact, I still dread speaking in public. So it's not unusual to question yourself—and, (slight hesitation) I think it's interesting that right now you're speaking as easily to me as I am to you.

Reminder.

T: In answer to that, I can only remind you that I had a problem speaking in front of groups as a graduate student and that I haven't really been able to overcome it. You see there's no time limit beyond which feelings of insecurity become abnormal. Besides, anyone who'd laugh at your inability to speak in class sounds like they might not be very secure themselves.

Manipulations.

T: I'm trying to understand, and I think I can to some extent. I think I understand that you're being unnecessarily hard on yourself. I was trying to get that across when I mentioned my own problem earlier.

P: I remember you mentioned it, but you didn't give any details.

T: Well, there aren't many details to give. I was very insecure as a graduate student about not being able to speak in front of groups of people. I felt different and wondered if I could make it in any kind of job after I got out of school.

P: Well, you got over your problem, didn't you?

T: No, I never really did, so I still think I can understand how you feel now.

P: Well, did you do anything special to try and get rid of your problem?

T: Actually, I tried many different therapies over the course of a couple of years.

P: And none worked?

T: I feel it would be inaccurate to say that any one of the approaches in particular failed to get rid of my fear of public speaking. I really don't think I got much benefit from any of them...

P: Does that mean that we can expect the same result with me?

T: Jim, that's a difficult question for me to answer; what fails to help one person may help another, even if they both have the same problem. We really can't predict how

things will work for you on the basis of what happened to me. A lot depends on you and your willingness to work at a resolution.

Cell #6 (Personal/Irrelevant/Failure)

Introduction to manipulations.

T: You know, Jim, self-doubts are pretty natural and happen to just about everyone for lots of different reasons. Back in graduate school I had real problems with overeating. I wondered if there was something wrong with me, too. In fact, overeating is still a problem for me. So it's not unusual to question yourself—and, (slight hesitation) I think it's interesting that right now you're speaking as easily to me as I am to you.

Reminder.

T: In answer to that, I can only remind you that I had a problem with overeating as a graduate student and that I haven't really been able to overcome it. You see there's no time limit beyond which feelings of insecurity become abnormal. Besides, anyone who'd laugh at your inability to speak in class sounds like they might not be very secure themselves.

Manipulations.

T: I'm trying to understand, and I think I can to some extent. I think I understand that you're being unnecessarily hard on yourself. I was trying to get that across

when I mentioned my own problem earlier.

P: I remember you mentioned it, but you didn't give any details.

T: Well, there aren't many details to give. I was very insecure as a graduate student. I was even afraid to be in front of groups of people because of how I looked from overeating. I felt different and even wondered if I could make it in any kind of job after I got out of school.

P: Well, you got over your problem, didn't you?

T: No, I never really did. I still have to go on crash diets and to spas very often, so I still think I can understand how you feel now.

P: Well, did you do anything special to try and get rid of your problem?

T: Actually, I tried many different therapies over the course of a couple of years.

P: And none worked?

T: I think it would be inaccurate to say that any one of the approaches in particular failed to get rid of my overeating. I really don't think I got much benefit from any of them...

P: Does that mean that we can expect the same result with me?

T: Jim, that's a difficult question for me to answer; what

fails to help one person may help another, even if they both have the same problem. We really can't predict how things will work for you on the basis of what happened to me. A lot depends on you and your willingness to work at a resolution.

Cell #7 (Vicarious/Relevant/Failure)

Introduction to manipulations.

T: You know, Jim, self-doubts are pretty natural and happen to everyone for lots of different reasons. I once had a graduate student patient who, like you, dreaded having to speak in front of groups. He wondered if there was something wrong with him, too. In fact, he still dreads speaking in public. So it's not unusual to question yourself--and, (slight hesitation) I think it's interesting that right now you're speaking as easily to me as I am to you.

Reminder.

T: In answer to that, I can only remind you that I had a patient who had a problem speaking in front of groups as a graduate student and that we were unable to overcome it. You see there's no time limit beyond which feelings of insecurity become abnormal. Besides, anyone who'd laugh at your inability to speak in class sounds like they might not be very secure themselves.

Manipulations.

T: I'm trying to understand, and I think I can to some ex-

tent. I think I understand that you're being unnecessarily hard on yourself. I was trying to get that across when I mentioned my other patient's problem earlier.

P: I remember you mentioned it, but you didn't give any details.

T: Well, there aren't many details to give. He was insecure as a graduate student about not being able to speak in front of groups of people. He felt different and wondered if he could make it in any kind of job after he got out of school.

P: Well, he got over his problem, didn't he?

T: No, he never really did but I still think I can understand how you feel now.

P: Well, did you do anything special to try and get rid of his problem?

T: Actually, we tried many different therapies over the course of a couple of years.

P: And none worked?

T: I think it would be inaccurate to say that any of the approaches in particular failed to get rid of his fear of public speaking. I really don't think he got much benefit from any of them...

P: Does that mean that we can expect the same result with me?

T: Jim, that's a difficult question for me to answer; what fails to help one person may help another, even if they both have the same problem. We really can't predict how things will work for you on the basis of what happened to another patient. A lot depends on you and your willingness to work at a resolution.

Cell #8 (Vicarious/Irrelevant/Failure)

Introduction to manipulations.

T: You know, Jim, self-doubts are pretty natural and happen to just about everyone for lots of different reasons. I once had a graduate student patient who had a real problem with overeating. He wondered if there was something wrong with him, too. In fact, overeating is still a problem for him. So it's not unusual to question yourself—and, (slight hesitation) I think it's interesting that right now you're speaking as easily to me as I am to you.

Reminder.

T: In answer to that, I can only remind you that I had a patient who had a problem with overeating as a graduate student and that we were unable to overcome it. You see there's no time limit beyond which feelings of insecurity become abnormal. Besides, anyone who'd laugh at your inability to speak in class sounds like they might not be very secure themselves.

Manipulations.

T: I'm trying to understand, and I think I can to some ex-

tent. I think I understand that you're being unnecessarily hard on yourself. I was trying to get that across when I mentioned my other patient's problem earlier.

P: I remember you mentioned it, but you didn't give any details.

T: Well, there aren't many details to give. He was insecure as a graduate student. He was even afraid to be in front of groups of people because of how he looked from overeating. He felt different and wondered if he could make it in any kind of job after he got out of school.

P: Well, he got over his problem, didn't he?

T: No, he never really did, but I still think I can understand how you feel now.

P: Well, did you do anything special to try and get rid of his problem?

T: Actually, we tried many different therapies over the course of a couple of years.

P: And none worked?

T: I think it would be inaccurate to say that any of the approaches in particular failed to get rid of his overeating. I really don't think he got much benefit from any of them...

P: Does that mean that we can expect the same result with me?

T: Jim, that's a difficult question for me to answer; what fails to help one person may help another, even if they both have the same problem. We really can't predict how things will work for you on the basis of what happened to another patient. A lot depends on you and your willingness to work at a resolution.

TRANSITIONS FOR CONTROL CONDITION

First Break:

T: You know, I think it's interesting that right now you're speaking as easily to me as I am to you.

Second Break:

T: You know there's no time limit beyond which feelings of insecurity become abnormal. Besides anyone who'd laugh at your inability to speak in class sounds like they might not be very secure themselves.

Third Break:

T: I'm trying to understand, and I think I can to some extent. I think I understand that you're being unnecessarily hard on yourself. I was trying to get that across earlier.

P: But do you think I can expect to get better?

T: Jim, that's a difficult question for me to answer. A lot depends on you and your willingness to work at a resolution.

APPENDIX C

DEPENDENT MEASURES

Name_____Sex_____

Section #_____Day and Time_____

General Instructions. The following questionnaire is composed of several sections of items designed to assess how you feel about the therapist in the tape-recorded interview you just heard. These items employ rating scales. We ask that you decide which of the alternatives on each scale most closely approximates your response to that item. Put a check mark (✓) in the box that corresponds to your choice. Special instructions will be provided at the beginning of each section of items.

Instructions: For the following 6 items recall that you are asked to respond as you would if you were the patient on the tape. We are interested in your perceptions of the therapist from a patient's perspective. Seven boxes are provided for each item. Place a check mark (✓) in the box that corresponds to how you will fill in the blank for each item. Read each item and scale carefully.

1. It sounded like the therapist was _____ to the patient in certain respects.

similar			neutral			dis-similar

2. The therapist's intentions were _____ the patient.

not to persuade			neutral			to persuade

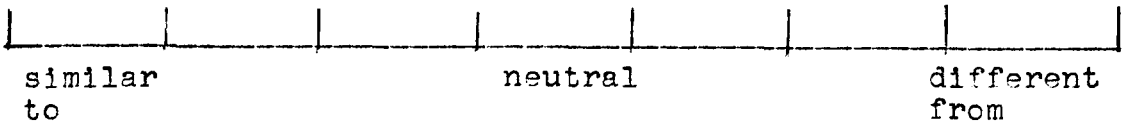
3. The therapist's intentions were _____ the patient.

to help			neutral			not to help

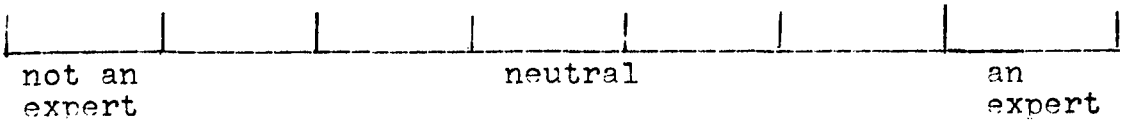
4. The therapist seemed to be _____.

untrust-worthy			neutral			trust-worthy

5. The therapist's attitudes seemed to be _____ the patient's.

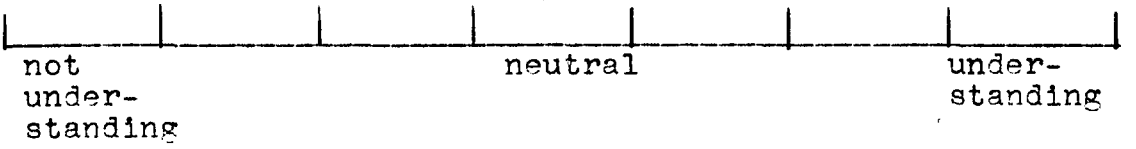


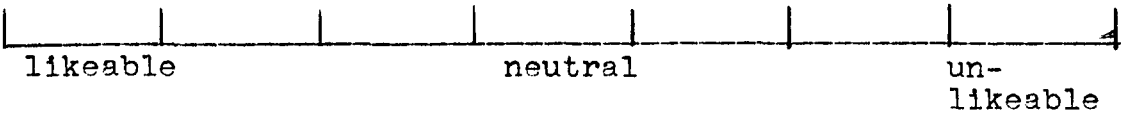
6. In his dealings with the patient it seemed that the therapist was _____.

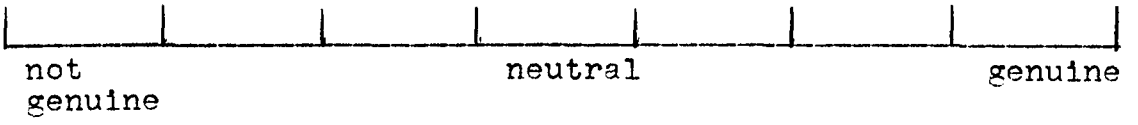


Instructions: For the following 11 items, once again we ask you to respond as if you were the patient on the tape. These items are opposite adjectives that might be used to describe how you perceived the therapist. Indicate how you perceived the therapist along each continuum by placing a check mark (✓) in the appropriate box. Read each scale carefully.

7. 

8. 

9. 

10. 

11. accenting — neutral — rejecting

12. uncaring — neutral — caring

13. pleasant — neutral — unpleasant

14. impatient — neutral — patient

15. interested — neutral — dis-interested

16. open — neutral — defensive

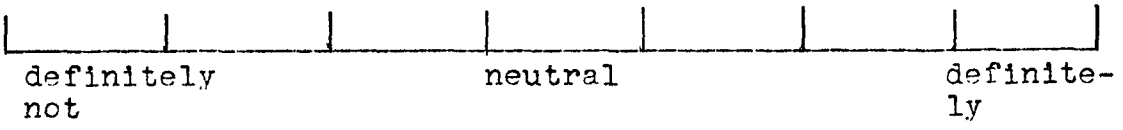
17. unfriendly — neutral — friendly

Instructions: For the following 7 items we again request that you put yourself in the place of the patient on the tape. From this perspective we would like to know how you might respond to future interactions with this therapist. Place a check mark (✓) in the box that corresponds to how likely or unlikely you think you would be to follow the course of action described in each item.

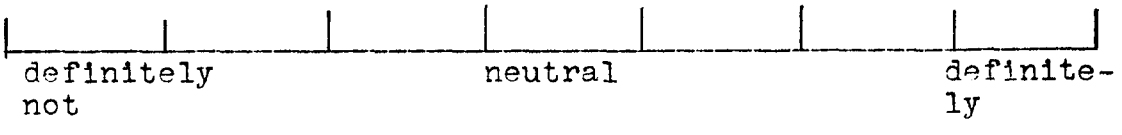
18. I would want to see this therapist again.

definitely not — neutral — definitely

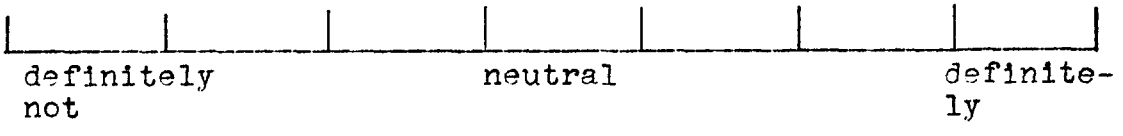
19. I would recommend this therapist to others.



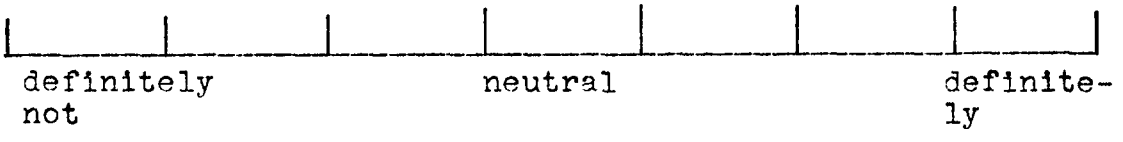
20. I would follow the therapist's advice and recommendations.



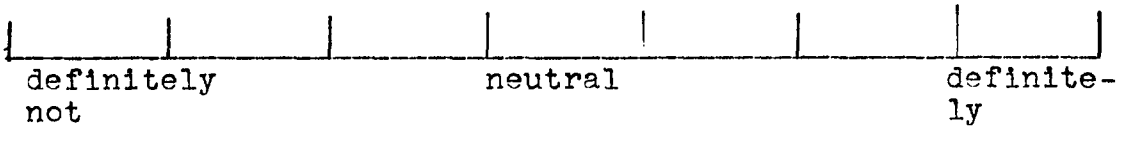
21. I think this therapist could help me with a public speaking problem.



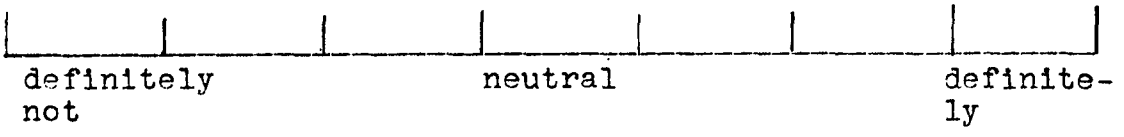
22. I think this therapist could help me with problems other than public speaking.



23. I would probably feel better about myself after consulting with this therapist.

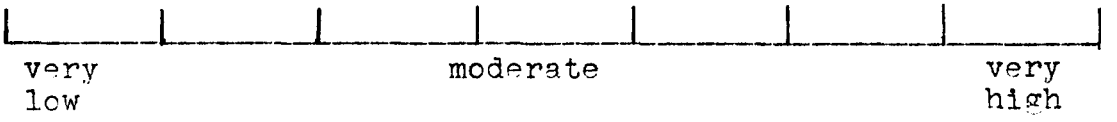


24. I would share my innermost thoughts with this therapist.



Now please rate your own subjective reaction towards speaking in public by answering the following question. Place a check mark (✓) in the appropriate box:

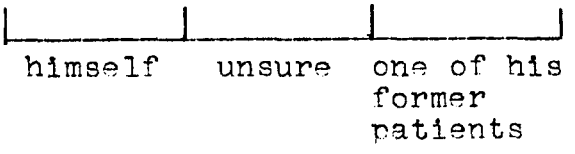
25. The amount of fear I experience when speaking in public is _____.



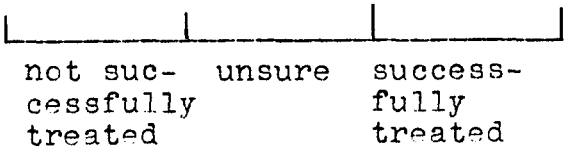
Please feel free to give your reactions to this experiment on the back of this questionnaire.

Instructions: For the following 3 items, place a check mark (✓) in the box that corresponds to what the therapist talked about.

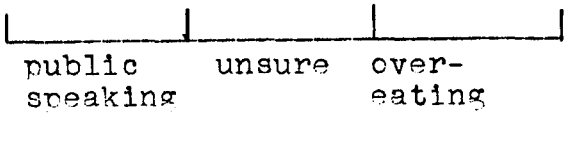
26. In addition to discussing the client's public speaking problem, the therapist also described a problem relating to



27. The problem described by the therapist was



28. The problem described by the therapist concerned



APPENDIX D

DEPENDENT MEASURES LISTED BY GROUP AND BY NUMBER

Variable Number	Description	
1	similar	
2	intention to persuade	
3	intention to help	PERSUASION
4	trustworthy	VARIABLES
5	similar attitudes	
6	expert	
7	warm	
8	understanding	
9	likeable	
10	genuine	
11	accepting	PSYCHOTHERAPY
12	caring	VARIABLES
13	pleasant	
14	patient	
15	interested	
16	open	
17	friendly	

18	would want to see therapist again	
19	would recommend therapist	
20	would follow therapist's advice	
21	therapist would be able to help with a public speaking problem	INTENTION VARIABLES
22	therapist would be able to help with other problems	
23	would feel better after consulting with therapist	
24	would share innermost thoughts with therapist	

APPENDIX E

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 1: Similar

**********A N A L Y S I S O F V A R I A N C E**********

	DEPOI	SIMILAR
BY	A	SELF-OTHER
	B	RELEVANT-IRRELEVANT
	C	SUCCESS-FAILURE
	SEX	FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	73.125	4	18.281	9.500
A	66.306	1	66.306	34.457
B	2.756	1	2.756	1.432
C	3.906	1	3.906	2.030
SEX	0.156	1	0.156	0.081
2-WAY INTERACTIONS	4.988	6	0.831	0.432
A B	0.006	1	0.006	0.003
A C	2.256	1	2.256	1.173
A SEX	0.306	1	0.306	0.159
B C	1.406	1	1.406	0.731
B SEX	0.506	1	0.506	0.263
C SEX	0.506	1	0.506	0.263
3-WAY INTERACTIONS	5.225	4	1.306	0.679
A B C	1.406	1	1.406	0.731
A B SEX	3.306	1	3.306	1.718
A C SEX	0.506	1	0.506	0.263
B C SEX	0.006	1	0.006	0.003
4-WAY INTERACTIONS	5.256	1	5.256	2.732
A B C SEX	5.256	1	5.256	2.732
RESIDUAL	277.100	144	1.924	
TOTAL	365.694	159	2.300	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 2: Intention to Persuade

**********ANALYSIS OF VARIANCE**********

DEP02 INTENTION TO PERSUADE
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	3.225	4	0.806	0.282
A	2.256	1	2.256	0.789
B	0.306	1	0.306	0.107
C	0.156	1	0.156	0.055
SEX	0.506	1	0.506	0.177
2-WAY INTERACTIONS	33.438	6	5.573	1.948
A B	0.506	1	0.506	0.177
A C	0.306	1	0.306	0.107
A SEX	10.506	1	10.506	3.673
B C	15.006	1	15.006	5.246
B SEX	6.806	1	6.806	2.379
C SEX	0.306	1	0.306	0.107
3-WAY INTERACTIONS	12.625	4	3.156	1.103
A B C	0.306	1	0.306	0.107
A B SEX	0.756	1	0.756	0.264
A C SEX	10.506	1	10.506	3.673
B C SEX	1.056	1	1.056	0.369
4-WAY INTERACTIONS	1.406	1	1.406	0.492
A B C SEX	1.406	1	1.406	0.492
RESIDUAL	411.900	144	2.860	
TOTAL	462.594	159	2.909	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 3: Intention to Help

**********A N A L Y S I S O F V A R I A N C E**********

DEP03 INTENTION TO HELP
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	3.250	4	0.813	0.503
A	0.225	1	0.225	0.139
B	0.900	1	0.900	0.557
C	2.025	1	2.025	1.253
SEX	0.100	1	0.100	0.062
2-WAY INTERACTIONS	7.050	6	1.175	0.727
A B	0.900	1	0.900	0.557
A C	2.025	1	2.025	1.253
A SEX	0.100	1	0.100	0.062
B C	1.600	1	1.600	0.990
B SEX	2.025	1	2.025	1.253
C SEX	0.400	1	0.400	0.247
3-WAY INTERACTIONS	2.250	4	0.563	0.348
A B C	0.400	1	0.400	0.247
A B SEX	1.225	1	1.225	0.758
A C SEX	0.000	1	0.000	0.000
B C SEX	0.625	1	0.625	0.387
4-WAY INTERACTIONS	15.625	1	15.625	9.665
A B C SEX	15.625	1	15.625	9.665
RESIDUAL	232.800	144	1.617	
TOTAL	260.975	159	1.641	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 4: Trustworthy

**********A N A L Y S I S O F V A R I A N C E**********

DEP04 TRUSTWORTHY
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	5.050	4	1.263	0.455
A	4.225	1	4.225	1.522
B	0.625	1	0.625	0.225
C	0.100	1	0.100	0.036
SEX	0.100	1	0.100	0.036
2-WAY INTERACTIONS	7.300	6	1.217	0.438
A B	0.900	1	0.900	0.324
A C	0.225	1	0.225	0.081
A SEX	0.225	1	0.225	0.081
B C	5.625	1	5.625	2.026
B SEX	0.225	1	0.225	0.081
C SEX	0.100	1	0.100	0.036
3-WAY INTERACTIONS	12.050	4	3.013	1.085
A B C	8.100	1	8.100	2.917
A B SEX	0.900	1	0.900	0.324
A C SEX	3.025	1	3.025	1.090
B C SEX	0.025	1	0.025	0.009
4-WAY INTERACTIONS	4.900	1	4.900	1.765
A B C SEX	4.900	1	4.900	1.765
RESIDUAL	399.800	144	2.776	
TOTAL	429.100	159	2.699	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 5: Similar Attitudes

**********ANALYSIS OF VARIANCE**********

DEPOS SIMILAR ATTITUDES
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	26.950	4	6.738	2.985
A	0.625	1	0.625	0.277
B	0.100	1	0.100	0.044
C	0.625	1	0.625	0.277
SEX	25.600	1	25.600	11.343
2-WAY INTERACTIONS	26.000	6	4.333	1.920
A B	1.225	1	1.225	0.543
A C	10.000	1	10.000	4.431
A SEX	2.025	1	2.025	0.897
B C	7.225	1	7.225	3.201
B SEX	4.900	1	4.900	2.171
C SEX	0.625	1	0.625	0.277
3-WAY INTERACTIONS	2.050	4	0.513	0.227
A B C	0.400	1	0.400	0.177
A B SEX	1.225	1	1.225	0.543
A C SEX	0.400	1	0.400	0.177
B C SEX	0.025	1	0.025	0.011
4-WAY INTERACTIONS	0.000	1	0.000	0.000
A B C SEX	0.000	1	0.000	0.000
RESIDUAL	325.000	144	2.257	
TOTAL	380.000	159	2.390	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 6: Expert

**********ANALYSIS OF VARIANCE**********

DEP06 EXPERT
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	13.025	4	3.256	0.921
A	0.306	1	0.306	0.087
B	0.056	1	0.056	0.016
C	12.656	1	12.656	3.580
SEX	0.006	1	0.006	0.002
2-WAY INTERACTIONS	44.037	6	7.340	2.076
A B	10.506	1	10.506	2.972
A C	15.006	1	15.006	4.245
A SEX	3.906	1	3.906	1.105
B C	7.656	1	7.656	2.166
B SEX	0.156	1	0.156	0.044
C SEX	6.806	1	6.806	1.925
3-WAY INTERACTIONS	9.525	4	2.381	0.674
A B C	1.056	1	1.056	0.299
A B SEX	1.406	1	1.406	0.398
A C SEX	5.256	1	5.256	1.487
B C SEX	1.806	1	1.806	0.511
4-WAY INTERACTIONS	0.006	1	0.006	0.002
A B C SEX	0.006	1	0.006	0.002
RESIDUAL	509.100	144	3.535	
TOTAL	575.694	159	3.621	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 7: Warm

**********A N A L Y S I S O F V A R I A N C E**********

DEP07 WARM
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	12.775	4	3.194	1.486
A	6.006	1	6.006	2.795
B	1.056	1	1.056	0.491
C	1.806	1	1.806	0.840
SEX	3.906	1	3.906	1.817
2-WAY INTERACTIONS	24.038	6	4.006	1.864
A B	1.406	1	1.406	0.654
A C	13.806	1	13.806	6.424
A SEX	2.756	1	2.756	1.282
B C	0.756	1	0.756	0.352
B SEX	0.056	1	0.056	0.026
C SEX	5.256	1	5.256	2.446
3-WAY INTERACTIONS	8.975	4	2.244	1.044
A B C	5.256	1	5.256	2.446
A B SEX	1.406	1	1.406	0.654
A C SEX	0.056	1	0.056	0.026
B C SEX	2.256	1	2.256	1.050
4-WAY INTERACTIONS	0.156	1	0.156	0.073
A B C SEX	0.156	1	0.156	0.073
RESIDUAL	309.500	144	2.149	
TOTAL	355.444	159	2.235	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 8: Understanding

**********ANALYSIS OF VARIANCE**********

DEP08 UNDERSTANDING
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION			SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS			8.750	4	2.188	0.803
A			2.025	1	2.025	0.743
B			3.600	1	3.600	1.321
C			0.100	1	0.100	0.037
SEX			3.025	1	3.025	1.110
2-WAY INTERACTIONS			25.750	6	4.292	1.575
A	B		3.600	1	3.600	1.321
A	C		19.600	1	19.600	7.193
A	SEX		2.025	1	2.025	0.743
B	C		0.025	1	0.025	0.009
B	SEX		0.100	1	0.100	0.037
C	SEX		0.400	1	0.400	0.147
3-WAY INTERACTIONS			18.050	4	4.513	1.656
A	B	C	13.225	1	13.225	4.853
A	B	SEX	0.000	1	0.000	0.000
A	C	SEX	3.600	1	3.600	1.321
B	C	SEX	1.225	1	1.225	0.450
4-WAY INTERACTIONS			9.025	1	9.025	3.312
A	B	C SEX	9.025	1	9.025	3.312
RESIDUAL			392.400	144	2.725	
TOTAL			453.975	159	2.855	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 9: Likeable

**********A N A L Y S I S O F V A R I A N C E**********

DEP09 LIKEABLE
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	13.050	4	3.262	1.315
A	6.400	1	6.400	2.580
B	2.025	1	2.025	0.816
C	0.400	1	0.400	0.161
SEX	4.225	1	4.225	1.703
2-WAY INTERACTIONS	12.300	6	2.050	0.826
A B	0.625	1	0.625	0.252
A C	3.600	1	3.600	1.451
A SEX	0.225	1	0.225	0.091
B C	0.225	1	0.225	0.091
B SEX	6.400	1	6.400	2.580
C SEX	1.225	1	1.225	0.494
3-WAY INTERACTIONS	8.050	4	2.013	0.811
A B C	3.025	1	3.025	1.219
A B SEX	2.500	1	2.500	1.008
A C SEX	0.025	1	0.025	0.010
B C SEX	2.500	1	2.500	1.008
4-WAY INTERACTIONS	2.500	1	2.500	1.008
A B C SEX	2.500	1	2.500	1.008
RESIDUAL	357.200	144	2.481	
TOTAL	393.100	159	2.472	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 10: Genuine

```
**********ANALYSIS OF VARIANCE**********
            DEP10    GENUINE
        BY  A        SELF-OTHER
            B        RELEVANT-IRRELEVANT
            C        SUCCESS-FAILURE
            SEX      FEMALE-MALE
**************************************************
```

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	10.125	4	2.531	0.883
A	0.400	1	0.400	0.140
B	5.625	1	5.625	1.963
C	1.600	1	1.600	0.558
SEX	2.500	1	2.500	0.873
2-WAY INTERACTIONS	9.975	6	1.662	0.580
A B	3.025	1	3.025	1.056
A C	3.600	1	3.600	1.256
A SEX	0.400	1	0.400	0.140
B C	0.225	1	0.225	0.079
B SEX	0.225	1	0.225	0.079
C SEX	2.500	1	2.500	0.873
3-WAY INTERACTIONS	8.075	4	2.019	0.705
A B C	7.225	1	7.225	2.522
A B SEX	0.225	1	0.225	0.079
A C SEX	0.000	1	0.000	0.000
B C SEX	0.625	1	0.625	0.218
4-WAY INTERACTIONS	7.225	1	7.225	2.522
A B C SEX	7.225	1	7.225	2.522
RESIDUAL	412.600	144	2.865	
TOTAL	448.000	159	2.818	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 11: Accepting

```
**********A N A L Y S I S   O F   V A R I A N C E**********
            DEP11    ACCEPTING
        BY  A        SELF-OTHER
            B        RELEVANT-IRRELEVANT
            C        SUCCESS-FAILURE
            SEX      FEMALE-MALE
************************************************************
```

SOURCE OF VARIATION			SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS			7.375	4	1.844	0.747
A			0.756	1	0.756	0.307
B			0.306	1	0.306	0.124
C			1.056	1	1.056	0.428
SEX			5.256	1	5.256	2.130
2-WAY INTERACTIONS			17.688	6	2.948	1.195
A	B		0.156	1	0.156	0.063
A	C		7.656	1	7.656	3.103
A	SEX		0.756	1	0.756	0.307
B	C		0.506	1	0.506	0.205
B	SEX		0.056	1	0.056	0.023
C	SEX		8.556	1	8.556	3.468
3-WAY INTERACTIONS			8.575	4	2.144	0.869
A	B	C	1.406	1	1.406	0.570
A	B	SEX	2.756	1	2.756	1.117
A	C	SEX	3.906	1	3.906	1.583
B	C	SEX	0.506	1	0.506	0.205
4-WAY INTERACTIONS			1.056	1	1.056	0.428
A	B	C	1.056	1	1.056	0.428
	SEX					
RESIDUAL			355.300	144	2.467	
TOTAL			389.994	159	2.453	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 12: Caring

**********ANALYSIS OF VARIANCE**********

DEP12 CARING
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION			SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS			6.700	4	1.675	0.835
A			4.900	1	4.900	2.443
B			0.900	1	0.900	0.449
C			0.000	1	0.000	0.000
SEX			0.900	1	0.900	0.449
2-WAY INTERACTIONS			18.300	6	3.050	1.521
A	B		2.500	1	2.500	1.247
A	C		14.400	1	14.400	7.180
A	SEX		0.900	1	0.900	0.449
B	C		0.400	1	0.400	0.199
B	SEX		0.000	1	0.000	0.000
C	SEX		0.100	1	0.100	0.050
3-WAY INTERACTIONS			9.700	4	2.425	1.209
A	B	C	6.400	1	6.400	3.191
A	B	SEX	1.600	1	1.600	0.798
A	C	SEX	0.100	1	0.100	0.050
B	C	SEX	1.600	1	1.600	0.798
4-WAY INTERACTIONS			0.000	1	0.000	0.000
A	B	C SEX	0.000	1	0.000	0.000
RESIDUAL			288.800	144	2.006	
TOTAL			323.500	159	2.035	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 13: Pleasant

**********ANALYSIS OF VARIANCE**********

DEP13 PLEASANT
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION			SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS			0.875	4	0.219	0.106
A			0.400	1	0.400	0.193
B			0.225	1	0.225	0.109
C			0.025	1	0.025	0.012
SEX			0.225	1	0.225	0.109
2-WAY INTERACTIONS			15.275	6	2.546	1.230
A	B		5.625	1	5.625	2.718
A	C		3.025	1	3.025	1.462
A	SEX		1.225	1	1.225	0.592
B	C		0.400	1	0.400	0.193
B	SEX		4.900	1	4.900	2.368
C	SEX		0.100	1	0.100	0.048
3-WAY INTERACTIONS			4.225	4	1.056	0.510
A	B	C	2.500	1	2.500	1.208
A	B	SEX	0.100	1	0.100	0.048
A	C	SEX	0.400	1	0.400	0.193
B	C	SEX	1.225	1	1.225	0.592
4-WAY INTERACTIONS			0.025	1	0.025	0.012
A	B	C	0.025	1	0.025	0.012
	SEX					
RESIDUAL			298.000	144	2.069	
TOTAL			318.400	159	2.003	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 14: Patient

**********A N A L Y S I S O F V A R I A N C E**********

DEP14 PATIENT
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION			SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS			5.375	4	1.344	0.495
A			0.506	1	0.506	0.186
B			1.056	1	1.056	0.389
C			0.506	1	0.506	0.186
SEX			3.306	1	3.306	1.218
2-WAY INTERACTIONS			19.737	6	3.290	1.212
A	B		5.256	1	5.256	1.936
A	C		0.056	1	0.056	0.021
A	SEX		1.056	1	1.056	0.389
B	C		11.556	1	11.556	4.257
B	SEX		1.056	1	1.056	0.389
C	SEX		0.756	1	0.756	0.279
3-WAY INTERACTIONS			16.975	4	4.244	1.563
A	B	C	1.806	1	1.806	0.665
A	B	SEX	0.306	1	0.306	0.113
A	C	SEX	11.556	1	11.556	4.257
B	C	SEX	3.306	1	3.306	1.218
4-WAY INTERACTIONS			0.506	1	0.506	0.186
A	B	C	0.506	1	0.506	0.186
	SEX					
RESIDUAL			390.900	144	2.715	
TOTAL			433.494	159	2.726	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 15: Interested

**********A N A L Y S I S O F V A R I A N C E**********

DEP15 INTERESTED
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION			SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS			4.275	4	1.069	0.414
A			2.756	1	2.756	1.068
B			0.056	1	0.056	0.022
C			1.406	1	1.406	0.545
SEX			0.056	1	0.056	0.022
2-WAY INTERACTIONS			8.587	6	1.431	0.554
A	B		6.806	1	6.806	2.637
A	C		0.306	1	0.306	0.119
A	SEX		0.056	1	0.056	0.022
B	C		1.056	1	1.056	0.409
B	SEX		0.056	1	0.056	0.022
C	SEX		0.306	1	0.306	0.119
3-WAY INTERACTIONS			5.375	4	1.344	0.521
A	B	C	2.756	1	2.756	1.068
A	B	SEX	0.056	1	0.056	0.022
A	C	SEX	0.756	1	0.756	0.293
B	C	SEX	1.806	1	1.806	0.700
4-WAY INTERACTIONS			1.056	1	1.056	0.409
A	B	C	1.056	1	1.056	0.409
	SEX					
RESIDUAL			371.700	144	2.581	
TOTAL			390.994	159	2.459	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 16: Open

**********A N A L Y S I S O F V A R I A N C E**********

DEP16 OPEN
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	14.125	4	3.531	1.298
A	11.556	1	11.556	4.246
B	0.756	1	0.756	0.278
C	1.806	1	1.806	0.664
SEX	0.006	1	0.006	0.002
2-WAY INTERACTIONS	15.737	6	2.623	0.964
A B	0.306	1	0.306	0.113
A C	8.556	1	8.556	3.144
A SEX	1.056	1	1.056	0.388
B C	2.756	1	2.756	1.013
B SEX	2.756	1	2.756	1.013
C SEX	0.306	1	0.306	0.113
3-WAY INTERACTIONS	15.825	4	3.956	1.454
A B C	1.406	1	1.406	0.517
A B SEX	6.006	1	6.006	2.207
A C SEX	7.656	1	7.656	2.813
B C SEX	0.756	1	0.756	0.278
4-WAY INTERACTIONS	3.906	1	3.906	1.435
A B C SEX	3.906	1	3.906	1.435
RESIDUAL	391.900	144	2.722	
TOTAL	441.494	159	2.777	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 17: Friendly

```
**********ANALYSIS OF VARIANCE**********
          DEP17    FRIENDLY
     BY   A        SELF-OTHER
          B        RELEVANT-IRRELEVANT
          C        SUCCESS-FAILURE
          SEX      FEMALE-MALE
**************************************************
```

SOURCE OF VARIATION			SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS			10.725	4	2.681	1.411
A			0.400	1	0.400	0.211
B			2.500	1	2.500	1.316
C			3.600	1	3.600	1.895
SEX			4.225	1	4.225	2.224
2-WAY INTERACTIONS			7.775	6	1.296	0.682
A	B		1.225	1	1.225	0.645
A	C		0.625	1	0.625	0.329
A	SEX		2.500	1	2.500	1.316
B	C		0.025	1	0.025	0.013
B	SEX		2.500	1	2.500	1.316
C	SEX		0.900	1	0.900	0.474
3-WAY INTERACTIONS			3.075	4	0.769	0.405
A	B	C	0.400	1	0.400	0.211
A	B	SEX	1.225	1	1.225	0.645
A	C	SEX	1.225	1	1.225	0.645
B	C	SEX	0.225	1	0.225	0.118
4-WAY INTERACTIONS			1.600	1	1.600	0.842
A	B	C	1.600	1	1.600	0.842
	SEX					
RESIDUAL			273.600	144	1.900	
TOTAL			296.775	159	1.867	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 18: Would Want to See Therapist Again

**********A N A L Y S I S O F V A R I A N C E**********

	CEP18	WOULD WANT TO SEE THERAPIST AGAIN
BY	A	SELF-OTHER
	B	RELEVANT-IRRELEVANT
	C	SUCCESS-FAILURE
	SEX	FEMALE-MALE

****

SOURCE OF VARIATION			SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS			9.625	4	2.406	0.714
A			0.025	1	0.025	0.007
B			6.400	1	6.400	1.899
C			1.600	1	1.600	0.475
SEX			1.600	1	1.600	0.475
2-WAY INTERACTIONS			33.675	6	5.613	1.666
A	B		2.025	1	2.025	0.601
A	C		11.025	1	11.025	3.272
A	SEX		2.025	1	2.025	0.601
B	C		12.100	1	12.100	3.591
B	SEX		1.600	1	1.600	0.475
C	SEX		4.900	1	4.900	1.454
3-WAY INTERACTIONS			8.275	4	2.069	0.614
A	B	C	1.225	1	1.225	0.364
A	B	SEX	1.225	1	1.225	0.364
A	C	SEX	4.225	1	4.225	1.254
B	C	SEX	1.600	1	1.600	0.475
4-WAY INTERACTIONS			5.625	1	5.625	1.669
A	B	C	5.625	1	5.625	1.669
	SEX					
RESIDUAL			485.200	144	3.369	
TOTAL			542.400	159	3.411	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 19: Would Recommend Therapist

**********A N A L Y S I S O F V A R I A N C E**********

	DEP19	WOULD RECOMMEND THERAPIST
BY	A	SELF-OTHER
	B	RELEVANT-IRRELEVANT
	C	SUCCESS-FAILURE
	SEX	FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	20.550	4	5.137	1.609
A	2.025	1	2.025	0.634
B	1.225	1	1.225	0.384
C	0.400	1	0.400	0.125
SEX	16.900	1	16.900	5.293
2-WAY INTERACTIONS	23.050	6	3.842	1.203
A B	3.025	1	3.025	0.947
A C	6.400	1	6.400	2.004
A SEX	0.900	1	0.900	0.282
B C	8.100	1	8.100	2.537
B SEX	1.600	1	1.600	0.501
C SEX	3.025	1	3.025	0.947
3-WAY INTERACTIONS	10.950	4	2.738	0.857
A B C	1.600	1	1.600	0.501
A B SEX	0.100	1	0.100	0.031
A C SEX	7.225	1	7.225	2.263
B C SEX	2.025	1	2.025	0.634
4-WAY INTERACTIONS	2.025	1	2.025	0.634
A B C SEX	2.025	1	2.025	0.634
RESIDUAL	459.800	144	3.193	
TOTAL	516.375	159	3.248	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 20: Would Follow Therapist's Advice

**********A N A L Y S I S O F V A R I A N C E**********

DEP20 WOULD FOLLOW THERAPISTS ADVICE
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION			SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS			18.025	4	4.506	1.973
A			0.506	1	0.506	0.222
B			2.756	1	2.756	1.207
C			9.506	1	9.506	4.162
SEX			5.256	1	5.256	2.301
2-WAY INTERACTIONS			16.887	6	2.815	1.232
A	B		3.906	1	3.906	1.710
A	C		5.256	1	5.256	2.301
A	SEX		1.056	1	1.056	0.462
B	C		4.556	1	4.556	1.995
B	SEX		0.306	1	0.306	0.134
C	SEX		1.806	1	1.806	0.791
3-WAY INTERACTIONS			11.725	4	2.931	1.283
A	B	C	8.556	1	8.556	3.746
A	B	SEX	0.156	1	0.156	0.068
A	C	SEX	2.256	1	2.256	0.988
B	C	SEX	0.756	1	0.756	0.331
4-WAY INTERACTIONS			4.556	1	4.556	1.995
A	B	C SEX	4.556	1	4.556	1.995
RESIDUAL			328.900	144	2.284	
TOTAL			380.094	159	2.391	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 21: He Would Help with Public Speaking

**********A N A L Y S I S O F V A R I A N C E**********

DEP21 HE WOULD HELP WITH PUBLIC SPEAKING
BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	30.725	4	7.681	2.451
A	0.400	1	0.400	0.128
B	4.900	1	4.900	1.564
C	11.025	1	11.025	3.519
SEX	14.400	1	14.400	4.596
2-WAY INTERACTIONS	12.775	6	2.129	0.680
A B	0.625	1	0.625	0.199
A C	3.600	1	3.600	1.149
A SEX	0.225	1	0.225	0.072
B C	1.600	1	1.600	0.511
B SEX	4.225	1	4.225	1.348
C SEX	2.500	1	2.500	0.798
3-WAY INTERACTIONS	8.175	4	2.044	0.652
A B C	0.225	1	0.225	0.072
A B SEX	2.500	1	2.500	0.798
A C SEX	1.225	1	1.225	0.391
B C SEX	4.225	1	4.225	1.348
4-WAY INTERACTIONS	0.100	1	0.100	0.032
A B C SEX	0.100	1	0.100	0.032
RESIDUAL	451.200	144	3.133	
TOTAL	502.975	159	3.163	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 22: He Would Help with Other Problems

**********A N A L Y S I S O F V A R I A N C E**********

	DEP22	HE WOULD HELP WITH OTHER PROBLEMS
BY	A	SELF-OTHER
	B	RELEVANT-IRRELEVANT
	C	SUCCESS-FAILURE
	SEX	FEMALE-MALE

****

SOURCE OF VARIATION			SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS			30.125	4	7.531	3.434
A			0.000	1	0.000	0.000
B			13.225	1	13.225	6.030
C			2.500	1	2.500	1.140
SEX			14.400	1	14.400	6.566
2-WAY INTERACTIONS			15.175	6	2.529	1.153
A	B		0.900	1	0.900	0.410
A	C		3.025	1	3.025	1.379
A	SEX		0.625	1	0.625	0.285
B	C		0.400	1	0.400	0.182
B	SEX		10.000	1	10.000	4.560
C	SEX		0.225	1	0.225	0.103
3-WAY INTERACTIONS			7.075	4	1.769	0.807
A	B	C	3.025	1	3.025	1.379
A	B	SEX	1.225	1	1.225	0.559
A	C	SEX	1.600	1	1.600	0.730
B	C	SEX	1.225	1	1.225	0.559
4-WAY INTERACTIONS			3.600	1	3.600	1.642
A	B	C	3.600	1	3.600	1.642
	SEX					
RESIDUAL			315.800	144	2.193	
TOTAL			371.775	159	2.338	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 23: Would Feel Better after Talking to Him

```
**********A N A L Y S I S   O F   V A R I A N C E**********
          DEP23    WOULD FEEL BETTER AFTER TALKING TO HIM
     BY   A        SELF-OTHER
          B        RELEVANT-IRRELEVANT
          C        SUCCESS-FAILURE
          SEX      FEMALE-MALE
**************************************************************
```

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	8.575	4	2.144	0.718
A	0.100	1	0.100	0.033
B	4.225	1	4.225	1.415
C	0.025	1	0.025	0.008
SEX	4.225	1	4.225	1.415
2-WAY INTERACTIONS	4.375	6	0.729	0.244
A B	1.225	1	1.225	0.410
A C	2.025	1	2.025	0.678
A SEX	0.025	1	0.025	0.008
B C	0.100	1	0.100	0.033
B SEX	0.100	1	0.100	0.033
C SEX	0.900	1	0.900	0.301
3-WAY INTERACTIONS	8.525	4	2.131	0.714
A B C	6.400	1	6.400	2.143
A B SEX	0.000	1	0.000	0.000
A C SEX	0.900	1	0.900	0.301
B C SEX	1.225	1	1.225	0.410
4-WAY INTERACTIONS	2.025	1	2.025	0.678
A B C SEX	2.025	1	2.025	0.678
RESIDUAL	430.000	144	2.986	
TOTAL	453.500	159	2.852	

ANALYSIS OF VARIANCE SUMMARY TABLES FOR ALL DEPENDENT MEASURES

Dependent Variable 24: Would Share Innermost Thoughts with Him

**********A N A L Y S I S O F V A R I A N C E**********

DEP24 WOULD SHARE INNERMOST THOUGHTS WITH HIM

BY A SELF-OTHER
B RELEVANT-IRRELEVANT
C SUCCESS-FAILURE
SEX FEMALE-MALE

****

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F
MAIN EFFECTS	26.025	4	6.506	2.092
A	0.225	1	0.225	0.072
B	6.400	1	6.400	2.058
C	2.500	1	2.500	0.804
SEX	16.900	1	16.900	5.435
2-WAY INTERACTIONS	10.575	6	1.762	0.567
A B	1.600	1	1.600	0.515
A C	0.900	1	0.900	0.289
A SEX	0.400	1	0.400	0.129
B C	0.225	1	0.225	0.072
B SEX	7.225	1	7.225	2.323
C SEX	0.225	1	0.225	0.072
3-WAY INTERACTIONS	4.475	4	1.119	0.360
A B C	3.025	1	3.025	0.973
A B SEX	0.225	1	0.225	0.072
A C SEX	1.225	1	1.225	0.394
B C SEX	0.000	1	0.000	0.000
4-WAY INTERACTIONS	0.900	1	0.900	0.289
A B C SEX	0.900	1	0.900	0.289
RESIDUAL	447.800	144	3.110	
TOTAL	489.775	159	3.080	